

CAPSULE GEOLOGY

development and molybdenum introduction.

Molybdenum mineralization is contained within quartz veins and to a somewhat lesser extent in breccia bodies within the granodiorite phase of the batholith. Three phases of breccia, known as Phase 1 Breccia, Quartz Breccia and Phase III Breccia, are found at the deposit. Fracturing can be grouped into eight distinct periods with six of these being genetically related to vein formation and ore deposition. The following six ore zones have been outlined at the deposit: 1. Main Breccia zone - composed of Quartz Breccia and Phase III Breccia with molybdenite occurring along fragment boundaries and within quartz veins cutting the breccia. 2. Fracture Ore zone - re-brecciated upper part of the Quartz Breccia and adjacent overlying granodiorite in the Main Breccia zone. Molybdenite with only a very minor amount of quartz comprise the matrix. 3. South Breccia zone - composed of Phase I and Phase III breccias with ore-grade mineralization occurring erratically as pods in fractures and the matrix. 4. Stringer zone - a subparallel swarm of veins around the northwest and west margins of the Main Breccia zone. 5. Southwest Stringer zone - a zone of subparallel veins about 300 metres south of the Main Breccia zone. Bounded at least partly on the southwest by what appears to be a major fracture zone which has been localized along an intensely altered and mineralized andesite dike. 6. High-Grade Vein - a system of quartz-molybdenite veins localized in a sheared and intensely altered andesite dike north of the Main Breccia zone.

All the ore zones are composed of more than one stage of molybdenite mineralization. Molybdenite is the only mineral of economic importance in the deposit. Pyrite is the most abundant and widespread accessory mineral, with chalcopyrite, sphalerite, scheelite, tetrahedrite, rutile, ankerite, bismuthinite, pyrolusite, magnetite, hematite and anatase also present.

Six alteration assemblages have been recognized in the deposit. Four of these are related to molybdenum mineralization and from oldest to youngest are: 1) garnet-hornblende, 2) biotite, 3) quartz-sericite-pyrite-potassium feldspar-chlorite, and 4) chlorite-talc. An epidote-chlorite assemblage had both a pre-mineralization stage and a stage coincident with mineralization. A zeolite-calcite-clay assemblage is post-mineralization.

At least two phases of molybdenite deposition occurred. Hydrothermal biotite dated at 102 million years was deposited between the two stages of molybdenum mineralization and, thus, is bracketed by the mineralization.

Unclassified reserves are 3,838,847 tonnes grading 0.135 per cent molybdenum; includes open pit reserves reported in 1980 as 2,358,460 tonnes grading 0.11 per cent molybdenum (Noranda Mines Annual Reports 1980 and 1984).

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- EMPR OF 1992-1; 1998-8-F, pp. 1-60
- EMPR PF (*Stevenson, J.S. (1942): Report on the Boss Mountain Molybdenite Prospect; Field Sketch of Drilling and sections on Boss Mountain Molybdenite, Sept. 1942; Plan showing geology and drill holes, sections and transcript of field notes, Boss Mountain, Oct. 1942; Drill Plan, Southwest Potash Corp. Boss Mountain Project, Feb. 1959; Computation of Average Grade of ore from Drill hole assays Apr. 1961; GSC Map Fig. 20 from Economic Geology 20, 1962; Air Photos, 1962; The Ore-Forming Sequence - Boss Mountain Mine, abstract from unknown source; M.E.G. Meeting Feb.11, 1964, Boss Mountain Molybdenum Property; Boss Mountain excerpt from unknown source; Heim, R.C. and Burton, A.D.K. Oct. 1965, Boss Mountain Mine Geology; Eastwood, G.E.P. Nov. 1964, Report on Boss Mountain Mine (also field notes and maps); Deputy Minister of Mines Correspondence 1939-1943 regarding Big Timothy Mountain deposit; Claim Map April 1967, Boss Mountain Area; Brynnor Mines Ltd. Aug. 1969, Status clipping; Brynnor Mines Ltd. 5045 Level plans; Brand, M.A. Apr.1974, Boss Mountain Pit Project; Rohwedder, J., Grove, E.W. Mar. 1975, Boss Mountain Project; Grove, E.W. Mar.1975, Boss Mountain Mine Open Pit Proposal; Smith, J.B. May 1975, Boss Mountain Expansion Project, Organization, Practices and Procedures; Reports Submitted to B.C. Department of Mines and Petroleum Resources on the Boss Mountain Mine Feb. 21,

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CIM Special Volume *15, p. 432 (Soregaroli, A.E. and Nelson, W.I.,
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N MINER June 24, 1976; Jan.15, 1981
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1983; Apr. 1984
*Soregaroli, A.E. (1968): Geology of the Boss Mountain Mine,
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World Mining Sept. 1975, p. 80

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 002**

NATIONAL MINERAL INVENTORY: 093A6W Cu1

NAME(S): **PINE**, FLY, GI,
LEM

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 20 59 N
LONGITUDE: 121 16 12 W
ELEVATION: Metres

NORTHING: 5801345
EASTING: 617833

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of Fly Claim Block.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Magnetite Pyrite
ALTERATION: Chlorite Calcite Epidote Biotite K-Feldspar
ALTERATION TYPE: Propylitic Zeolitic Biotite Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic Unknown	Nicola	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Monzonite
Syeno Diorite
Basalt
Volcanic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Channel
COMMODITY: Copper GRADE 0.2500 Per cent
COMMENTS: From trenching, maximum value over 21.3 metres.
REFERENCE: Northern Miner April, 1984.

CAPSULE GEOLOGY

The copper mineralization of the Pine showing is associated with a monzonitic to dioritic stock which occurs within volcanic rocks of the Nicola Group in the central Quesnel belt. The stock has intruded Upper Triassic basalt and overlying Lower Jurassic breccias containing felsic volcanic and plutonic clasts. These latter breccias are partly coeval with, and form an apron about, the felsic stock. Both the volcanic and the intrusive rocks have alkalic to subalkalic compositions with shoshonitic affinities.

The volcanic rocks adjacent to the stock and parts of the stock itself have undergone propylitic alteration, characterized by the development of calcite, chlorite and epidote. Zeolite alteration in places may also be of hydrothermal origin. Biotite alteration and secondary potassium feldspar is commonly associated with copper mineralization in syenodiorite and monzonite. Copper mineralization also occurs sparsely in the surrounding volcanics. Weakly anomalous gold values have been determined in propylitized volcanic rocks surrounding the stock. Mineralization consists of chalcopyrite, pyrrhotite, magnetite and pyrite.

The maximum value obtained from trenching in 1984 was 0.25 per cent copper over 21.3 meters, gold was not assayed (Northern Miner, April, 1984).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 5
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EMPR AR 1966-132; 1967-124
EMPR EXPL 1987-C244,C245
EMPR FIELDWORK 1987, p. 131; 1988, pp. 159-165
EMPR PF (Claim Map, 1967)
GSC MAP 574; 1424A
Morton, R.F., (1976): Alkalic Volcanism and Copper Deposits in the
Horsefly Area, Central British Columbia, Ph.D. Thesis, Carleton
University
W MINER April, 1984
N MINER April, 1984
CJES Vol. 25, pp. 1608-1617
GCNL #65, 1984

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **PROVIDENCE**, BLACKBEAR, OTTO,
BEAR CREEK, JIMMY, SUNSHINE,
DIAL, PROVIDENCE JANET, BEAR

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:
LATITUDE: 52 38 35 N
LONGITUDE: 121 25 17 W
ELEVATION: 1463 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5833734
EASTING: 606809

COMMODITIES: Silver Lead Zinc Gold

MINERALS

SIGNIFICANT: Galena Pyrite Sphalerite Gold
ASSOCIATED: Quartz
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
DIMENSION: 0180 x 0004 Metres
COMMENTS: Main quartz vein traced for 180 metres averaging 4.5 metres in width.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Meta Rhyolite Tuff
Phyllite
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Pre-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: NO. 2 REPORT ON: N

<u>CATEGORY:</u>	<u>SAMPLE TYPE:</u>	<u>YEAR:</u>
Assay/analysis	Bulk Sample	1980
<u>COMMODITY</u>		
Silver	3343.7800	Grams per tonne
Gold	4.9000	Grams per tonne
Lead	45.7000	Per cent
Zinc	0.1100	Per cent

COMMENTS: Shipment of selected ore made in 1951.
REFERENCE: Assessment Report 8291.

CAPSULE GEOLOGY

The Providence deposit lies within the Quesnel Terrane of the Intermontane Belt near its eastern margin, adjacent to the Precambrian to Paleozoic rocks of the Omineca Terrane. The dominant lithologies comprise red-brown weathering phyllite, grey siltstone and interbedded felsic tuffs which form the lowermost part of the Upper Triassic to Lower Jurassic Nicola Group. Formerly referred to as "black phyllite", this unit has been thrust onto the older rocks of the Omineca Terrane with which it has been deformed and metamorphosed, probably during middle to late Jurassic times.

Mineralization comprises argentiferous galena with pyrite, minor sphalerite and gold within three subparallel, gently dipping quartz veins hosted by meta-rhyolite (?) tuff. The main quartz vein has been traced over a distance of 180 metres and averages about 4.5 metres in width.

A shipment of selected ore from the No. 2 Zone assayed 3343.78

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CAPSULE GEOLOGY

grams per tonne silver, 45.7 per cent lead, 0.11 per cent zinc and 4.9 grams per tonne gold (Assessment Report 8291).

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CJES Vol. 25, pp. 1608-1617
PR REL Barker Minerals Ltd., Nov.21, 2002
WWW <http://www.Barkerminerals.com/s/Properties.asp>

DATE CODED: 1985/07/24
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FIELD CHECK: N
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MINFILE NUMBER: **093A 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEITHLEY CREEK, KITCHENER, HOWICK,
ONWARD, CARIBOO PLACER GOLD**

STATUS: Producer
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 46 27 N
LONGITUDE: 121 25 48 W
ELEVATION: 1069 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5848304
EASTING: 605909

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by metasedimentary Snowshoe Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold workings have been situated at a number of sites along Keithley Creek for 8 kilometres from its mouth. One of the main areas of activity was on the Kitchener claim located about two kilometres upstream from the mouth of the creek. A considerable amount of underground work was carried out on a bench situated over 30 metres above the creek. Around 1920 hydraulic operations largely replaced underground mining. The creek drains an area that is mainly underlain by Snowshoe Group rocks. For the period 1874 to 1945 there is a recorded production of 1,100,891 grams of gold.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

Noble Metal Group Inc. processed gravels in 1997 and 1998. In 1998, processing of 8994 cubic yards returned 18,018 grams of gold (GCNL #212 (Nov.4), 1998).

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561,562; 1892-528,529,table; 1893-1039,table; 1894-727,732,733,
table; 1895-656,659,table; 1896-499,515,516; 1897-465; 1898-982,
1899-610,614,633; 1900-741; 1901-963,969; 1902-60,88,116; 1903-69;
1904-41,50; 1905-51,59; 1906-47; 1908-44; 1909-47; 1910-46; 1911-
51,52; 1912-53; 1913-60,66; 1914-73; 1915-57; 1916-41; 1917-140;
1918-143; 1920-99; 1921-115; 1922-131; 1923-132; 1924-127; 1925-
160; 1926-177,178; 1927-179; 1928-202; 1929-204; 1930-175; 1931-
95; 1932-113; 1933-136; 1935-C38; 1937-C35; 1938-C50; 1939-109;
1940-9; 1941-89,90; 1942-88; 1943-84; 1944-79; 1945-127; 1946-
201; 1947-196; 1948-179; 1949-243; 1950-201; 1951-205; 1952-239;
1953-176,177; 1954-171; 1955-86; 1956-141; 1957-74; 1958-79;
1959-148; 1960-123; 1961-133; 1962-142; 1963-135; 1964-176;
1965-253; 1966-256; 1967-297; 1968-291

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463-473
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EMPR OF 2001-11
EMPR PF (Topographical Map)
GSC MAP 1424A
GCNL #166(Aug.28), #238(Dec.11), 1997; #212(Nov.4), 1998
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
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FIELD CHECK: N
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MINFILE NUMBER: **093A 004**

MINFILE NUMBER: **093A 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **LITTLE SNOWSHOE CREEK, HAYWOOD**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 50 N
LONGITUDE: 121 27 58 W
ELEVATION: 1326 Metres

NORTHING: 5856378
EASTING: 603300

LOCATION ACCURACY: Within 1 KM

COMMENTS: Upstream from mouth 2.4 kilometres.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by metasedimentary Snowshoe Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Records indicate that by 1902 a 1158 metre long tunnel had been driven up the Little Snowshoe Creek following the irregular bedrock. More recent activity has apparently been sluicing. During the period 1901 to 1915 recorded production was 35,800 grams of gold. The creek drains an area that is mainly underlain by metasedimentary rocks of the Snowshoe Group which are the most likely source of the placer gold.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

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EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR OF 2001-11
GSC MAP 1424A

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO QUARTZITE** ROUNDTOP MOUNTAIN, YANKS PEAK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 54 40 N
LONGITUDE: 121 17 55 W
ELEVATION: Metres

NORTHING: 5863738
EASTING: 614411

LOCATION ACCURACY: Within 1 KM

COMMENTS: Coordinates of Roundtop Mountain. Yanks Peak at 52 degrees, 51 minutes latitude and 121 degrees, 25 minutes longitude.

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R07 Silica sandstone

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Feldspathic Quartzite
Quartzite
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

PHYSIOGRAPHIC AREA: Quesnel Highland

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1982

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silica

97.5700 Per cent

COMMENTS: Chip sample across 50 metres ranges from 95.12 to 97.57 per cent silica.

REFERENCE: Open File 1987-15, page 20.

CAPSULE GEOLOGY

The Cariboo quartzite showing consists of quartzite which occurs in several horizons within the Cambrian(?) Hadrynian to Lower Paleozoic Snowshoe Group. Quartzites exposed in the Yanks Peak and Roundtop Mountain areas may not be part of the same formation. Two main types of quartzite are present in the Roundtop Mountain area. One type is a white to pinkish weathering micaceous to slightly feldspathic quartzite while the other type is medium grey weathering and micaceous. Extensive quartz veining occurs in the quartzite in places. Five chip samples collected by the Geological Survey Branch in 1982 assayed 95.12 to 97.57 per cent silica over 50 metres (Open File 1987-15, page 20). Quartzite in the Yanks Peak area is more homogeneous. It is variable in color and is generally massive and fine-grained with well-sorted and well-rounded grains. Three chip samples collected by the Geological Survey Branch in 1982 returned 95.56, 97.18 and 98.92 per cent silica (Open File 1987-15).

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GSC MAP 1424A

RUN DATE: 26-Jun-2003
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ENERGY AND MINERALS DIVISION

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BIBLIOGRAPHY

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W MINER April, 1984

DATE CODED: 1987/04/14
DATE REVISED: 1989/02/02

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093A 007**

NATIONAL MINERAL INVENTORY: 093A5 Cu1

NAME(S): **WIGGINS CREEK**, MIOCENE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 16 35 N
LONGITUDE: 121 43 08 W
ELEVATION: 1113 Metres

NORTHING: 5792553
EASTING: 587404

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of showings on Wiggins 2 & 5 claims.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Fractured Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Porphyritic Trachyte
Quartz Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Wiggins Creek copper occurrence is hosted by shears and fractures in a dark grey porphyritic trachyte cut by strongly altered quartz porphyry dikes. The trachyte probably is part of the Upper Triassic to Lower Jurassic Nicola Group of the central Quesnel belt. The Nicola Group is an assemblage of alkalic to sub-alkalic volcanic rocks of shoshonitic affinity.

Copper mineralization consists of minor pyrite and chalcopyrite with associated malachite in quartz-calcite veins.

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GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 008**

NATIONAL MINERAL INVENTORY: 093A12 Cu1

NAME(S): **MOUNT POLLEY**, CARIBOO-BELL, BOOTJACK LAKE,
BOOTJACK, MT POLLEY, BJ,
NORTHWEST EXTENSION, CARIBOO BELL, BELL,
SPRINGER, CENTRAL NORTH,
WEST, ROAD, KAY LAKE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 52 33 48 N
LONGITUDE: 121 38 17 W
ELEVATION: 1127 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5824568
EASTING: 592318

LOCATION ACCURACY: Within 500M

COMMENTS: The copper deposits are located approximately 57 kilometres northeast of Williams Lake (Canadian Institute of Mining and Metallurgy Special Volume 15).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite Bornite Gold
Copper Cuprite Chalcocite Digenite Covellite
ALTERATION: Biotite K-Feldspar Diopside Calcite Epidote
Chlorite Malachite Garnet

COMMENTS: Also epidote, zeolite and malachite.

ALTERATION TYPE: Potassic Propylitic Oxidation
MINERALIZATION AGE: Middle Jurassic
ISOTOPIC AGE: 184 Ma

DATING METHOD: Potassium/Argon MATERIAL DATED: Biotite

DEPOSIT

CHARACTER: Stockwork Pipe Disseminated Breccia
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Tabular
DIMENSION: 1100 x 450 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Central zone.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Nicola Undefined Formation Polley Stock
Triassic-Jurassic

LITHOLOGY: Diorite
Syenite
Breccia
Alkali Basalt Breccia
Polymictic Breccia
Pyroxenite
Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel Plutonic Rocks
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Zeolite

INVENTORY

ORE ZONE: MOUNT POLLEY REPORT ON: Y

CATEGORY: Probable YEAR: 2001
QUANTITY: 30245122 Tonnes

COMMODITY	GRADE
Gold	0.3740 Grams per tonne
Copper	0.3600 Per cent

COMMENTS: Total probable ore reserves as of April 30, 2001 with a strip ratio of 1.96. This total includes 1,687,227 tonnes grading 0.269 per cent copper and 0.487 gram per tonne gold at the Cariboo Pit with a strip ratio of 0.48; 5,099,907 tonnes grading 0.355 per cent copper and 0.37 gram per tonne gold at the Bell Pit with a strip ratio of 1.88; and 23,457,988 tonnes grading 0.367 per cent copper and 0.367 gram per tonne gold at the Springer Pit with a strip ratio of 2.09.

REFERENCE: Imperial Metals Corporation 2000 Annual Report.

CAPSULE GEOLOGY

The Cariboo-Bell or Mount Polley copper deposits are located approximately 57 kilometres northeast of Williams Lake. Copper was first discovered on Mount Polley in 1964.

In the period from 1966 to 1972, Cariboo-Bell Copper Mines Limited completed 18,341 metres of diamond drilling and 8533 metres of percussion drilling in 215 holes. In 1981, E & B Explorations Inc. optioned the property from Highland Crow and that year completed 1746 metres of diamond drilling, 1295 metres of rotary drilling and a soil geochemical survey. Work completed from 1982 to 1987 included 3585 metres of diamond drilling and 4026 metres of reverse circulation overburden drilling, as well as soil geochemistry, geological mapping, magnetics, ground geophysics and induced polarization. In 1988 Imperial Metals Corporation completed an induced polarization survey and trenching, plus an additional 99 diamond drill holes totalling 8878 metres. In 1989, a further 139 holes totalling 18,639 metres of diamond drilling were completed to detail reserves in the Central and West zones. A total of 535 percussion, rotary and diamond drill holes, comprising of 62,482 metres of drilling, were completed to the end of 1989.

The deposits occur within felsic Jurassic-Triassic Polley stock rocks which have intruded Nicola Group volcanic rocks. The Nicola Group in the area comprises a sequence of alkali basalt breccias and flows of Upper Triassic (Norian) age overlain by polyolithic breccias characterized by the presence of felsic clasts of Lower Jurassic (Pliensbachian(?)) age. The stock which hosts the copper mineralization is a complex of several intrusive phases ranging in composition from diorite to syenite. Pyroxenite and gabbro have been intersected in drill holes while nepheline syenite dated at 201 Ma occurs to the west (the Bootjack stock) and presumably represents a more differentiated phase of the Cariboo-Bell intrusions.

Alteration is zonal with an outer propylitic zone, consisting of a calcite-epidote-chlorite-pyrite assemblage, surrounding a potassic zone characterized by secondary biotite and pink orthoclase with diopside. Between the inner potassic zone and the outer propylitic zone is an intermediate garnet-epidote zone. Zeolites are ubiquitous within altered rocks and, although some may be the result of metasomatism associated with hydrothermal fluids, most zeolitic alteration, especially in the outer alteration zone, may be the result of burial metamorphism of regional extent.

Copper-gold mineralization occurs within a variety of breccias and extends into the surrounding volcanic rocks. The two dominant breccia types are crackle breccias, typical of porphyry systems, and intrusion breccias. Six zones of significant mineralization have been defined within the breccias.

Hypogene minerals in ore zones include chalcopyrite (1 to 3 per cent), magnetite (4 to 8 per cent) and minor pyrite while supergene minerals include malachite, native copper, cuprite, chalcocite, neodigenite and covellite. Gold occurs as microscopic inclusions in chalcopyrite. The abundance of copper-gold mineralization is reported to be proportional to the intensity of brecciation.

The two main zones of interest are the Central and West zones. The tabular sill-like Central zone is 1,100 metres in length and up to 450 metres in width. This zone strikes north and dips east. The circular West zone has been drilled to 275 metres depth and is 450 metres in diameter. It plunges to the west and is open at depth below 275 metres.

Drilling outside the main pit area has identified four other areas of interest. Of these, the Northwest Extension zone was tested by one drillhole. The hole intersected 67 metres grading 0.33 per cent copper and 0.3428 gram gold (Property File - Imperial Metals Corp. Annual Report, 1991). The Road zone occurs north of the pit area and several hundred metres south of the Lloyd-Nordik (093A 160) mineralization. It consists of magnetite and chalcopyrite-bearing breccia that may resemble Lloyd 2 mineralization.

Pit S-19 measured geological reserves are 48,983,400 tonnes grading 0.38 per cent copper and 0.54 grams per tonne gold. Inferred (geological) reserves at Mount Polley are 230,403,400 tonnes grading 0.25 per cent copper and 0.34 gram per tonne gold (George Cross News Letter #45, 1991).

Imperial Metals Corp. has received a mine development certificate from the B.C. Ministry of Energy, Mines and Petroleum Resources for a 13,700 tonne-per-day open pit mining operation and covers all elements of the mining plan including the open pit, processing plant, water supply, tailings pond and a power transmission line. The mine development recommended by Fluor Daniel Wright Engineers in its feasibility study calls for 13,700 tonnes-per-day based on an initial 10-year mining reserve of 48,983,400 tonnes grading 0.38 per cent copper and 0.54 gram per tonne gold to produce 13,608,000 kilograms of copper per year. Gold

CAPSULE GEOLOGY

production will exceed 3,428,000 grams per year initially and gradually decline to 1,714,000 grams per year in year 10 (George Cross News Letter #199, October 15, 1992).

In 1995, Imperial Metals Corporation with support from the Explore B.C. Program carried out an exploration diamond drilling program consisting of 230.1 metres in 2 holes on the Kay Lake Basin zone, 806.2 metres in 4 holes on the Road zone and 737.0 metres in 5 holes on the Pit areas as well as 935.4 metres of rotary drilling in 7 holes on other geochemical and geophysical targets in an effort to increase the resource base. This program confirmed the existence of mineralization which require further definition by induced polarization survey and drilling (Explore B.C. Program 95/96 - M35).

Imperial Metals Corporation and Sumitomo Corporation completed soil stripping on the mill site, road access route and tailings dam site, in anticipation of construction start-up in the spring of 1996. Production will commence in the fall of 1997 (Information Circular 1996-1, page 10). Mineable reserves are reported to be 82,300,000 tonnes grading 0.30 per cent copper and 0.417 gram per tonne gold at a stripping ratio of 1.16 to 1 (Information Circular 1997-1, page 14). This includes the Central pit with 43,022 tonnes grading 0.501 gram per tonne gold and 0.285 per cent copper; the North pit with 9428 tonnes grading 0.329 gram per tonne gold and 0.260 per cent copper; and the West pit with 29,875 tonnes grading 0.324 gram per tonne gold and 0.333 per cent copper. The total geological resource stands at 133 million tonnes grading 0.36 gram per tonne gold and 0.27 per cent copper (Northern Miner June 24, 1996). Annual production, at a daily throughput of 18,000 tonnes is estimated to give Mount Polley a mine life of between 12 and 15 years.

Approximately 750,000 tonnes of ore and waste have been mined from the starter pit, located between the Cariboo and Bell pits. The concentrator/service/office complex and crusher building are roofed and clad (October 18, 1996). Fine-tuning of the mill is underway, while processing close to 800 tonnes of ore per hour. Concentrate has been trucked daily from the site for several weeks to Vancouver. The 1190 bench is nearly complete and drilling on the 1180 bench has begun.

The mine officially opened on September 13th, 1997. The deposit will be mined in three pits: Cariboo (first), Bell and Springer (T. Schroeter, personal communication, 1997).

During 1998, 12.6 million tonnes of material were mined from the Cariboo Pit, of which over 6.0 million tonnes was ore. The bulk of the ore originated from the southern, high oxide, high gold, high value portions of the Cariboo Pit. In the latter half of 1998 it was decided to mine the north portion of the Cariboo Pit that provides better metal recoveries but is generally lower grade material; the intention is to preserve some of the higher grade material in the southern zones for better market conditions.

During 1999, 15.04 million tonnes of material was mined from the Cariboo Pit, of which over 6.65 million tonnes were ore. In addition 99,417 tonnes of material was mined from the upper bench of the Bell Pit, of which 89,353 tonnes were ore. At the end of 1999 a total of 896,793 tonnes of low grade material had been stockpiled for future processing (Imperial Metals Corporation Annual Report 1999, page 6).

Imperial Metals Corporation (February 1998 merger of Imperial Metals and Princeton Mining) operates the Mount Polley mine. The mine is owned 52.5 per cent by Imperial and 47.5 per cent by SC Minerals Canada Limited, a wholly owned subsidiary of Sumitomo Corporation of Japan.

Reserves are reported as 76,470,300 tonnes grading 0.47 gram per tonne gold and 0.3 per cent copper in 1999 (Imperial Metals Corporation, 1999).

Exploration in 1999 included drilling in the Bell Pit and at the south end of the Cariboo Pit. In the Bell Pit, immediately north of the Cariboo Pit, diamond drilling totalling 1946 metres in eight holes tested the Bell deposit to depth and along the north and east limits. Immediately south of the Cariboo Pit, five diamond-drill holes totalling 1011 metres were completed in the recently discovered C-2 zone and an additional five holes totalling 1110 metres were drilled under the south end of the Cariboo Pit to test the Deep Cariboo zone. Finally, 33 short percussion-drill holes totalling 1385 metres were drilled south and east of the Cariboo Pit.

At year end (2000), Imperial completed an agreement with Sumitomo Corporation that resulted in a restructuring of the mine's term debt and Imperial acquiring 100 per cent ownership of the Mount Polley mine. The 2000 exploration program at Mount Polley included percussion and core drilling in the following areas: 207, Bell, C2, Cariboo Pit, Southeast and Springer. A total of 226 percussion holes for 10,652 metres and 26 core holes for 4875 metres were completed. Percussion drilling in and north of the proposed Springer Pit was

CAPSULE GEOLOGY

successful in defining new near-surface mineralization that has been named the North Springer Extension zone.

Total probable ore reserves as of April 30, 2001 are 30,245,122 tonnes grading 0.36 per cent copper and 0.374 gram per tonne gold with a strip ratio of 1.96. This total includes 1,687,227 tonnes grading 0.269 per cent copper and 0.487 gram per tonne gold with a strip ratio of 0.48 at the Cariboo Pit; 5,099,907 tonnes grading 0.355 per cent copper and 0.37 gram per tonne gold with a strip ratio of 1.88 at the Bell Pit; and 23,457,988 tonnes grading 0.367 per cent copper and 0.367 gram per tonne gold with a strip ratio of 2.09 at the Springer Pit (Imperial Metals Corporation 2000 Annual Report). In 2000, reverse-circulation drilling on the Southeast zone was successful in identifying potentially economic mineralization.

On January 5, 2001, Imperial Metals announced it had acquired the remaining interest in the mine from Sumitomo giving it 100 per cent ownership. Imperial reported on March 7 that since acquiring 100 per cent ownership it had completed 65 shallow percussion holes and in the progress discovered a new high-grade zone near the Springer pit and has named it the North Springer extension.

Mining and milling operations at the Mount Polley mine suspended on September 30, 2001.

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21238
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CJES Vol.25, pp. 1608-1617
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20, Apr.10, Jul.3,10,24, Dec.25, 1989; Aug.6, 1990; Feb.4, July
22, Oct.28, *Dec.9, 1991; Oct.26, 1992; June 26, 1995; Jun.24,
1996; Sept.22, Nov.11, 1997; Feb.23, Apr.6, June 29, July 20,
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NW PROSP Aug./Sept., Sept./Oct. 1989
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Placer Dome File
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DATE CODED: 1985/07/24
DATE REVISED: 1997/08/25

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 009**

NATIONAL MINERAL INVENTORY: 093A12 Cu3

NAME(S): **PINE 9**, POLLEY, RED ROCK,
MEG

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 03 N
LONGITUDE: 121 35 09 W
ELEVATION: 716 Metres

NORTHING: 5830661
EASTING: 595739

LOCATION ACCURACY: Within 500M

COMMENTS: Location of showing from Assessment Report 2148.

COMMODITIES: Copper

MINERALS

SIGNIFICANT:	Chalcopyrite	Pyrite	Pyrrhotite		
ALTERATION:	Malachite	Azurite	Calcite	Chlorite	Epidote
ALTERATION TYPE:	Oxidation		Propylitic		
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Igneous-contact Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Unknown

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Alkali Basalt
Monzonitic Syeno Diorite
Volcanic

HOSTROCK COMMENTS: The basalt unit is Upper Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region in which the Pine 9 showing occurs comprises Upper Triassic alkali basalt of the Nicola Group of the central Quesnel Belt. Intruding the basalt is a dike-like monzonite-syenodiorite stock. Hydrothermal activity associated with the stock has altered the surrounding volcanics in places with a propylitic mineral assemblage of epidote, chlorite and calcite. Mineralization consists of chalcopyrite, pyrite and minor pyrrhotite and the oxidation products of chalcopyrite (malachite and azurite).

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GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 010**

NATIONAL MINERAL INVENTORY: 093A12 Cu3

NAME(S): **RED ROCK 5**, PINE, POLLEY,
MEG, DAVE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

MINING DIVISION: Cariboo

LATITUDE: 52 36 44 N
LONGITUDE: 121 35 09 W
ELEVATION: 884 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5830074
EASTING: 595751

LOCATION ACCURACY: Within 500M

COMMENTS: Location of showing from Assessment Report 2148.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ALTERATION: Epidote Calcite Chlorite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive Podiform
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Unknown

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Basalt
Monzonitic Syeno Diorite

HOSTROCK COMMENTS: The basalt unit is Upper Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The geology of the region in which the Red Rocks showing occurs comprises Upper Triassic alkali basalt of the Nicola Group of the central Quesnel Belt. Intruding the basalt is a dike-like monzonite-syenodiorite stock. Hydrothermal activity associated with the stock has altered the surrounding volcanics in places with a propylitic mineral assemblage of epidote, chlorite and calcite. Pyrite and minor chalcopyrite, locally as massive blebs and lenses, occur in more altered basalt.

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CJES Vol. 25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 011**

NATIONAL MINERAL INVENTORY: 093A7 Cu1

NAME(S): **EN, EUREKA PEAK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 18 54 N
LONGITUDE: 120 37 14 W
ELEVATION: Metres

NORTHING: 5798740
EASTING: 662189

LOCATION ACCURACY: Within 1 KM
COMMENTS: Location of Cirque 2.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite
ALTERATION: Sericite Chlorite Epidote
ALTERATION TYPE: Propylitic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
DIMENSION: 1829 x 1219 x 0244 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Pyroxene Basalt Breccia
Tuff
Phyllite
Granodiorite
Pyroxenite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE:

CAPSULE GEOLOGY

The En showing occurs near the eastern margin of the Quesnel Belt in south central British Columbia where it is underlain by rocks of the basal part of the Nicola Group. These rocks comprise pyroxene basalt breccias, tuff and phyllite. Lenses of granodiorite occur within the volcanic rocks while a sill-like pyroxenite body occurs near the base of the volcanic sequence.

Mineralization comprises chalcopyrite, pyrite and pyrrhotite as disseminations and in veinlets within intrusive, volcanic and sedimentary rocks. In pyroxenite rocks sulphide exsolution blebs also occur. Wallrock alteration associated with copper mineralization is sericitic, surrounded by chlorite-epidote alteration.

The presence of gold mineralization in the granodiorite and adjacent volcanic rocks is suggested from the results of silt, soil and rock-chip sampling.

An inner "core" 1829 by 1219 by 244 metres grades from 0.13 to 0.44 per cent copper surrounded by an outer shell of about 0.10 per cent copper (EMR MR 223, 1989).

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EMPR P 1990-3
GSC MAP 1424A
EMR MR 223, 1989

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 22
REPORT: RGEN0100

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Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZED, SUE, SUEY,**
JAMIE, P 1-20

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A07W
BC MAP:
LATITUDE: 52 27 32 N
LONGITUDE: 120 53 06 W
ELEVATION: 823 Metres

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5814183
EASTING: 643698

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claim block.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrrhotite Pyrite Pyrolusite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: 0003 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Northwest striking fracture zone is about 3.0 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	Unnamed/Unknown Informal
Jurassic			

LITHOLOGY: Basalt
Sediment/Sedimentary
Intermediate Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Quesnel

CAPSULE GEOLOGY

The Zed showing is underlain by Upper Triassic basalt and sedimentary rocks which form the lowest part of the volcanic stratigraphy of the Nicola Group of the central Quesnel Belt. Intruding these rocks are small stocks and dikes of intermediate composition which are possibly of Jurassic age.

Mineralization comprises chalcopyrite, bornite, pyrrhotite, pyrite and pyrolusite associated with quartz and calcite in a 3.0 metre wide fracture zone striking northwest.

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EMPR P 1990-3
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 013**

NATIONAL MINERAL INVENTORY:

NAME(S): **SOVEREIGN CREEK**, WIM, DODO CREEK,
CREEK 1, CREEK 2, CREEK 3,
WIM-TA, WIM-CAL

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093A13W
BC MAP:
LATITUDE: 52 59 30 N
LONGITUDE: 121 53 35 W
ELEVATION: 1000 Metres
LOCATION ACCURACY: Within 1 KM

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5871917
EASTING: 574300

COMMENTS: Talc zones occur over a 1 kilometre long linear trend (Open File 1988-19). See the Sovereign nickel showing (093A 130) for a description of the nickel mineralization.

COMMODITIES: Talc Nickel Silver Zinc Gold

MINERALS

SIGNIFICANT: Talc Chrysotile Antigorite Pentlandite Chalcocopyrite
 Sphalerite Galena
ASSOCIATED: Dolomite Chlorite Chrysotile Pyrite Quartz
 Calcite
ALTERATION: Serpentine Limonite
ALTERATION TYPE: Serpentin'zn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Vein
CLASSIFICATION: Hydrothermal Replacement Industrial Min.
TYPE: M07 Ultramafic-hosted talc-magnesite
SHAPE: Regular
MODIFIER: Folded Sheared
DIMENSION: 110 x 35 x 27 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Dodo Creek zone, confirmed by drilling (20 to 95 per cent talc).

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Paleozoic Undefined Group Crooked Amphibolite

LITHOLOGY: Serpentinite
Serpentinized Ultramafic
Talc Chlorite Schist
Talc Schist
Dolomite
Phyllite
Quartzite
Slate
Limestone

HOSTROCK COMMENTS: The Crooked Amphibolite is Mississippian to Permian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Quesnel Slide Mountain

INVENTORY

ORE ZONE: DODO CREEK REPORT ON: Y
CATEGORY: Combined YEAR: 1986
QUANTITY: 150000 Tonnes
COMMODITY: Talc GRADE: 45.0000 Per cent
COMMENTS: Proven and probable reserves.
REFERENCE: Assessment Report 15522.

ORE ZONE: DODO CREEK REPORT ON: Y
CATEGORY: Inferred YEAR: 1986
QUANTITY: 365000 Tonnes
COMMODITY: Talc GRADE: 45.0000 Per cent
COMMENTS: Possible reserves.
REFERENCE: Assessment Report 15522.

CAPSULE GEOLOGY

The Sovereign Creek prospect is situated near Upper Sovereign Creek, on the right flank of Sovereign Mountain, about 36 kilometres southeast of Quesnel. There are four talc showings: Dodo Creek, Creek 1, Creek 2 and the Creek 3 showing located north of the Swift Creek forestry road. All the showings are within 500 metres of the road, occurring along strike for 1 kilometre.

The prospect occurs at the eastern margin of the Upper Triassic to Lower Jurassic Quesnellia Terrane and the western margin of the Hadrynian(?) to Paleozoic Barkerville Terrane. Between the two terranes is a narrow strip of mafic and ultramafic rocks known as the Mississippian to Permian Crooked Amphibolite and which have been mapped as part of the Slide Mountain Terrane. The Crooked Amphibolite, possibly correlative with the Antler Formation of the Slide Mountain Group, is in thrust contact with rocks of the Ramos succession of the Barkerville Terrane to the east (the Eureka Thrust). The contact to the west with Quesnellia rocks, may be stratigraphic.

The talc and nickel mineralization (see the Sovereign nickel showing, 093A 130) is hosted by serpentinite and sheared ultramafics of the Crooked Amphibolite, which is bound on the southwest by Upper Triassic dolomite and phyllite. These rocks are thrust over the Ramos Creek succession which consists of micaceous quartzite, phyllite, slates and limestones. Folding causes local bed repetition and thickening; the general trend of all rocks is northwest, with dips to the southwest. Talc occurs as discrete platy fragments of talc-chlorite rock and in schistose talc-carbonate boulders.

The Dodo Creek showing is exposed for 30 metres along it's length. Dark green serpentinitized ultramafics contain 20 to 42 per cent light green to white talc blebs, ranging from very fine-grained to one centimetre long (Assessment Report 14808). The matrix contains mostly dolomite with lesser amounts of chlorite. Antigorite flakes (15 millimetres in length) are cut by reticulate talc and chrysotile veinlets. Drilling has indicated the presence of talc mineralization over a length of 110 metres, a width of 35 metres at the surface, and a depth of 20 to 25 metres, at grades ranging from 20 to 95 per cent talc. Proven and probable reserves are stated as 150,000 tonnes at 45 per cent talc and possible reserves of 365,000 tonnes at the same grade (Assessment Report 15522).

The Creek 1 and Creek 2 showings are located 750 metres southeast of the Dodo Creek showing. Light green platy talc composed of 70 to 90 per cent talc and chlorite with minor disseminated pyrite and limonite are found in float. The fragments are angular, ranging in size from 30 to 60 centimetres; the size and shape suggest a close proximity to the source.

Another showing, Creek 3, on the Swift River forestry road (southwest of Creek 1 and Creek 2), consists of several large boulders, up to 3 metres in diameter, of talc carbonate schist. The boulders are mottled light green to light grey-brown and contain up to 85 per cent talc with associated carbonate (dolomite?) and minor limonite.

Four grab samples from the Sovereign Creek property were analysed by x-ray diffraction in 1987, and the results are as follows (Open File 1988-19):

Sample 1. Talc >> chlorite (10 per cent) > dolomite > trace quartz
and calcite (1 to 2 per cent)
Sample 2. Talc >> dolomite (greater than 10 per cent) > chlorite
(8 per cent) >> trace quartz (1 to 2 per cent)
Sample 3. Talc >> chlorite (20 per cent) > dolomite (15 per cent) >>
minor quartz (5 per cent)
Sample 4. Talc >> minor chlorite (5 per cent), calcite (3 per cent)
and trace quartz (1 to 2 per cent).

Ontario Research studies show that the talc from the Sovereign Creek property compares favourably with current marketable products. The platy and peridotite-talc rated quite high in brightness; the samples studied came from a weathered (oxidized) environment (Assessment Report 14808).

Pyrite, chalcocopyrite, sphalerite and galena mineralization with associated silver, zinc and gold values have also been observed in the area. Samples assayed up to 2.2 grams per tonne silver, 0.02 grams per tonne gold and 0.0171 per cent zinc (Assessment Report 16875).

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17246
EMPR EXPL 1987-C255
EMPR GEM 1972-333

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 26
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF *1988-19, pp. 43-45
EMPR PF (Various reports and correspondence, 1985-1988)
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1988/01/21
DATE REVISED: 1989/04/21

CODED BY: MM
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **MIOCENE**, MIOCENE SHAFT, MIOCENE GRAVEL MINING CO.

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 19 59 N
LONGITUDE: 121 25 02 W
ELEVATION: 785 Metres

NORTHING: 5799262
EASTING: 607847

LOCATION ACCURACY: Within 500M

COMMENTS: B.C. Telephone utility trailer/Miocene Gravel Mining Co. 3 compartment shaft.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Recent			Glacial/Fluvial Gravels

LITHOLOGY: Unconsolidated Sediment/Sedimentary
Calcareous Conglomerate
Sandstone
Siltstone

HOSTROCK COMMENTS: Cenozoic surficial cover including till.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Miocene showing is located immediately west of the Horsefly river, covered now by the town of Horsefly. The 2 compartment shaft is approximately 1000 feet southwest of the old Wards' hydraulic pit. This is 137 metres deep in loose gravel and till. The shaft bottomed on Eocene siltstones and shales, and a decline was driven (southwest-west) along the "bedrock" surface.

The three compartment shaft is underneath the B.C. Telephone utility trailer across from the community hall. The shaft is 167 metres deep in unconsolidated till and gravel. A 152 metre drift was cut at the siltstone "bedrock" level. The gravel and boulder conglomerate in contact with the "bedrock" is partially cemented, many metres thick.

The gold, or pay gravels, occur in the lower yellow, quartz pebble/cobble rich gravels. As well blue gravels (blue shales) at the contact of the gravels and siltstones carry gold. No assays or values are reported but were said "to pay well". By inference with similar deposits in the area, Ward's Horsefly and Hobson's Horsefly, a value of several cents per cubic yard (order of 0.001 ounce per yard) can be suggested.

No production is recorded for the site and all the workings are collapsed. This deposit is inferred as being within the old "Miocene Channel" that hosts the placer deposits in the Horsefly area.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1912-K53; 1938-C16
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1988, pp. 159-165; 1990, pp. 331-356; 1992, pp.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 28
REPORT: RGEN0100

BIBLIOGRAPHY

463-473
EMPR PF (Bergman, E.E., (1938): Report of a Geophysical Survey of
the Horsefly River Valley, British Columbia)
GSC MAP 1424A

DATE CODED: 1988/05/26
DATE REVISED: 1990/03/19

CODED BY: KDH
REVISED BY: AP

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093A 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **WARD'S HORSEFLY**, HARPER LEASE, HORSEFLY GOLD MINING CO.,
HARPERS BAR, HARPER CAMP

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:
LATITUDE: 52 20 20 N
LONGITUDE: 121 24 13 W
ELEVATION: 778 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of old hydraulic pit.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5799931
EASTING: 608760

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Recent			Glacial/Fluvial Gravels

LITHOLOGY: Unconsolidated Sediment/Sedimentary
Calcareous Conglomerate
Sandstone
Siltstone

HOSTROCK COMMENTS: Cenozoic cover including till.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The placer claim(s) on Harper's bar were originally staked around 1864. With the influx of white and Chinese miners in the Cariboo gold rush of the mid-1800's, many small sniping operations (unregistered) removed a large amount of placer gold. Mr. T. Ward bought the old Harper's lease in 1891 and began an organized hydraulic operation. This was quite a large operation. However, no complete production records are available. Estimates of 29000 to 59000 ounces have been made.

The hydraulic pit was approximately 18 metres below the river level. Gold was in yellow gravels, some of which was partially cemented. Blue gravels, lower in the section, also carried some gold. The pay gravels bottomed on (Eocene) shaly rock that dips away to the west, south and east at about 30 to 35 degrees. It appears that the Ward deposit is at a "paleo high" and the gold gravels dip away steeply as demonstrated by the Miocene Shaft 608 metres southwest. The shaft bottoms on Eocene shaly rock at 152 metres below surface (about 145 metres below river level).

The gold values were of sufficient grade to warrant installation of a hydraulic elevator and profitable operations continued for over 14 years.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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N108; 1920-N100-105; 1938-C16; 1947-A197
EMPR EXPL 1989, pp. 147-169

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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REPORT: RGEN0100

BIBLIOGRAPHY

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463-473
EMPR PF (Maps of Harpers Camp Area, 1918, unknown; Galloway, J.D.,
1920, Letter to Minister of Mines re: Harpers Camp; Galloway,
J.D., 1921, Report on Harpers Camp)
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1988/05/26
DATE REVISED: / /

CODED BY: KDH
REVISED BY:

FIELD CHECK: Y
FIELD CHECK:

MINFILE NUMBER: **093A 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACK CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A06E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 18 43 N
LONGITUDE: 121 05 29 W
ELEVATION: Metres

NORTHING: 5797450
EASTING: 630108

LOCATION ACCURACY: Within 500M

COMMENTS: Approximately 2.0 kilometres north on Black Creek from Horsefly River.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold Magnetite

COMMENTS: Minor magnetite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual

TYPE: C01 Surficial placers

SHAPE: Irregular

DIMENSION: 1000 x 1002 x 0005 Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Recent

Glacial/Fluvial Gravels

LITHOLOGY: Layered Bedded Unconsolidated Till
Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Black Creek placer gold deposit is located on Black Creek about 20 kilometres east of Horsefly, British Columbia. The deposit consists of layered, unconsolidated reworked glacio-fluvial, gravel and sand. The material contains abundant kyanite, schist fragments, garnet and quartz grains. Typical of most Horsefly area placers, magnetite is present only in small quantities. The medium to coarse-grain size is probably due to addition of magnetite from quartz diorite on Horsefly Mountain, at the headwaters of Black Creek.

The glacio-fluvial deposits rest on a bedrock of augite porphyry basalt flows, flow breccias and underlying bedded pyroxene rich wackes and siltstones. Grey clays overlie these rocks. The clay has been cut by later, now filled, river channels which crosscut one another in a complex network. No gold is found in this clay. Gold occurs in the lower, coarse gravel channels. Exact determination of pay channels have not been made so the total area extent of gold deposition is vague.

The Black Creek placer deposit was discovered in the late 1890's by Mr. Campbell. The property was purchased by Harold Armes sometime prior to 1920 and was worked intermittently through to 1986 by Mr. Armes and his family. In 1986 the property was acquired by Mr. L. Shunter who has worked the claim steadily through 1988. A total of 2125 grams gold production has been recorded, however, these records are not complete (Bulletin 28).

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR AR 1932-A117,A118
EMPR BULL *28

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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REPORT: RGEN0100

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EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK *1988, pp. 159-166; 1990, pp. 331-356; 1992, pp.
463-473
GSC MAP 1424A

DATE CODED: 1988/12/07
DATE REVISED: 1988/12/07

CODED BY: KDH
REVISED BY: KDH

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093A 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANTOINE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A05E
BC MAP:
LATITUDE: 52 24 53 N
LONGITUDE: 121 34 15 W
ELEVATION: 770 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: General centre of workings.

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5808127
EASTING: 597201

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cenozoic			Glacial/Fluvial Gravels

LITHOLOGY: Unconsolidated Sediment/Sedimentary

HOSTROCK COMMENTS: Cenozoic surficial cover including glacial till.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1933
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Gold 0.4300 Grams per tonne

COMMENTS: Average of gravel washed in 1933.
REFERENCE: Minister of Mines Annual Report 1933, page 145.

CAPSULE GEOLOGY

The deposit consists of Cenozoic unconsolidated sediments. Pay gravel is locally cemented by calcite. The original pay horizon was 1.0 metre thick gravel horizon on top of a red clay layer. The horizon was worked by a series of shallow shafts and drifts at the head of Antoine Creek. Slightly down stream, several small hydraulic pits were made. The gravels were recorded as paying \$0.50 per cubic yard, or about 0.43 grams per tonne. The site was worked for the period 1929 to 1933 by R.N. Campbell and several associates. Only a small amount of gold was produced (6479 grams) which is consistent with the small size of the operation. Recorded production of 5878 grams of gold between the years 1930 to 1935 is probably less than the total produced (Bulletin 28, page 4).

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR BULL *28, p. 50
EMPR FIELDWORK 1988, pp. 159-165; 1990, pp. 331-356; 1992, pp.
463-473

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1988/05/26
DATE REVISED: / /

CODED BY: KDH
REVISED BY:

FIELD CHECK: Y
FIELD CHECK:

MINFILE NUMBER: **093A 018**

NATIONAL MINERAL INVENTORY: 093A12 Cu4

NAME(S): **MARY**, BELL, LL

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 38 42 N
LONGITUDE: 121 52 05 W
ELEVATION: Metres

NORTHING: 5833382
EASTING: 576586

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Copper minerals not identified but probably chalcopyrite.
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Nicola	Undefined Formation	Unnamed/Unknown Informal
Jurassic			

LITHOLOGY: Basalt
Monzonite
Syeno Diorite

HOSTROCK COMMENTS: Intrusives are Early to Middle Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Mineralization occurs associated with Early to Middle Jurassic monzonite and syenodiorite bodies which have intruded Upper Triassic to Lower Jurassic Nicola Group volcanic rocks. Minor amounts of secondary copper minerals occur in fractures within basalt near intrusive rocks.

Malachite and azurite occur infrequently in Upper Triassic basalts associated with intrusive rocks throughout the central Quesnel Belt. It is not known whether the copper mineralization of this occurrence is related to monzonitic intrusions or whether it was deposited before the monzonite was emplaced.

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EMPR ASS RPT 11830, 13063, 14401
EMPR FIELDWORK 1987, pp. 147-153
EMPR MAP 67
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 019**

NATIONAL MINERAL INVENTORY: 093A2 Cu1

NAME(S): **SILVER BOSS, BIG TIMOTHY, S.B.,
TIMOTHY, SILVERBOSS, PERIDOTE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A02W
BC MAP:
LATITUDE: 52 06 54 N
LONGITUDE: 120 56 11 W
ELEVATION: 1920 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Underground
MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5775838
EASTING: 641297

COMMODITIES: Copper Lead Zinc Silver Gold
 Olivine

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Arsenopyrite Pyrrhotite Galena
 Sphalerite Tetrahedrite Olivine
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Disseminated Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Faulted Sheared
DIMENSION: 210 x 7 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: 210 metre long shear zone 4.5 to 9.0 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Takomkane Batholith

LITHOLOGY: Quartz Monzonite
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Quesnel

CAPSULE GEOLOGY

The Silver Boss showing is located within the Jurassic Takomkane batholith, near its northeastern edge. A fault or shear zone, approximately 210 metres in length, consists of a 4.5 to 9.0 metre width of faulted, sheared, brecciated and altered quartz monzonite. Within this zone pyrite, chalcopyrite, arsenopyrite, pyrrhotite, galena, sphalerite, limonite, malachite and azurite are associated with quartz (George Cross Newsletter #152, 1984).

The area was prospected and sampled as the Silver Boss and Peridote claims in 1994 and 1995 by Pioneer Metals Corp. (David Ridley). Peridote crystals occur near the summit of Big Timothy Mountain.

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EMPR GEM 1970-211
EMPR PF (Exeter Mines Prospectus, June 1970; Ascan Resources Ltd. Prospectus, Aug. 24, 1972)
GSC MAP 1424A
GCNL #152, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **GUS**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A02W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 08 12 N
LONGITUDE: 120 54 17 W
ELEVATION: 1585 Metres

NORTHING: 5778309
EASTING: 643396

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Nicola	Undefined Formation	
Jurassic			Takomkane Batholith

LITHOLOGY: Quartz Monzonite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Gus showing is located is within the Jurassic Takomkane batholith, a large granodiorite to quartz monzonite intrusion within dominantly Upper Triassic to Lower Jurassic rocks of the Nicola Group.

Pyrite and minor chalcopyrite occur as disseminations within quartz monzonite near the northeastern margin of the batholith. This occurrence may be related to the Silver Boss occurrence (093A 019) which is about 300 to 400 metres topographically higher in the same area.

BIBLIOGRAPHY

EMPR ASS RPT *2513, 2785
EMPR GEM 1970-211,
EMPR AR 1914-K73; 1915-K58; 1917-F134; 1929-C229
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 021**

NATIONAL MINERAL INVENTORY:

NAME(S): **CORBAN**, YANKS PEAK (L.10662), YANKS PEAK NO. 3 (L.10664),
CARIBOO YANKEE BELLE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 50 27 N
LONGITUDE: 121 26 13 W
ELEVATION: 1700 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5855709
EASTING: 605279

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold Pyrite
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Faulted Fractured
COMMENTS: Veins are partly structurally controlled and trend northeast.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Argillaceous Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Keithley and Harveys Ridge succession are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist
COMMENTS: Keithley and Harvey succession are informal names.

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1925
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	95.9300 Grams per tonne
Gold	383.7100 Grams per tonne

COMMENTS: A probable chip sample over .5 metres reported from one of the adits in 1925.

REFERENCE: Minister of Mines Annual Report 1925, page A161.

CAPSULE GEOLOGY

The geology of the region consists of(?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks of the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist of mainly marble, quartzite and phyllite which in the Yanks Peak area comprise the Keithley and Harveys Ridge successions. Metamorphism of the region varies from chlorite grade to sillimanite and higher but the lode gold deposits of the region occur only in rocks metamorphosed no higher than greenschist facies.

The Corban showing consists of gold and silver mineralization which occurs erratically in northeast trending quartz veins which mainly cut quartzite. The veins, containing pyrite and ankerite, are structurally controlled. Their orientations are "in part controlled by the regional fault and fracture pattern" (Struik, 1988; Geological Survey of Canada Memoir 421). It is suggested that gold mineraliza-

CAPSULE GEOLOGY

tion and chlorite grade metamorphism was coeval.
A sample (assumed to be a chip sample) from an adit taken in 1924, assayed 383.71 grams per tonne gold and 95.93 grams per tonne silver across 0.5 metres (Minister of Mines Annual Report 1925, page A161).
Three shallow tunnels had been excavated on the Corban Zone by 1938.

BIBLIOGRAPHY

EMPR AR *1925-A161; 1928-C202; *1929-C192; 1933-A137; *1934-C30;
1938-C48
EMPR ASS RPT 10209, 10269, 11194
EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 87; 20, Part VI, p. 14
EMPR EXPL 1982-273
EMPR OF 2001-11
EMPR PF (Starr, C.C. (1938): Report on the Cariboo Yankee Belle Mine, 7 p.; Geology, Cariboo Yankee Belle Mine (1"=50'), 1938; Plan, Cariboo Yankee Belle Mine (1"=100'), 1938)
GSC MAP 562A; 1424A
GSC MEM 421
GSC P *38-16, p. 40
W MINER April, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOMESTAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 14 N
LONGITUDE: 121 24 35 W
ELEVATION: 1430 Metres

NORTHING: 5855348
EASTING: 607121

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Faulted Fractured
DIMENSION: 0001 Metres STRIKE/DIP: 060/75S
COMMENTS: The vein is 0.6 metres wide, partly structurally controlled, strikes 60 degrees and dips 75 degrees south.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartz Sericite Schist
Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Keithley and Harveys Ridge successions are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1954
SAMPLE TYPE: Grab
COMMODITY: Gold 7.5400 Grams per tonne
COMMENTS: Selected sample containing about 50 per cent pyrite from a quartz vein in an adit.
REFERENCE: Bulletin 34, page 63.

CAPSULE GEOLOGY

The geology of the region consists of(?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist of mainly marble, quartzite and phyllite which in the Yanks Peak area comprise the Keithley and Harvey Ridge successions. Metamorphism of the region varies from chlorite to sillimanite and higher grade. The lode gold deposits of the region occur only in rocks metamorphosed no higher than greenschist facies.

The Homestake showing consists of gold mineralization which occurs erratically in northeast trending quartz veins which, in this area, cut quartz-sericite schist. The veins are structurally controlled and their orientations are "in part controlled by the regional fault and fracture pattern" (Struik, 1988; Geological Survey of Canada Memoir 421). It is suggested that gold mineralization and

CAPSULE GEOLOGY

chlorite grade metamorphism was coeval.

The Homestake vein, which is about 0.6 metres wide, contains abundant pyrite with associated gold.

The vein strikes 60 degrees and dips 75 degrees south. A selected grab sample taken in 1954 contained 50 per cent pyrite and assayed 7.54 grams per tonne gold (Bulletin 34, page 63).

BIBLIOGRAPHY

EMPR ASS RPT 10209, 11117
EMPR ASS RPT SUM 1981-234
EMPR BULL *34, p. 63
EMPR EXPL 1982-275
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **SOCKETT**, NUMBER 1, NUMBER 2

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 49 49 N
LONGITUDE: 121 25 51 W
ELEVATION: 1326 Metres

NORTHING: 5854544
EASTING: 605716

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Lead Zinc

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age. Keithley and Harveys Ridge successions are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of(?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks mainly consist of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions.

Metamorphism of the region varies from chlorite to sillimanite and higher grade. The host rocks of the Sockett occurrence have been metamorphosed to greenschist facies.

Mineralization occurs in quartzite in quartz stringers and in silicified zones adjacent to the stringers. Mineralization consists of gold, pyrite, galena and sphalerite.

BIBLIOGRAPHY

EMPR ASS RPT 10209
EMPR ASS RPT SUM 1981-234
EMPR BULL *34, p. 85
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRENCH SNOWSHOE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 50 23 N
LONGITUDE: 121 24 48 W
ELEVATION: 1417 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5855621
EASTING: 606872

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by metasedimentary Snowshoe Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer mining operations were fairly extensive on French Snowshoe Creek for a distance of over 800 metres downstream from the mouth of Dutchman Creek. Small shallow hand diggings also extend upstream from Dutchman Creek for about 2.3 kilometres. More recent hydraulic mining operations apparently also took place about 2.0 kilometres upstream from Dutchman Creek.

Drilling in 1991 by Yanks Peak Resources Ltd. outlined an intermediate channel from 0.8 to 13.1 metres and a lower, possibly Tertiary channel, from 15.2 metres to bedrock (George Cross Newsletter #134, July 12, 1991).

Recorded production from French Snowshoe Creek for the period 1874 to 1945 amounted to 12.752 kilograms of gold.

The source of the placer gold is most likely the gold vein deposits hosted by the Snowshoe Group metasedimentary rocks. Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion, is the likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1878-374; 1902-90; 1913-66; 1933-144; 1945-127; 1949-243;
1950-202; 1960-123; 1961-134
EMPR BULL 28, pp. 49,50; 34, pp. 45,50-53,55,56
EMPR EXPL 1989, pp. 147-169; 1990, pp. 331-356
EMPR FIELDWORK 1992, pp. 463-473
EMPR OF 2001-11
EMPR PF (Snowshoe Creek placer leases; Sketches; Underground workings Sketch)
GSC MAP 1424A
GSC MEM 421
GCNL #134, 1991

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 025**

NATIONAL MINERAL INVENTORY:

NAME(S): **BULLION PIT**, BULLION HYDRAULIC, CHINA PIT,
BULLION

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:
LATITUDE: 52 37 38 N
LONGITUDE: 121 38 21 W
ELEVATION: 762 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of open pit; 5.0 kilometres west of Likely.

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5831673
EASTING: 592108

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C02 Buried-channel placers
DIMENSION: 1500 x 450 x 125 Metres
COMMENTS: Irregular arc, northwest trend.

STRIKE/DIP: C01 Surfacial placers
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Pleistocene			Unnamed/Unknown Informal

LITHOLOGY: Gravel
Unconsolidated Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: BULLION PIT

REPORT ON: Y

CATEGORY: Measured
QUANTITY: 16200000 Tonnes
COMMODITY: Gold
GRADE: 0.7542 Grams per tonne
YEAR: 1986

REFERENCE: George Cross Newsletter No.120, 1986.

CAPSULE GEOLOGY

The Bullion Pit is located 97 kilometres east of Williams Lake and 5 kilometres west of Likely.

The Bullion was one of the largest placer gold mines in the world, measuring 1500 by 450 by 125 metres. Work began in the area in the 1870's and continued through to 1942; a small amount of work was done recently.

The gravels in the Bullion Pit are stratigraphically equivalent to those hosting the Wells-Barkerville Cariboo gold fields. These are Pleistocene gravels, predominantly from the last glacial event. The lowest gravels are fluvial and may represent a pre-Wisconsin (greater than 100,000 years before present) non-glacial event. Above these are glacio-fluvial gravels and till of the early Wisconsin stage. This segment is 33 to 100 metres thick and contain the highest gold values. Unconformably above that is a layer of consolidated lodgement till called the "boulder clay" by early placer miners. The unconformity represents the Olympia glacial interstage of the middle Wisconsin (60,000 to 30,000 years before present). This lodgement till is typically no more than several metres thick. The lodgement till represents the base of the Fraser glacial stage of the late Wisconsin (30,000-10,000 years before present). Above the till are well stratified gravels that form the balance of the upper 30 to 50 metres of section. The top of the section is capped by a thin veneer of Holocene debris (less than 10,000 years before present). The ancient channel of the Bullion pit represents an infill of a fluvial channel (greater than 100,000 years before present).

CAPSULE GEOLOGY

Gold recovered from the Pleistocene gravels was usually fine "coarse" gold with nuggets 0.9 to 7 grams in size. Gold is flattened, well worn and frequently coated in oxide. Provenance, in part, appears to be the metamorphic terrane to the east, the same as the provenance of placer gold in the Wells-Barkerville area. Some of the gold, along with large euhedral crystals of pyrite and arsenopyrite, is probably more proximal. The source is possibly from quartz veins with pyrite and arsenopyrite bearing alteration envelopes hosted by black phyllites of the basal Triassic assemblage, such as those on Spanish Mountain.

The lower gravels of the early Wisconsin glacial stade carry the higher grade gold values (0.203 grams per cubic metre). Calculated from all published sources, the average grade is 0.0711 gram per tonne and the best value was 0.0766 gram per tonne (Minister of Mines Annual Report 1935, page 16). In 1986, measured recoverable reserves of 16,200,000 tonnes of ore grading 0.7542 gram per tonne gold were reported (George Cross Newsletter #120, 1986).

John Hobson began mining the Bullion Pit in 1895. Estimations indicate that a total of 200 million tonnes of material were removed by hydraulic methods and 5.463 million grams (175,644 ounces) of gold were produced.

BIBLIOGRAPHY

- EMPR AR 1902-72; 1907-42; 1909-21; 1910-48; 1911-K50,54; 1913-K63, 64; 1914-K72; 1915-K57; 1918-K136; 1919-K111; 1921-G111,114; 1929-C191,204; 1930-A173; 1931-A90,91; 1932-A107; 1933-A140; *1935-C16; 1937-A7,50,C35; 1938-C50; 1939-A10; 1940-A89; 1942-A89
- EMPR BULL 1, p. 39; 15, pp. 8,36; 28, pp. 21-31,48-52
- EMPR EXPL 1989, pp. 147-169
- EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
- EMPR PF (Placer Gold Fields Co. 1900 map; Annes, E.C., (1925): Sketch Map of Pre-Glacial Channels of the South Fork of Quesnel River; Lay, D., (1927): Sketch Map of the South Fork of Quesnel River; Bullion Mining Co. various maps; Clague, J.J. 1987, A placer gold exploration target in the Cariboo district, B.C. GSC P 87-1A)
- GSC MAP 1424A
- GSC P *87-1A, pp. 177-180
- GCNL #9, 1983; #120, 1986; #35 (Feb.19), #89 (May 7), #91 (May 11), 1992
- GEOLOG #22 part 3, August, 1993
- WWW http://www.infomine.com/index/properties/BULLION_PIT_CLAIMS.html
- Placer Dome File
- Sharpe, R.F., (1939): *The Bullion Hydraulic Mine, The Miner, Vol. 12, No. 1, pp. 37-40 (copy in PF)

DATE CODED: 1988/04/25
DATE REVISED: 1989/03/29

CODED BY: KDH
REVISED BY: KDH

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093A 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **LUCE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 51 24 N

LONGITUDE: 121 26 21 W

ELEVATION: Metres

NORTHING: 5857467

EASTING: 605091

LOCATION ACCURACY: Within 500M

COMMENTS: Cabin shown on 1:50,000 topo sheet.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer Residual

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by metasedimentary Snowshoe Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The main placer workings on Luce Creek were hydraulic operations on an old channel that was reported to be about 300 metres long and 9 to 15 metres wide.

The source of the placer gold is most likely the gold vein deposits hosted in the Snowshoe Group metasedimentary rocks.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1902-91; 1905-51; 1906-38; 1909-47; 1910-46
EMPR BULL 34, pp. 48-50
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **JANE (L. 11337)**, DOUGLAS VEIN, OLD TIMER (L. 11338),
HAYWOOD VEIN, ARRASTRE VEIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 51 28 N
LONGITUDE: 121 25 39 W
ELEVATION: 1630 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5857608
EASTING: 605874

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Gold Galena Pyrite
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
DIMENSION: 0001 Metres
COMMENTS: Veins are 0.5 to 1.5 metres wide.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Sericite Schist
Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age. Possibly Harveys Ridge succession.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: DUMP REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1954
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 23.9800 Grams per tonne
Gold 250.4400 Grams per tonne
COMMENTS: Selected quartz sample from dump containing 40 per cent pyrite.
REFERENCE: Bulletin 34, page 84.

CAPSULE GEOLOGY

The geology of the region consists of(?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold bearing quartz veins occur only in greenschist facies rocks. The gold mineralization of the Jane group of veins occurs with associated pyrite and galena in quartz-ankerite veins and stringers within sericite schist. The veins are 0.5 to 1.5 metres wide. The host rock has been mapped as "Midas Formation" (Campbell, 1978; Geological Survey of Canada Open File Map 574) but was remapped as undifferentiated Snowshoe Group (possibly the Harveys Ridge succession) by Struik in 1988 (Geological Survey of Canada Memoir 421).

CAPSULE GEOLOGY

A selected quartz sample from the dump contained 40 per cent pyrite and assayed 250.44 grams per tonne gold and 23.98 grams per tonne silver (Bulletin 34, page 84).

BIBLIOGRAPHY

EMPR AR *1929-C194; *1933-A137; 1938-C47; 1939-A71; 1940-A57;
1941-A56; 1942-A55
EMPR ASS RPT 10269, 10775, 11194, *13663
EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 78
EMPR EXPL 1975-E127; 1982-273; 1985-C274
EMPR OF 2001-11
GSC ANN RPT 1887-1888, p. C44
GSC MAP 562A; 1424A
GSC MEM 421
GSC OF 1978-574 (Map)
GSC P *38-16, p. 36

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **TALBOT VEINS**, YANKS PEAK NO.2 (L.10663), CARIBOO YANKEE BELLE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 50 44 N
LONGITUDE: 121 26 33 W
ELEVATION: 1737 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5856226
EASTING: 604894

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Faulted Fractured
DIMENSION: 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Veins are 0.3 to 1.0 metre wide and are structurally controlled.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?) Hadrynian to Paleozoic in age. Keithley and Harveys Ridge successions are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEINS REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1954
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 18.8400 Grams per tonne
COMMENTS: A selected sample of pyrite mineralization.
REFERENCE: Bulletin 34, page 89.

CAPSULE GEOLOGY

The geology of the region consists of (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions of the Snowshoe Group. Metamorphism of the region varies from chlorite to sillimanite and higher grade. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

Gold mineralization in the Talbot veins occurs sporadically in northeast trending quartz veins which mainly cut quartzite. The veins are structurally controlled and their orientations are "in part controlled by the regional fault and fracture pattern" (Struik, 1988; Geological Survey of Canada Memoir 421). It is suggested that gold mineralization and chlorite grade metamorphism was coeval.

Gold in the Talbot quartz veins is associated with pyrite. These veins are from 0.3 to 1 metre wide and are generally only

CAPSULE GEOLOGY

sparsely mineralized.
In 1954 a selected grab sample containing pyrite mineralization
assayed 18.84 grams per tonne gold (Bulletin 34, page 89).

BIBLIOGRAPHY

EMPR AR 1925-C193
EMPR ASS RPT 11194
EMPR BULL *34, p. 87
EMPR EXPL 1982-273
EMPR OF 2001-11
EMPR PF (Starr, C.C. (1938): Report on the Cariboo Yankee Belle
Mine, 7 p. (located in Corban (093A 021); Geology, Cariboo Yankee
Belle Mine (1"=50'), 1938 (located in 093A 021); Plan, Cariboo
Yankee Belle Mine (1"=100'), 1938 (located in 093A 021))
GSC MAP 562A; 1424A
GSC MEM 421
GSC OF 1978-574(Map)
GSC P *38-16, p. 40
W MINER April, 1984
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **AMPARO**, HOMESTAKE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 33 N
LONGITUDE: 121 24 45 W
ELEVATION: 1555 Metres

NORTHING: 5855931
EASTING: 606921

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Tungsten Lead

MINERALS

SIGNIFICANT: Scheelite Galena
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
DIMENSION:

STRIKE/DIP: 070/65N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartz Vein
 Quartzite
 Marble
 Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of(?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions of the Snowshoe Group. Metamorphism of the region varies from chlorite to sillimanite and higher grade.

Mineralization in the Amparo showing consists of streaks of galena and irregular, discontinuous masses of light buff colored scheelite. Mineralization occurs in one or two quartz veins hosted by quartzite. The quartzite is reported to contain ankerite, presumed to be of hydrothermal origin.

BIBLIOGRAPHY

EMPR AR 1952-A111
EMPR ASS RPT 10209, 11117
EMPR ASS RPT SUM 1981-234
EMPR BULL *34, p. 64
EMPR EXPL 1982-275
EMPR OF 1991-17, 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEST**, JANE (L.11338), OLD TIMER (L.11337)

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 51 28 N
LONGITUDE: 121 25 39 W
ELEVATION: 1630 Metres

NORTHING: 5857608
EASTING: 605874

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Galena Pyrite
COMMENTS: Galena appears to be argentiferous.
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Harveys Ridge Succession

LITHOLOGY: Argillaceous Schist
Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?) Hadrynian to Paleozoic in age.
Possibly Harveys Ridge succession (informal name).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1954
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 3.4300 Grams per tonne
Gold 36.6600 Grams per tonne

COMMENTS: Probable chip sample over approximately 25 centimetres of quartz vein.

REFERENCE: Bulletin 34, page 84.

CAPSULE GEOLOGY

The geology of the region consists of (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold bearing quartz veins occur only in greenschist facies rocks.

Mineralization of the West Vein showing occurs in quartz veins and stringers hosted by argillaceous schist. Gold is commonly associated with pyrite and galena which appears to be argentiferous.

The host rock has been mapped as "Midas Formation" (Campbell, 1978; Geological Survey of Canada Open File Map 574) but was remapped as undifferentiated Snowshoe Group (possibly the Harveys Ridge succession) by Struik in 1988 (Geological Survey of Canada Memoir 421).

In 1954 a sample (assumed to be a chip sample) over 25 centi-

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CAPSULE GEOLOGY

metres of quartz vein assayed 36.60 grams per tonne gold and 3.43 grams per tonne silver (Bulletin 34, page 84).

BIBLIOGRAPHY

EMPR AR 1929-C194; 1933-A137; 1938-C47; 1939-A71; 1940-A57;
1941-A56; 1942-A55
EMPR ASS RPT 10269, 10775, 11194, *13663
EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 78
EMPR EXPL 1975-E127; 1982-273; 1985-C274
EMPR OF 2001-11
GSC ANN RPT 1887-1888, p. C44
GSC MAP 562A; 1424A
GSC MEM 421
GSC P *38-16, p. 36

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 031**

NATIONAL MINERAL INVENTORY:

NAME(S): **BERTHA**, PAULINE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 51 42 N
LONGITUDE: 121 25 42 W
ELEVATION: 1713 Metres

NORTHING: 5858039
EASTING: 605808

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
DIMENSION: 0002 Metres
COMMENTS: Vein is 1 to 2 metres wide.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Harveys Ridge Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillaceous Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?) Hadrynian to Paleozoic in age. Possibly Harveys Ridge succession (informal name).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

The mineralization of the Bertha showing consists of gold and associated pyrite in a quartz vein hosted by argillaceous quartzite. The vein is one to two metres wide.

The host rock has been mapped as "Midas Formation" (Campbell, 1978, Geological Survey of Canada Open File Map 574) but was remapped as undifferentiated Snowshoe Group (possibly the Harveys Ridge succession) by Struik in 1988 (Geological Survey of Canada Memoir 421).

BIBLIOGRAPHY

EMPR ASS RPT 10269, 10775, 11194, *13663
EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 83
EMPR EXPL 1975-E127; 1982-273; 1985-C274
EMPR OF 2001-11
GSC MAP 562A; 1424A
GSC MEM 421
GSC P *38-16, p. 38

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 031**

MINFILE NUMBER: **093A 032**

NATIONAL MINERAL INVENTORY:

NAME(S): **BETTY (L. 11335)**, BETTY FR. (L.11334)

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 51 19 N
LONGITUDE: 121 26 08 W
ELEVATION: 1494 Metres

NORTHING: 5857318
EASTING: 605338

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Argillaceous Schist
Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Possibly Harveys Ridge succession (informal name).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization
	GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1933
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	2.7400 Grams per tonne
Gold	8.4300 Grams per tonne

COMMENTS: Sample of a sulphide zone.
REFERENCE: Minister of Mines Annual Report 1933, page A137.

CAPSULE GEOLOGY

The geology of the region consists of (?) Hadrynian to Paleozoic Snowshoe Group rock. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold bearing quartz veins occur only in greenschist facies rocks. The Betty showing consists of gold and locally abundant pyrite in a quartz vein hosted by argillaceous schist. Based on observations of similar veins in the area, gold is presumably associated with the pyrite.

The host rock has been mapped as "Midas Formation" (Campbell, 1978, Geological Survey of Canada Open File Map 574) but was remapped as undifferentiated Snowshoe Group (possibly the Harveys Ridge succession) by Struik in 1988 (Geological Survey of Canada Memoir 421).

A grab sample of a sulphide rich zone assayed 8.43 grams per tonne gold and 2.74 grams per tonne silver (Minister of Mines Annual Report 1933, page A137).

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BIBLIOGRAPHY

EMPR AR 1933-A137
EMPR ASS RPT 10269, 10775, 11194, *13663
EMPR ASS RPT SUM 1981-249
EMPR BULL 34, p. 83
EMPR EXPL 1982-273; 1985-C279
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **SADDLE (L. 4668)**, MIDAS, SADDLE EXTENTION (L. 4669)

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 45 N
LONGITUDE: 121 25 25 W
ELEVATION: 1753 Metres

NORTHING: 5856285
EASTING: 606165

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 0001 Metres STRIKE/DIP: 355/70E TREND/PLUNGE:
COMMENTS: The vein averages 1.2 metres in width, within a north striking fault zone.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Black Silty Quartzite
Sericite Schist
Argillaceous Schist
Marble
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1954
SAMPLE TYPE: Chip
COMMODITY Gold GRADE 131.5600 Grams per tonne
COMMENTS: Sample of about 1.5 metres across a quartz vein.
REFERENCE: Bulletin 34, page 69.

CAPSULE GEOLOGY

The geology of the region consists of (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

The Saddle showing consists of a mineralized quartz vein, averaging about 1.2 metres in width, within a north-striking fault zone. The vein strikes 355 degrees and dips 70 degrees east. The fault zone cuts rocks of possibly Lower Paleozoic age. Black silty quartzites occur west of the showing and grey argillaceous and sericitic schists occur to the east. Mineralization within the vein consists of gold, pyrite, galena, sphalerite and chalcopyrite.

A 1.5 metre chip sample taken across the vein assayed 131.56

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CAPSULE GEOLOGY

grams per tonne gold (Bulletin 34, page 69).

BIBLIOGRAPHY

EMPR AR 1929-C193; 1930-A176
EMPR BULL *34, p. 69
EMPR OF 2001-11
GSC MAP 562A; 1424A
GSC MEM 421
GSC P 38-16, p. 38

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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BIBLIOGRAPHY

EMPR OF 2001-11
GSC ANN RPT 1887-1888, p. C45
GSC MAP 369; 1424A
GSC MEM 421
GSC P 38-16, p. 39

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Snowshoe Group. The veins, which strike northeast to east, are known to occur over an area of about 60 by 570 metres and average 30 to 50 centimetres in width. In the late 1930's the Midas adit, which attained a length of 365 metres, was constructed in order to carry out underground exploration of the veins.

The average of two chip samples taken from a narrow quartz vein in the Midas adit assayed 1212.46 grams per tonne gold (Bulletin 34, page 75). In 1949, 45 tonnes of ore produced 311 grams of gold and 62 grams of silver.

BIBLIOGRAPHY

EMPR AR 1929-C194; 1933-A137; 1934-C30; 1949-A103; 1950-107
EMPR BC METAL MM00451
EMPR BULL *34, p. 68
EMPR OF 2001-11
EMPR PF (Drillhole sections (sketches) Midas Underground, date unknown; Sketch Maps Midas Underground (veins), date unknown; JBK to James H. Howard - Geologic Notes, date unknown; Notes on Various conversations by W.D. McCartney(?) Aug. & Sept. 1949; McCartney, W.D. Nov. 1949, Midas Member)
GSC ANN RPT 1887-1888, p. C45
GSC MAP 369; 1424A
GSC MEM 421
GSC P 38-16, p. 39

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOULDER LEDGE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 51 48 N
LONGITUDE: 121 26 05 W
ELEVATION: Metres

NORTHING: 5858215
EASTING: 605374

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartz Vein
Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Probably Harveys Ridge succession (informal name). Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions, but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks. The Boulder Ledge showing consists of a single quartz vein discovered during tunnelling operations in 1874. While descriptive information is scanty, the vein was reported to contain galena and gold mineralization. Because of its location with respect to similar veins in the area, it is expected that the vein is hosted by Harveys Ridge succession, Snowshoe Group rocks.

BIBLIOGRAPHY

EMPR AR 1886-227
EMPR ASS RPT 10269, 10775, 11194, 13663
EMPR EXPL 1985-C274
EMPR OF 2001-11
GSC ANN RPT 1887-1888, p. C45
GSC MAP 369; 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/02

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **JIM**, RIDGE NO.4, FHM CODVILLE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 42 N
LONGITUDE: 121 24 51 W
ELEVATION: 1737 Metres

NORTHING: 5856206
EASTING: 606803

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz veins exposed over a surface area of about 150 by 60 metres.

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Gold Galena Pyrite Sphalerite
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Folded
DIMENSION: 0150 x 0060 x 0002 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Quartz veins exposed over an area of 150 by 60 metres are up to 1.8 metres wide, and strike northeast and east.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Argillaceous Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1954
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 10.2800 Grams per tonne
Gold 78.8000 Grams per tonne
COMMENTS: A selected grab sample of quartz containing 75 per cent pyrite.
REFERENCE: Bulletin 34, page 68.

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1978
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 71.6000 Grams per tonne
Lead 3.6000 Per cent
Zinc 2.3800 Per cent
COMMENTS: An average of sampling over 14.5 metres.
REFERENCE: Assessment Report 7106.

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions, but further to the east they remain undifferentiated. Metamorphism of the region

CAPSULE GEOLOGY

varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

The Jim showing consists of several mineralized quartz-ankerite veins, up to 1.8 metres wide, hosted by dark grey argillaceous quartzite. The host rocks are folded about northwest trending axes and the veins commonly strike northeast and east. Mineralization consists of sparsely distributed galena, sphalerite, pyrite and gold.

An average of sampling over 14.5 metres of the A1 trench in 1978 assayed 71.60 grams per tonne silver, 3.6 per cent lead and 2.38 per cent zinc (Assessment Report 7106). A selected grab sample containing 75 per cent pyrite taken from the Jim vein in 1954 assayed 78.80 grams per tonne gold and 10.28 grams per tonne silver (Bulletin 34 page 68).

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1960-19
EMPR ASS RPT *7106
EMPR BULL *34, p. 66
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONTE CHRISTO**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 06 N
LONGITUDE: 121 24 53 W
ELEVATION: Metres

NORTHING: 5855093
EASTING: 606790

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u> Proterozoic-Paleoz.	<u>GROUP</u> Snowshoe	<u>FORMATION</u> Undefined Formation	<u>IGNEOUS/METAMORPHIC/OTHER</u>
---	--------------------------	---	----------------------------------

LITHOLOGY: Chlorite Schist
Graphitic Schist
Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions, but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

The Monte Christo showing is underlain mainly by clastic metasedimentary rocks exposed in the Lightning Creek anticlinorium. Mineralization consists of pyrite, galena and sphalerite in quartz veins crosscutting chlorite and graphite schist.

BIBLIOGRAPHY

EMPR ASS RPT 10209, 11117
EMPR ASS RPT SUM 1981-234
EMPR BULL 34, pp. 39,64
EMPR EXPL 1982-275
EMPR OF 2001-11
GSC MAP 369; 1424A
GSC OF 858
GSC P 82-1B, pp. 117-124

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 040**

NATIONAL MINERAL INVENTORY: 093A12 Cu5

NAME(S): **SLIDE**, CURATOR, SLIDE MOUNTAIN

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 39 43 N
LONGITUDE: 121 53 55 W
ELEVATION: Metres

NORTHING: 5835235
EASTING: 574489

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate midpoint of three showings.

COMMODITIES: Copper

MINERALS

SIGNIFICANT:	Chalcocite	Bornite	Chalcopyrite	Tetrahedrite
ALTERATION:	Silica	Malachite	Azurite	
ALTERATION TYPE:	Silicific'n		Oxidation	
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER:	Vein	Stockwork
CLASSIFICATION:	Hydrothermal	Epigenetic
TYPE:	L03 Alkalic porphyry Cu-Au	
SHAPE:	Irregular	
MODIFIER:	Faulted	Fractured

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Pyroxene Basalt Breccia
Hornblende Porphyry Dike
Feldspar Porphyry Sill
Felsic Dike
Flow Breccia
Tuff

HOSTROCK COMMENTS: Intruded by hornblende porphyry dikes and sills, feldspar porphyry sill and a felsic dike.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Slide showing is located in the Central Quesnel belt of south central British Columbia. The region is underlain by Nicola Group rocks which, in this area, consists of a lower, Upper Triassic, assemblage of sedimentary and basic volcanic rocks overlain by a Lower to Middle Jurassic assemblage of dominantly volcanic breccias and tuffs (characterized by the presence of feldspathic clasts). The top of the basic volcanic assemblage is marked by discontinuous lenses of dark grey limestone which also delimits the top of the Triassic.

The showing is hosted by Upper Triassic limestone conformably overlying pyroxene basalt breccia to the west. Basaltic and felsic breccias are present to the east. The contact between the limestone and the breccias to the east has been interpreted as a fault. The limestone is intruded by hornblende porphyry dikes, felsic dikes and felsic sills.

Copper mineralization occurs within the limestone and in the underlying basalt as fracture fillings and is accompanied by silicification. Copper minerals consist of bornite, chalcocite and tetrahedrite with secondary malachite and minor azurite. In the basalt, copper occurs mainly in minor amounts of chalcopyrite. Mineralization is epigenetic and possibly related to the felsic intrusions.

BIBLIOGRAPHY

EMPR ASS RPT 2857, 2858, 2859, 6251, 10328, *11116, *11812, *12265, *13651
EMPR EXPL 1977-E180; 1982-269; 1983-391; 1984-289

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 70
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1970-207
N MINER Mar.15, 1984
GCNL #242, 1983; #6,#18,#36, 1984
EMPR FIELDWORK 1987, pp. 147-153
EMPR MAP 67
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **BULLION LODE**, KEY, TOP-HAT

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 43 N
LONGITUDE: 121 40 05 W
ELEVATION: Metres

NORTHING: 5831791
EASTING: 590150

LOCATION ACCURACY: Within 500M

COMMENTS: Central location within a large group of claims - 8.0 kilometres due west of Likely.

COMMODITIES: Gold Copper Silver

MINERALS

SIGNIFICANT: Gold Chalcopyrite Silver
ASSOCIATED: Pyrite
ALTERATION: Chlorite Epidote Calcite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Mesothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Nicola	Undefined Formation	
Lower Jurassic			Unnamed/Unknown Informal

ISOTOPIC AGE: 193 +/- 7 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Alkali Olivine Basalt
Volcanic
Feldspathic Tuff
Syeno Diorite
Monzodiorite

HOSTROCK COMMENTS: The host rocks are Nicola equivalent volcanic rocks. Material dated is hydrothermal biotite related to ore mineral deposition.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Bullion Lode property covers a large section of Upper Triassic alkali-olivine basalts and some Lower Jurassic volcanic feldspathic tuffs (Nicola Group equivalent). These rocks underlie the eastern side of the Central Quesnel Belt, near Likely, British Columbia. The rocks trend northwest and dip gently to the southwest. Intruded into the rocks are several small monzodioritic to syeno-dioritic plugs associated with a similar intrusion in the Bullion Pit (093A 025, immediately east of the prospect). Substantial pyrite-chalcopyrite mineralization with trace gold and silver values occurs around the margins of the plugs. The hydrothermal alteration varies from weak to intense propylitization. Diamond drilling (1985) has not defined any large mineralized zones.

BIBLIOGRAPHY

EMPR FIELDWORK *1986, p. 129; *1987, p. 151
EMPR EXPL 1985-C264; 1987-C250
EMPR ASS RPT 5954, 5955, 5956, 6337, 6437, 6861, 10947, 13964, 16264
EMPR MAP 20; *67
EMPR PF (Global Pacific Minerals Inc. Prospectus Aug. 1989)
GSC MAP 1424A
GCNL #43, 1985
N MINER Oct.28, 1985

DATE CODED: 1988/04/26
DATE REVISED: 1990/03/19

CODED BY: KDH
REVISED BY: AP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 041**

CAPSULE GEOLOGY

Mines Annual Report 1902).
"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1887-255-259; 1889-273-277; 1890-359-362; 1891-559-563;
1892-525-529; *1896-515; *1897-476-481,484; 1898-982; 1899-575;
*1902-69-81; 1903-H66-H69; 1904-G37-42,51; 1912-K53; 1923-A127-
A131; 1930-A178; 1932-A117
EMPR FIELDWORK 1988, pp. 159-165; 1990, pp. 331-356; 1992, pp.
463-473
EMPR PF (Mining Lease, 1897)
EMPR EXPL 1989, pp. 147-169
GSC MAP 1424A
Placer Dome File

DATE CODED: 1988/05/27
DATE REVISED: 1990/03/19

CODED BY: KDH
REVISED BY: AP

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093A 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **SPANISH MOUNTAIN**, CPW, MARINER II,
MAX, EL TORO, MT. CALVERY,
MADRE, MAIN, LE,
JOE

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:

MINING DIVISION: Cariboo

LATITUDE: 52 35 19 N
LONGITUDE: 121 27 18 W
ELEVATION: 1280 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5827629
EASTING: 604665

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of CPW claim block.

COMMODITIES: Gold Silver Lead Copper Zinc

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Chalcopyrite Tetrahedrite
Pyrite
ASSOCIATED: Quartz Ankerite Mariposite
ALTERATION: Ankerite Mariposite
ALTERATION TYPE: Carbonate Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Bladed
MODIFIER: Folded Faulted
COMMENTS: Also fractured.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Upper Triassic
GROUP: Nicola
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Shale
Siltstone
Siliceous Tuff
Limestone
Volcanic Breccia
Pillow Lava

HOSTROCK COMMENTS: Felsic porphyry dikes/sills in shale/siltstone.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
RELATIONSHIP:
PHYSIOGRAPHIC AREA: Quesnel Highland
GRADE: Greenschist

INVENTORY

ORE ZONE: CPW
REPORT ON: Y
CATEGORY: Unclassified
QUANTITY: 838160 Tonnes
YEAR: 1988
COMMODITY: Gold
GRADE: 1.9500 Grams per tonne
COMMENTS: Reserves in the Main (Madre) and LE zones.
REFERENCE: Trio Gold Corp. Annual Report 1988.

CAPSULE GEOLOGY

The region is underlain by Upper Triassic metasedimentary rocks with some intercalated volcanics of the basal part of the Nicola Group. This sequence is overlain to the west by alkali basalt and alkali olivine basalt. The metasedimentary rocks consist of slaty to phyllitic, dark grey to black shale and siltstone and dark brown to black-weathering grey limestone and, increasing in amount up section, banded tuff, volcanic breccia and local pillow lavas.

These rocks have been folded initially about northwest trending axes and then refolded about axes subparallel to those of F1 folds at the mesoscopic scale. Whereas F1 folds have an accompanying penetrative fabric, deformation associated with F2 folding was essentially nonpenetrative, manifested as crenulation and fracture

CAPSULE GEOLOGY

cleavages. A third phase of deformation unaccompanied by folding is recognized as easterly striking, steeply dipping fractures. Northeast directed thrust faults occur at the base of the metasedimentary assemblage and possibly within the assemblage. These faults probably formed at the same time as F1 folds and are deformed during F2 folding. Northeast striking, steeply dipping normal faults cut the volcanic terrane to the west and appear to have cut the eastern metasedimentary rocks in some areas.

The geology of the CPW deposit is typical of the metasedimentary assemblage. Dark grey siltstone and shale has been folded along northwest striking axes, in places isoclinally. Intercalated lenses of highly siliceous (probably rhyolitic) tuff occur within the sequence. Felsic porphyry dikes and sills also occur.

Gold mineralization with associated base metals occurs within quartz veins. The veins formed during and after deformation along the limbs and localized within hinge regions of mesoscopic folds. There is a suggestion that these quartz veins are also fault or shear-controlled. Mineralization consists of coarse gold, galena, sphalerite, chalcopyrite, tetrahedrite and pyrite with quartz, mariposite and ankerite gangue. Gold also occurs in limonitic pseudomorphs after pyrite within siltstone. Coarse gold visible in some quartz veins may be the product of supergene enrichment. Drilling results indicate that gold mineralization in the quartz veins is discontinuous or in podiform shoots. The veins are generally narrow but can be up to 4 metres wide. The quartz veins also cut felsic porphyry. Several zones of oxidized material, containing a small amount of reserves, have been identified and tested.

The gold-bearing quartz veins were discovered in 1933 by F. Dickson and A. Bayley. Two adits were driven on lower veins in 1938. In 1947, El Toro B.C. Mines, Ltd. conducted diamond drilling (8 holes, 793 metres) and shipped 3.6 tonnes of ore, containing 249 grams of gold, 1306 grams of silver, 46 kilograms of copper and 66 kilograms of lead.

Unclassified reserves in the Main (Madre) and LE zones are 838,160 tonnes grading 1.95 grams per tonne gold (Trio Gold Corp. Annual Report 1988). Erratically distributed free gold makes accurate estimations difficult.

In 1992, 635 tonnes (700 tons) of ore were mined and stockpiled; 318 tonnes (350 tons) were sent to the Premier mill and 105 tonnes (116 tons) to the Bow Mines (Greenwood) mill. Schroeter estimates 1431 grams (46 ounces) of gold were recovered from the Premier mill and 3266 grams (105 ounces) of gold were recovered from the Greenwood mill.

Exploration by Cyprus Amax Minerals in 1996 examined the bulk mineable potential of the property through a comprehensive trenching and sampling program. Cyprus examined the widespread occurrence of gold mineralization associated with a shale-siltstone horizon (i.e. stratabound).

Consolidated Logan Mines Ltd. has an option on the property from Wildrose Resources Ltd. Imperial Metals optioned the property from Wildrose in January 2000. Imperial must spend \$500,000 over 5 years. Skygold Ventures Ltd. entered into an option agreement with Wildrose Resources in 2003.

BIBLIOGRAPHY

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- EMPR AR 1933-A134; 1936-C38; 1938-C48; *1947-A123-A127
- EMPR ASS RPT *6460, *6935, *8636, *11822, *14682, 15880
- EMPR BC METAL MM00449
- EMPR EXPL 1977-E179; 1983-384; 1985-B14,15; 1986-C307; 1987-C250
- EMPR FIELDWORK 1987, pp. 139-145
- EMPR INF CIRC 1989-1, p. 20; 1997-1, p. 28
- EMPR MAP 65 (1989)
- EMPR OF 1992-1, 2001-11
- EMPR P 1990-3
- EMPR PF (see Nifty, 093D 006 - Wildrose Resources Ltd. Corporate Information; Geology notes and trench map; Mt. Calvary Resources Ltd. information brochure)
- EMR MIN BULL MR 223 B.C. 204
- GSC MAP 1424A
- CJES Vol.25, pp. 1608-1617
- GCNL #65,#113,#114,#147,#158,#184,#186,#205,#239, 1984; #9,#73,#114, #119,#128,#134,#137,#144,#169,#183,#197,#208,#232, 1985; #67, #189, 1986; #unknown, 1987; #11,#46, 1988; #39(Feb.25), #176(Sept.11), 1992; #129(Jul.7), 1997; #91(May 11), #126 (June 30), #155(Aug.14), #174(Sept.12), 2000
- IPDM May/June, 1985
- N MINER Feb.14,Jul.11,Nov.11, 1985; Oct.13, 1986; June 24, 1996

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 76
REPORT: RGEN0100

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NW PROSP Autumn 1984
PR REL Skygold Ventures Ltd., Jan.28, 2003; Mar.4, 2003
W MINER Apr., 1984
WWW
http://www.infomine.com/index/companies/wildrose_resources_ltd.html

DATE CODED: 1985/07/24
DATE REVISED: 1997/03/25

CODED BY: GSB
REVISED BY: GP

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **CLEO**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 02 36 N
LONGITUDE: 121 18 23 W
ELEVATION: Metres

NORTHING: 5767212
EASTING: 616151

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Copper mineralization assumed to be chalcopyrite.
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry Skarn
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Lower Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Takomkane Batholith

LITHOLOGY: Granodiorite
Volcanic
Alkalic Felsic Intrusive
Monzonite
Syenite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The region is underlain by Upper Triassic to Lower Jurassic Nicola Group basalt intruded by the Lower Jurassic Takomkane Batholith of essentially granodioritic composition. Small syenitic to monzonitic stocks and dikes have intruded the volcanic rocks but appear to be cross cut by the Takomkane batholith. These alkalic felsic intrusions commonly have associated copper mineralization. Mineralization occurs within intrusions or propylitized volcanics near the intrusions. This can be either porphyry or skarn type mineralization.

The Takomkane batholith outcrops at Murphy Lake east of the Cleo showing and basalt occurs to the north near Eagle (or Canim) Creek. In the area of the showing, outcrop is exceedingly sparse. Copper mineralization has been reported to occur in granodiorite and is believed to be associated with alkalic felsic rocks intruded by the Takomkane batholith.

In 1995, with Explore B.C. Program support, Regional Resources Ltd. continued exploration on their large Lac La Hache area claims. The program included geological mapping and sampling, magnetometer and induced polarization surveys, and 3336 metres of diamond drilling in 18 holes. Results of this work range from disappointing to an interesting new discovery. Geological mapping and geophysical surveys indicate that copper-gold zones associated with alkalic intrusions seem to be narrow and steeply dipping, though of good grade, thus forming an exploration challenge. Large IP anomalies seem to be due to abundant primary magnetite rather than large copper-gold deposits. Drilling on the Nemrud skarn was disappointing. Late in the season a new zone of copper mineralization with values ranging from 0.4 to 1 per cent copper over widths of 10 metres was discovered in coarse grained, magnetite-bearing monzonite/diorite and gabbro on the T1 claim near Murphy Lake - a first for this intrusion (Explore B.C. Program 95/96 - M139).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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EM EXPL 1998-57-64
EMPR ASS RPT 3027, *3387
EMPR GEM 1971-130
EMPR Explore B.C. Program 95/96 - M139
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1996/11/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **FIR RIDGE**, ROSE LAKE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 15 55 N
LONGITUDE: 121 45 16 W
ELEVATION: 1036 Metres

NORTHING: 5791275
EASTING: 585000

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Chalcopyrite assumed as the main copper mineral.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Chert
Argillite
Greenstone

HOSTROCK COMMENTS: Cache Creek is Mississippian to Triassic in age, in this area probably Permian.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional

Quesnel
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Plateau

GRADE: Greenschist

CAPSULE GEOLOGY

The Fir Ridge showing occurs at the boundary of the Cache Creek and Quesnellia terranes and is underlain by the Mississippian to Triassic Cache Creek Group. It is likely that in the area of the showing the rocks are of Permian age (based on the presence of fusulinid foraminifera found in similar lithologies to the south). The contact between the Cache Creek Group and Quesnellia is probably a fault although nowhere is this contact exposed in the map sheet.

The claims are underlain by chert, argillite, greenstone and limestone. Copper mineralization is reported to occur within limestone.

BIBLIOGRAPHY

EMPR ASS RPT 2216, 3129
EMPR GEM 1971-132
GSC MAP 1424A
EMPR PF (Claim Map, 1970)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

thin films on fractures, as veinlets and scattered veins up to 15 centimetres wide, and as pods and irregular masses 15 to 20 centimetres wide. Drilling results seem to indicate a series of steeply dipping north to northeast trending zones of mineralization with an enriched zone adjacent to the footwall or lower contact of the mineralized gneiss. The mineralized zone extends 1500 metres in an east-west direction and 900 metres in a north-south direction. In addition to fluorite, mineralization consists of galena, sphalerite, molybdenite, celestite, pyrite and associated silver. Gangue minerals consist of quartz, calcite, dickite and allanite. Chloritic, sericitic and potassic alteration with associated biotite and epidote are evident in the area. An age date on fluorite using fission track methods resulted in a date of 104.6 Ma +/- 6 Ma (Fieldwork, 1988).

Indicated (probable) reserves are 24 million tonnes grading 11.5 per cent fluorite (CaF₂) (Eaglet Mines Ltd. Annual Report 1984).

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EMPR EXPL 1980-535; 1981-295; 1982-19
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EMPR GEM 1973-546; 1975-E199
EMPR MAP 65, 1989
EMPR OF 1992-1; 1992-9; 1992-16
EMPR PF (Report of the Annual Meeting Eaglet Mines Ltd. June 7, 1983; Memo from M. Steeves July, 1983; Correspondence July, 1983; Memo from Corporate Finance July, 1983; Eaglet Mines Ltd. Investment Highlights, 1983; Ball, C.W. and Boggaiam, G. (1984): Geology and Development of the Fluorspar Deposits of Eaglet Mines Limited)
EMR MIN BULL MR 223 B.C. 203
GSC MAP 1424A
CJES Vol.25, pp. 1608-1617
GCNL #200, 1979; #147, 1980; #47,#70,#74,#105, 1981; #2,#77,#105,#153, #204, 1982; #60,#110,#155,#188,#226, 1983; #76,#105,#132, 1984; #19, #135,#150,#162,#214,#245, 1985; #20,#43, 1986
N MINER Aug.7, 1980; Mar.19,Apr.16, 1981; Jan.14,May 6,Jul.29, Nov.4, 1982; Apr.7,Jun.16,Aug.18, 1983; Apr.26,Jun.7,Jul.19, 1984; Jul.18, 1985
PR REL (Continental Carlisle Douglas, 1981)
W MINER Dec. 1982
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **HO, SUCKER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 18 30 N
LONGITUDE: 121 20 59 W
ELEVATION: Metres

NORTHING: 5796615
EASTING: 612509

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Syenite Diorite
Basalt Tuff
Basalt Breccia
Sediment/Sedimentary

HOSTROCK COMMENTS: Unnamed intrusives are Early to Middle Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP: Syn-mineralization

GRADE:

CAPSULE GEOLOGY

The Ho showing is located within the central Quesnel Belt, underlain by Upper Triassic to Lower Jurassic volcanic and sedimentary rocks of the Nicola Group. Intruding these rocks are Early to Middle Jurassic felsic alkalic plutons which commonly host pyrite and chalcopyrite mineralization.

The showing is underlain by Nicola Group basalt, tuff and breccia, a syenite-diorite intrusion and a small area of Tertiary sediments. Mineralization consists of disseminated chalcopyrite, pyrite and malachite within stringers cutting the felsic intrusion.

BIBLIOGRAPHY

EMPR GEM 1969-177
EMPR ASS RPT 13349
EMPR EXPL 1984-273
GSC OF 574
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
EMPR FIELDWORK 1988, pp. 159-165
EMPR PF (Claim Map, 1968)
EMPR PF GEN (093A General - Bergman, E.E.: 1938 Report of a Geophysical Survey of the Horsefly River Valley, British Columbia)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/06

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 048**

NATIONAL MINERAL INVENTORY: 093A6 Cu2

NAME(S): **LO, KE, BTEM,
HEN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 28 50 N
LONGITUDE: 121 02 13 W
ELEVATION: 1006 Metres

NORTHING: 5816301
EASTING: 633310

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite
ASSOCIATED: Quartz Carbonate
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Tuff
Volcaniclastic
Epiclastic
Chert
Siltstone
Hornfels

HOSTROCK COMMENTS: Showing is underlain dominantly by Upper Triassic Nicola Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Contact
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Post-mineralization
GRADE: Hornfels

CAPSULE GEOLOGY

The Lo showing occurs near the eastern edge of the Nicola Group lower volcanic assemblage central Quesnel Belt. Underlain dominantly by Upper Triassic sedimentary rocks with some intercalated volcanics, the area has been explored for copper mineralization and, more recently, for gold.

Although no intrusion has been mapped in the area, the rocks are hornfelsed, suggesting that an intrusion is present at a relatively shallow level. Epiclastic and volcaniclastic rocks contain disseminated pyrite and pyrrhotite; chalcopyrite has been reported within tuffs. Sulphide-bearing quartz-carbonate veinlets are also present. Gold mineralization occurs associated with pyrrhotite and chalcopyrite in zones of siliceous alteration within volcanic tuff.

BIBLIOGRAPHY

EMPR ASS RPT 683, *9122, *15231
EMPR EXPL 1980-306; 1986-C304
EMPR AR 1965-141
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
EMPR FIELDWORK 1988, pp. 159-165

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/06

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 049**

NATIONAL MINERAL INVENTORY: 093A9 Pb1

NAME(S): **JOY**, BOB, JOE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A09W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 41 00 N
LONGITUDE: 120 17 11 W
ELEVATION: 2134 Metres

NORTHING: 5840500
EASTING: 683423

LOCATION ACCURACY: Within 500M

COMMENTS: On ridge 8.5 kilometres northeast of tip of east arm of Quesnel Lake.

COMMODITIES: Lead Zinc Copper Barite

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopryrite Barite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Cunningham	

LITHOLOGY: Limestone
Quartz Barite Vein
Dolomite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The Joy showing lies within the Cariboo Terrane of the Omineca Belt underlain by rocks of the Cariboo Group, Cunningham Formation. The Pleasant Valley Thrust, a major thrust fault which marks the division between the Cariboo and Barkerville terranes, lies about five kilometres to the west of the showing.

The Cunningham Formation is characterized by limestone, dolomite and fine-grained marble in gradational contact with the underlying, dominantly clastic, rocks of the Isaac Formation and the overlying clastic Yankee Belle Formation. These three formations are considered to be Hadrynian (Upper Proterozoic) in age.

Mineralization consists of galena, sphalerite and minor chalcopryrite within quartz-barite veins hosted by thin-bedded limestone.

BIBLIOGRAPHY

EMPR AR 1966-132
GSC P 72-35; 85-1A, pp. 267-272
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/06

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAM**, NA, SF,
HL, ZL, CARIBOO

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A15W
BC MAP:

MINING DIVISION: Cariboo

LATITUDE: 52 49 43 N
LONGITUDE: 120 57 15 W
ELEVATION: 1463 Metres

UTM ZONE: 10 (NAD 83)
NORTHING: 5855166
EASTING: 637832

LOCATION ACCURACY: Within 500M

COMMENTS: Located 9.6 kilometres northwest of the north arm of Quesnel Lake.

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork

CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Irregular

MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Cariboo

FORMATION

Cunningham

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Marble
Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The Lam showing is located within the Cariboo Terrane of the Omineca Belt, underlain by rocks of the Cariboo Group, Cunningham Formation. The Pleasant Valley Thrust, a major thrust fault which marks the division between the Cariboo and Barkerville Terranes, lies a short distance to the west of the showing.

The Cunningham Formation is characterized by limestone, dolomite and fine-grained marble in gradational contact with the underlying, dominantly clastic, rocks of the Isaac Formation and the overlying clastic Yankee Belle Formation. These three formations are considered to be Hadrynian in age.

Mineralization consists of quartz stringers hosted by limestone containing erratically distributed galena and sphalerite.

BIBLIOGRAPHY

EMPR ASS RPT *4458

EMPR GEM 1971-136; 1972-333; 1973-296

EMPR PF (Highland Queen Mines Ltd. Prospectus Feb. 17, 1971; Claim Maps Feb. 1972)

GSC P 72-35; 85-1A

GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/06

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **HIBERNIAN**, JEWELLERY SHOP, CUNNINGHAM CREEK

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 54 58 N
LONGITUDE: 121 21 09 W
ELEVATION: 1341 Metres

NORTHING: 5864209
EASTING: 610774

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Gold Arsenopyrite Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY: Silver 7.5400 Grams per tonne
Gold 9.4600 Grams per tonne

COMMENTS: Across 3.7 metres.
REFERENCE: George Cross Newsletter 88, May 8, 1989.

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the property comprise the Downey succession. Metamorphism of the region varies from chlorite to sillimanite and higher grade. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

The Hibernian quartz vein is about 46 centimetres wide and cuts quartzite of the Downey succession. The vein which strikes to the north, contains galena, arsenopyrite, pyrite and gold. Recent drilling resulted in an assay of 9.46 grams per tonne gold and 7.54 grams per tonne silver from a sample of the Hibernian vein (George Cross Newsletter #88, May 8, 1989). The Park showing (093A 060) is possibly the western extension of this vein.

The Jewellery Shop vein showing is 300 metres to the southwest. The vein is exposed over a 54-metre strike length and averages about 3 metres in width. A sample from this vein assayed 15.91 grams per tonne gold and 48.7 grams per tonne silver over 6.1 metres (George Cross Newsletter #88, May 8, 1989).

CAPSULE GEOLOGY

Trenching, 150 metres northwest of the Jewellery Shop vein, exposed the B zone. A channel sample over 4 metres assayed 22.6 grams per tonne gold (George Cross Newsletter #211, November 2, 1989).

Consolidated Pacific Bay Minerals Ltd. completed four NQ diamond drill holes in August 2002 totalling 302.3 metres, which tested the strike and down-dip extensions of the B-zone and the Jewellery Shop veins. A B-zone drill intersection, 30 metres below surface, yielded 21.1 grams per tonne gold over 1.9 metres, between 31.7 to 33.6 metres (1.9 metres core, 1.35 metres of total width). A 5.2 metre intercept of the Jewellery Shop vein, 40 metres below surface, yielded 2.1 grams per tonne gold (PR REL Pacific Bay Minerals Ltd., August 26, 2002).

BIBLIOGRAPHY

EM EXPL 2002-13-28
EMPR ASS RPT 3521, *7106
EMPR BULL *34, p. 63
EMPR OF 2001-11
EMPR PF (*Fraser, D.D. (1945): Report on Exploration Along the Barkerville Gold Belt between Cunningham Creek and Cariboo River; *Mitchell, J.A., (1970): Report on Properties of Coast Interior Ventures Ltd.)
GSC MAP 1424A
GSC MEM 421
GCNL *#88, #211, 1989
PR REL Consolidated Pacific Bay Minerals Ltd., Aug. 26, 2002
WWW <http://www.pacific-bay.com/nugget.php>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/06

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 052**

NATIONAL MINERAL INVENTORY:

NAME(S): **GISCO**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 58 07 N
LONGITUDE: 121 25 11 W
ELEVATION: 1295 Metres

NORTHING: 5869947
EASTING: 606126

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Lead

MINERALS

SIGNIFICANT: Gold Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Attitude of fracture filling vein.

STRIKE/DIP: 080/70N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1946
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 10.9600 Grams per tonne

COMMENTS: A grab sample of mineralized vein material.
REFERENCE: Minister of Mines Annual Report 1946, page A94.

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Gisco showing comprise the Downey succession (informal). Metamorphism of the region varies from chlorite to sillimanite and higher grade. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

A fracture-filling quartz vein, hosted by quartzite, is exposed for a maximum width of about 30 centimetres. The quartzite strikes northwest and the quartz vein strikes 80 degrees, dipping 70 degrees north. Pyrite, galena and rare specks of visible gold occur within the quartz vein.

A grab sample of the Gisco vein in 1946 assayed 10.96 grams per tonne gold (Minister of Mines Annual Report 1946, page A94).

BIBLIOGRAPHY

EMPR AR 1946-A94

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 89
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 4642, *12682, 16990
EMPR BULL 38, p. 81
EMPR GEM 1972-333; 1973-295
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/06

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 053**

NATIONAL MINERAL INVENTORY:

NAME(S): **PITTI**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 58 12 N
LONGITUDE: 121 25 11 W
ELEVATION: 1341 Metres

NORTHING: 5870102
EASTING: 606123

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Silver and gold minerals not specified.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Limestone
Quartzite
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Pitt showing comprise the Downey succession (informal). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

Chalcopyrite with associated silver and gold mineralization occurs within a quartz vein hosted in a 7.6 metre wide limestone bed.

BIBLIOGRAPHY

EMPR AR 1946-A94
EMPR ASS RPT 4642, *12682, 16990
EMPR BULL 38, p. 81
EMPR EXPL 1983-394
EMPR GEM 1972-333; 1973-295
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **SPITFIRE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 59 42 N
LONGITUDE: 121 25 05 W
ELEVATION: 1433 Metres

NORTHING: 5872885
EASTING: 606173

LOCATION ACCURACY: Within 1 KM

COMMENTS: North side of Wolfe Creek about 250 metres in elevation above China Creek cabin. Location of cabin not certain.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

SHAPE: Irregular

DIMENSION: 0150 x 0100 Metres

STRIKE/DIP: 050/90

TREND/PLUNGE:

COMMENTS: Zone of quartz veining where veins are up to 15 centimetres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Downey Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Spitfire showing comprise the Downey succession (informal). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

A zone of quartz veining about 150 by 100 metres occurs within the quartzite. Veins in this zone strike at about 050 degrees, are generally vertical and range in width up to about 15 centimetres. While pyrite occurs within all the veins, gold is present only in some.

BIBLIOGRAPHY

EMPR AR 1946-A94
EMPR ASS RPT *4861
EMPR BULL *38, p. 81
EMPR GEM 1973-295
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZONE**, ANTLER CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 57 56 N
LONGITUDE: 121 25 53 W
ELEVATION: Metres

NORTHING: 5869590
EASTING: 605350

LOCATION ACCURACY: Within 5 KM

COMMENTS: Approximately 150 metres south-east of Antler Creek Bridge. Exact location of bridge not certain.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold Arsenopyrite Pyrite

ASSOCIATED: Quartz Ankerite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION:

STRIKE/DIP: 025/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Downey Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Marble
Ankerite Schist
Quartz Vein
Quartzite
Phyllite

HOSTROCK COMMENTS: Probably Downey succession (informal name) rocks. The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which to the east of the Zone showing comprise the Downey succession (informal). Due to the imprecise location of the showing, it is not known whether it is the Downey succession or other Snowshoe Group successions which underlie the showing. Metamorphism of the region varies from chlorite grade to sillimanite and higher. The gold vein deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

The showing consists of five subparallel and vertical quartz veins which occur in grey ankeritic schist. Ankerite-bearing rocks are common in the Downey succession and it is probable that these rocks are also part of this succession. The quartz veins strike at about 025 degrees, more or less corresponding with the strike of a major normal fault, the Antler Creek Fault, cutting the area. The veins are sparsely mineralized with arsenopyrite, pyrite and gold.

BIBLIOGRAPHY

EMPR AR 1947-A114
EMPR ASS RPT 12682, 15938, 16990
EMPR BULL 38, p. 81
EMPR EXPL 1987-C258
EMPR OF 2001-11
GSC MAP 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 93
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO CANYON**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 58 09 N
LONGITUDE: 121 25 05 W
ELEVATION: 1295 Metres

NORTHING: 5870012
EASTING: 606237

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Downey Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?)
Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1957

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Gold

27.7500

Grams per tonne

COMMENTS: Assay from 25.0 centimetres of drill core.

REFERENCE: Bulletin 38, page 81.

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Cariboo Canyon showing comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

Mineralization consists of pyrite and gold within quartz veins cutting metasedimentary rocks. Although only two quartz veins are exposed in outcrop, a drill hole intersected several quartz veins varying in width from 10 to 25 centimetres. A 25 centimetre drill core sample assayed 27.75 grams per tonne gold (Bulletin 38, page 81).

BIBLIOGRAPHY

EMPR AR 1946-A94
EMPR ASS RPT 4642, 12682, 16990
EMPR BULL 38, p. 81
EMPR GEM 1972-333; 1973-295
EMPR OF 2001-11
GSC MAP 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 95
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **PITTMAN**, BRIDGER AND JOHNSTON

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 57 47 N
LONGITUDE: 121 25 15 W
ELEVATION: 1372 Metres

NORTHING: 5869328
EASTING: 606065

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Hydrothermal
TYPE: I01 Au-quartz veins
COMMENTS: Veins are probably structurally controlled.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz.
GROUP: Snowshoe
FORMATION: Downey Succession
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Limestone
Quartzite
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1947
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 37.6900 Grams per tonne
Lead 4.9000 Per cent
Zinc 34.9000 Per cent

COMMENTS: A selected sample containing abundant galena and sphalerite.
REFERENCE: Minister of Mines Annual Report 1947, page A115.

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Pittman showing comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

The showing is underlain by limestone in which replacement veins, probably structurally controlled, containing galena, sphalerite and pyrite occur.

A grab sample containing abundant galena and sphalerite assayed 34.9 per cent zinc, 4.9 per cent lead and 37.69 grams per tonne silver (Minister of Mines Annual Report 1947, page A115).

BIBLIOGRAPHY

EMPR AR 1947-A115
EMPR ASS RPT 4642, 12682, 16990
EMPR BULL 38, p. 81
EMPR EXPL 1983-394
EMPR GEM 1972-333; 1973-295

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 97
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421
GSC P 38-16, p. 23

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **REDGOLD, SHIKO, MB,
SL, LYNDA, SHIK,
MITCHELL BAY**

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5813716
EASTING: 602981

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:
LATITUDE: 52 27 50 N
LONGITUDE: 121 29 03 W
ELEVATION: 945 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Area of drilling.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite
ALTERATION: Chlorite Epidote Pyrite Calcite
ALTERATION TYPE: Propylitic Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Podiform Stockwork
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Lower Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Shiko Stock

ISOTOPIC AGE: 196 +/- 7 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Basalt
Basaltic Breccia
Breccia
Diorite
Monzonite
Syenite

HOSTROCK COMMENTS: Host rocks are Nicola Group arc related feldspathic volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Cariboo Plateau

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Zeolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1974

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Gold

0.0340

Grams per tonne

Copper

0.1000

Per cent

COMMENTS: Copper values generally low and sporadic. Gold values very low (typically around 0.034 grams per tonne).

REFERENCE: Assessment Report 5540.

CAPSULE GEOLOGY

The Shiko showing occurs within the central Quesnel Belt, a belt of Triassic to Jurassic, dominantly volcanic rocks with associated alkaline stocks. The volcanics form part of the Nicola Group which extends from near the British Columbia-United States border in the south to east of Quesnel in the north.

The showing is underlain by mainly basaltic breccia and polyolithologic breccia (containing felsic clasts) into which the zoned Late Triassic diorite-monzonite-syenite Shiko stock has been intruded. The basaltic rocks are of Upper Triassic age and overlying breccias are probably Lower Jurassic in age. Felsic clasts within

CAPSULE GEOLOGY

these breccias are comagmatic and were deposited coevally with the stock.

Hydrothermal activity associated with the intrusion of the stock has produced pods and lenses of epidote-chlorite-calcite alteration within basaltic rocks and alteration of wallrock adjacent to fractures within the stock. This propylitic alteration assemblage is locally accompanied by chalcopyrite-pyrite-bornite mineralization. Recent work (Exploration 1987, page C245) suggests that gold and chalcopyrite were remobilized and subsequently deposited along fractures within pyrite.

Assays from drill core in 1974 ranged from 0.01 to 0.10 per cent copper and typically around 0.034 grams per tonne gold. The copper values were low and sporadic with very low gold values (Assessment Report 5540).

Imperial Metals Corporation acquired the property in 1996.

BIBLIOGRAPHY

- EMPR ASS RPT *4557, *4601, *5540, *8260, 11297, 11623, 12584,*12694, 13355, 13804, 14009, 14870, 16093, 17645, 18837, 19803, 20145, 20930, 22104, 23771, 24630, 24865
EMPR EXPL 1980-306; 1984-272; 1985-C259; 1986-C306; 1987-C245; 2002-13-28
EMPR FIELDWORK 1986, pp. 125-133; 1987, pp. 131-137; 1988, pp. 159-165
EMPR GEM 1970-209; 1971-133; 1973-292; 1974-238
EMPR PF (Schink, E.A.,(1974): Geology of the Shiko Lake Stock, Near Quesnel Lake, B.Sc. Thesis, University of British Columbia)
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
GCNL #31, 1983
W MINER April, 1984
Imperial Metals Corporation, 1995 Annual Report
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1988/04/26

CODED BY: GSB
REVISED BY: KDH

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **WET, GAVIN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 29 47 N
LONGITUDE: 121 45 10 W
ELEVATION: 1067 Metres

NORTHING: 5816981
EASTING: 584670

LOCATION ACCURACY: Within 500M

COMMENTS: Near centre of area containing numerous showings.

COMMODITIES: Copper Molybdenum Lead Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Galena Pyrite
ASSOCIATED: Quartz K-Feldspar
ALTERATION: Chlorite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
SHAPE: Irregular
DIMENSION: 0004 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Veins are up to 4.5 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Cretaceous

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Sediment/Sedimentary
Basaltic Breccia
Quartz Feldspar Vein
Quartz Monzonite Dike
Hornfels

HOSTROCK COMMENTS: Showing is underlain by Upper Triassic sediments and intercalated basaltic breccia.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1978
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 101.1260 Grams per tonne
Gold 18.5112 Grams per tonne

COMMENTS: Selected grab sample from vein containing galena.
REFERENCE: George Cross Newsletter #118, 1978.

CAPSULE GEOLOGY

The Wet showing is located within the central Quesnel Belt, near the western contact of Upper Triassic basalt and underlying sedimentary rocks. This assemblage forms part of the Triassic to Jurassic Nicola Group of south central British Columbia. The sedimentary rocks and intercalated basaltic breccia have been intruded by a number of quartz monzonite dikes along an east-west oriented zone over a distance of about 3 kilometres. Adjacent to intrusive contacts the sedimentary rocks have been variably hornfelsed and metasomatized (mainly chlorite-pyrite). Quartz and quartz-potassium feldspar veins cutting both sediments and dikes locally contain chalcopyrite and molybdenite mineralization. Very minor galena, gold and silver occur in some veins. A selected grab sample taken in 1978 from a quartz vein containing galena assayed 18.5112 grams per tonne gold and 101.126 grams per tonne silver (George Cross Newsletter #118, 1978). Disseminated pyrite with minor chalcopyrite also occurs within some of the dikes.

CAPSULE GEOLOGY

The age of the intrusions and the mineralization is thought to be Cretaceous because of the presence of Cretaceous quartz monzonite intrusions elsewhere in the region. The chalcopyrite-molybdenite mineralization is unrelated to chalcopyrite-gold mineralization associated with Lower Jurassic stocks nearby.

An area east of Gavin Lake was explored and tested for placer gold potential in the early to mid 1970's.

BIBLIOGRAPHY

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EMPR EXPL 1979-205; 1984-269
EMPR GEM 1970-208; 1973-289; 1974-236
GCNL #118, 1978
EMPR FIELDWORK 1987, pp. 147-153; 1988, p. 152
GSC MAP 1424A
EMPR PF (Gavex Gold Mines Ltd., Feb. 1977 Prospectus, Surficial Geology Map and location map for placer exploration property)
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **PARK**, NUGGET MOUNTAIN, BON

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

LATITUDE: 52 55 04 N
LONGITUDE: 121 22 07 W
ELEVATION: Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of BON 1-4 claims. Park claims are slightly south of the BON claims.

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5864370
EASTING: 609687

COMMODITIES: Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz Carbonate
ALTERATION: Chlorite Sericite Silica Carbonate
ALTERATION TYPE: Chloritic Sericitic Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Downey Succession

LITHOLOGY: Phyllite
Quartz Carbonate Vein
Marble
Quartzite

HOSTROCK COMMENTS: Downey succession is Lower Paleozoic (informal name). The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 1098.3300 Grams per tonne
COMMENTS: Sample 6161 D. from quartz-sericite-galena vein.
REFERENCE: Assessment Report 13550.

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1970
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 41.4788 Grams per tonne
Gold 0.5485 Grams per tonne
Lead 2.0160 Per cent
COMMENTS: Sample average across 14 metres of trench on east slope of Nugget Mountain.
REFERENCE: Property File - Mitchell, J.A. 1970.

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Bon showing comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks meta-

CAPSULE GEOLOGY

morphosed no higher than greenschist facies.

The Bon showing is underlain by chloritic and sericitic rocks interbedded with siliceous and calcareous members, probably of the Lower Paleozoic Downey succession. Galena-sphalerite-pyrite mineralization occurs in quartz-carbonate veins oriented generally sub-parallel to the foliation of enclosing phyllitic metasedimentary rocks. The galena and sphalerite are closely associated with high gold and silver values.

Trenching on the east slope of Nugget Mountain, on the Park claims, resulted in an average assay across 14 metres of 0.5485 grams per tonne gold, 41.4788 grams per tonne silver and 2.016 per cent lead (Property File - Mitchell, J.A., 1970).

Rock chip sampling in 1985 resulted in a best assay of 1098.33 grams per tonne silver and a soil survey returned a high gold value of 6.2 grams per tonne (6200 parts per billion) (Assessment Report 13550).

BIBLIOGRAPHY

EMPR ASS RPT 3521, 4587, 4642, *10762, *11831, *13085, *13550, 14132, 15422, 16876, 17115
EMPR EXPL 1982-273; 1983-392; 1984-294; 1987-C256
EMPR OF 2001-11
EMPR PF (*Mitchell, J.A. 1970, Report on Properties of Coast Interior Ventures Ltd.; Claim Map 1970; Assay Plan Park Claims 1970)
GSC MAP 1424A
GSC MEM 421
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/08

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **KUSK**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A07E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 16 22 N
LONGITUDE: 120 32 56 W
ELEVATION: 1783 Metres

NORTHING: 5794208
EASTING: 667233

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond-drill hole (DDH-1, 1985) collar located on a ridge between Frasergold Creek and the head of MacKay River, 7.25 kilometres east-southeast from the summit of Eureka Peak, 8 kilometres northeast of Crooked Lake (Assessment Report 14050).

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Chalcopyrite
COMMENTS: Minor sphalerite, galena and chalcopyrite
ASSOCIATED: Quartz Carbonate Ankerite Siderite
ALTERATION: Carbonate Sericite Ankerite Siderite Limonite

ALTERATION TYPE: Carbonate Sericitic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Concordant
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Upper Triassic
GROUP: Unnamed/Unknown Group
FORMATION: Unnamed/Unknown Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Phyllite
Calcareous Phyllite
Argillaceous Limestone
Greenschist
Quartz Sericite Schist
Quartz Sericite Chlorite Schist
Quartzite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Quesnel
GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY: Gold
YEAR: 1985
GRADE: 1.1300 Grams per tonne
COMMENTS: Sample across 6.1 metre wide zone
REFERENCE: Assessment Report 14050.

CAPSULE GEOLOGY

The Kusk occurrence area is located along the nose of a major northwest trending, overturned syncline (Crooked Lake syncline). The Proterozoic Snowshoe Group forms the base of the syncline and consists of banded paragneiss, feldspar-augen gneiss, schist and sub-mylonite. Overlying the Snowshoe Group rocks with apparent structural discontinuity is a 100 to 500 metre thick section of andesitic to basaltic metavolcanics of the Mississippian Slide Mountain Group. Overlying this sequence is a thick section of Upper Triassic metasedimentary and metavolcanic rocks consisting of a thick basal phyllite/greenschist sequence which grades upward into augite porphyry flows, tuffs and breccias.

The Kusk occurrence is underlain by the Upper Triassic basal phyllite/greenschist sequence which has been subdivided into three units; the lower unit consists of interbedded dark grey to black

CAPSULE GEOLOGY

phyllite, greenschist and quartz-sericite schist, the middle unit is characterized by dark grey to black, locally strongly pyritic, lustrous phyllite with minor intercalated lenses of limestone, and the upper unit consists of interbedded black phyllite, quartzite, greenschist and quartz-sericite-chlorite schist. The middle unit includes a knotted, iron carbonate-rich facies characterized by abundant fine-grained iron carbonate knots (ankerite and/or siderite) up to 1 centimetre in size. The augen in the knotted phyllite unit are invariably weathered to limonite and/or goethite in surface exposures but at depth are dense to very fine-grained, often faintly laminated and occasionally containing fine lines of pyrite, pyrrhotite and rarely sphalerite. The phyllite generally wraps around the knots and many show rotation with pressure shadows filled with secondary carbonate.

Quartz-carbonate pods, laminations and veins are common in the phyllite sequence. Most of the quartz occurs as pods and discontinuous laminations conformable to bedding. Locally, thin late stage quartz veins crosscut bedding. The quartz is milky white with clusters of coarse carbonate, principally ankerite. Pyrite, pyrrhotite and minor sphalerite, galena and chalcopyrite are associated with the carbonate. Strong vein zones tend to occur near the contact of knotted phyllite, cherty laminated phyllites and metavolcanics. Moderate to strong sericite and carbonate alteration is commonly found in the phyllite unit.

A 1985 diamond-drill program intersected a low grade stratabound gold zone 6.1 to 8.08 metres wide in the black phyllites near the top of a sequence characterized by calcareous phyllite and argillaceous limestone interbeds. Diamond-drill hole 1 intersected a zone 6.1 metres wide which assayed 1.13 grams per tonne gold. Diamond-drill hole 2 intersected the same zone across a 8.08 metre intersection and assayed 0.37 grams per tonne gold. A quartz-carbonate lens also assayed 0.335 per cent zinc and 14.0 grams per tonne silver (Assessment Report 14050).

BIBLIOGRAPHY

EMPR ASS RPT 10786, 11593, *14050, *16987, *18025
EMPR EXPL 1982-260; 1983-368; 1985-C255; 1988-C144
EMPR P 1990-3
GSC MAP 1424A

DATE CODED: 1989/09/06
DATE REVISED: / /

CODED BY: GO
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093A 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIL, LR, DICK,
GRIZZLY LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 47 58 N
LONGITUDE: 120 51 26 W
ELEVATION: 1704 Metres

NORTHING: 5852113
EASTING: 644459

LOCATION ACCURACY: Within 500M
COMMENTS: See also AI (093A 065).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Cunningham	

LITHOLOGY: Limestone
Dolomite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The Sil showing lies within the Cariboo Terrane of the Omineca Belt and is underlain by rocks of the Cunningham Formation, Cariboo Group. A short distance to the west of the property lies the Pleasant Valley Thrust. This is a major thrust fault which marks the division between the Cariboo Terrane to the east and the Barkerville Terrane to the west.

The Cunningham Formation is characterized by limestone, dolomite and fine-grained marble and is in gradational contact with the underlying, dominantly clastic, rocks of the Issac Formation and the overlying clastic Yankee Belle Formation. These three formations are all considered to be of Hadrynian (Upper Proterozoic) age.

Mineralization consists of quartz stringers with erratically distributed galena and sphalerite within limestone of the Cunningham Formation.

Golden Kootenay Resources Inc. conducted surveys and drilling on the Grizzly Lake project from 1993 to 1998. Excellerated Resources Inc. optioned the property in 1999.

BIBLIOGRAPHY

EM EXPL 1998-44; 2002-13-28
EMPR ASS RPT 2366, 3783, 3813, 22833, 23191, 23995, 24304, 24805,
25824
EMPR GEM 1972-334; 1973-296
GSC MAP 1424A
GSC MEM 421
GCNL #38(Feb.24), #47(Mar.9), #71(Apr.14), 1999
WWW <http://www.excellerated.ca>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 063**

NATIONAL MINERAL INVENTORY:

NAME(S): **BORY**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 04 22 N
LONGITUDE: 121 21 13 W
ELEVATION: Metres

NORTHING: 5770412
EASTING: 612838

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claim block.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic Skarn
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Lower Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Takomkane Batholith

LITHOLOGY: Quartz Monzonite
Granodiorite
Basalt
Syenite Dike
Monzonite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The region is underlain by basalt of the Upper Triassic to Lower Jurassic Nicola Group. The Nicola Group has been intruded by the Lower Jurassic Takomkane batholith of, essentially, granodioritic composition. Small syenitic to monzonitic stocks and dikes have intruded the volcanic rocks but appear to be cut by the Takomkane batholith. These alkalic felsic intrusions commonly have associated copper mineralization within the intrusions or within propylitized volcanics near the intrusions. This mineralization can be either of porphyry or skarn-type.

The Takomkane batholith outcrops at Murphy Lake to the east of the Bory showing while basalt of Upper Triassic age outcrops to the north. Mineralization consists of chalcopyrite which occurs as stringers and disseminations within quartz monzonite and granodiorite considered to be part of the Lower Jurassic Takomkane batholith.

BIBLIOGRAPHY

EMPR ASS RPT 3232
EMPR GEM 1971-130; 1972-330; 1974-235
GSC MAP 1424A
Falconbridge File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 064**

NATIONAL MINERAL INVENTORY:

NAME(S): **RED**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 17 48 N
LONGITUDE: 121 27 11 W
ELEVATION: Metres

NORTHING: 5795162
EASTING: 605492

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Copper
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic
TYPE: D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Miocene

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
COMMENTS: Suspect terrane overlap.

Overlap Assemblage

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

This occurrence of native copper occurs within basalt of probably Miocene age which overlies Upper Triassic - Lower Jurassic volcanic rocks of the Nicola Group of the central Quesnel belt. While native copper is not uncommon within the plateau basalts of central British Columbia these occurrences have no economic importance apart from their possible value in the providing of mineralogical specimens.

BIBLIOGRAPHY

EMPR GEM 1972-331
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
EMPR FIELDWORK 1988, pp. 159-165

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/03

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRIZZLY LAKE, AL, LOU,
SAMSON, DICK, FOG,
PEACH**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A15W

UTM ZONE: 10 (NAD 83)

BC MAP:
LATITUDE: 52 48 45 N
LONGITUDE: 120 54 10 W
ELEVATION: Metres

NORTHING: 5853474
EASTING: 641346

LOCATION ACCURACY: Within 1 KM
COMMENTS: See also Sil (093A 062).

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite Smithsonite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Replacement
TYPE: E12 Mississippi Valley-type Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian	Cariboo	Cunningham	

LITHOLOGY: Limestone
Dolomite
Marble
Granodiorite
Siliceous Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Bowron Trench

CAPSULE GEOLOGY

The Al showing lies within the Cariboo Terrane of the Omineca Belt and is underlain by rocks of the Cunningham Formation, Cariboo Group. A short distance to the west of the property lies the Pleasant Valley Thrust. This is a major thrust fault which marks the division between the Cariboo Terrane to the east and the Barkerville Terrane to the west.

The Cunningham Formation is characterized by limestone, dolostone and fine-grained marble and is in gradational contact with the underlying, dominantly clastic, rocks of the Issac Formation and the overlying clastic Yankee Belle Formation. These three formations are all considered to be of Hadrynian (Upper Proterozoic) age.

Mineralization consists of galena, sphalerite, chalcopyrite and pyrite with associated silver within limestone of the Cunningham Formation.

Golden Kootenay Resources Inc. conducted surveys and drilling from 1993 to 1998 on the Grizzly Lake project. In excess of 65 lead-zinc showings occur over an area 5.6 to 6.8 kilometres in length and 0.8 to 2.4 kilometres in width. Excellerated Resources Inc. optioned the property in 1999.

BIBLIOGRAPHY

EMPR ASS RPT *9667, 20537, 20639, 21038, 22833, 23191, 23995, 24304, 24805, 25824
EMPR EXPL 1980-312; 1998-44
EMPR GEM 1971-136; 1972-334
EMPR PF (Excellerated Resources Inc. Website (June 1999): Grizzly Lake Property, 8 p.)
GSC MAP 1424A
GSC MEM 421
GCNL #38(Feb.24), #47(Mar.9), #71(Apr.14), 1999
PR REL Excellerated Resources Inc., Apr.9, May 27, 1999

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

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REPORT: RGEN0100

BIBLIOGRAPHY

WWW <http://www.excellerated.ca>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/08

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 066**

NATIONAL MINERAL INVENTORY:

NAME(S): **B**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 32 43 N
LONGITUDE: 121 43 46 W
ELEVATION: 1173 Metres

NORTHING: 5822447
EASTING: 586159

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Copper Chalcocite
ASSOCIATED: Quartz Calcite Zeolite
ALTERATION: Malachite Carbonate Ankerite
ALTERATION TYPE: Oxidation Carbonate Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal
TYPE: D03 Volcanic redbed Cu
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Basalt
Basaltic Breccia
Agglomerate
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The geology of the region consists of Upper Triassic to Lower Jurassic sedimentary and volcanic rocks of the Nicola Group which are cut by northeast-striking normal faults. The stratigraphy of the lower part of the Nicola Group comprises Upper Triassic sedimentary rocks overlain by green and grey basaltic breccia, in turn overlain by maroon basalt. In this area the uppermost Upper Triassic unit is red sandstone which overlies maroon basalt.

The maroon basaltic unit was, in part, deposited subaerially and consists of vesicular flow breccias with amygdules of calcite and zeolite. In places chalcocite, malachite and native copper also occur in amygdules and malachite has coated fracture surfaces. Quartz-carbonate-ankerite alteration zones associated with northeast-striking faults also contain minor amounts of copper mineralization.

BIBLIOGRAPHY

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EMPR GEM 1973-293
EMPR EXPL 1984-284
EMPR MAP 20
EMPR FIELDWORK 1987, pp. 147-153
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/08

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 067**

NATIONAL MINERAL INVENTORY:

NAME(S): **SPANISH CREEK**, GOLDEN HORN, BLACK BEAR,
ENNIS, STANDARD MINE, MOORE CO.

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:
LATITUDE: 52 39 00 N
LONGITUDE: 121 28 27 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Open Pit

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5834430
EASTING: 603222

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Recent

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Glacial/Fluvial Gravels

LITHOLOGY: Gravel
Black Phyllite
Schist

HOSTROCK COMMENTS: Nicola Group metasediments are probable source of placer gold.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Spanish Creek placer deposit occurs near the eastern margin of the central Quesnel Belt where Upper Triassic phyllitic meta-sedimentary rocks of Quesnellia are in thrust contact with rocks of the Barkerville terrane to the east. Lode gold deposits occur within rocks of both terranes and provide a probable source for placer gold deposits in the region. Spanish Creek drains an area where several lode deposits have been worked in the past, (CPW 093A 043) mainly in Upper Triassic Nicola Group black phyllite. This unit is considered to be the source of the gold in Spanish and Black Bear creeks.

Placer gold in Spanish and Black Bear creeks occurs within recent gravels and in older gravels which rest directly on bedrock. These older gravels are probably similar in age to those worked at the Bullion Pit (093A 025) west of Likely, where the gravels define an older channel of the Quesnel River. At Spanish Creek the older gravels mark a stream channel coincident with the present creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1875-13; 1876-table; 1884-table; 1890-362,table; 1891-1895-tables; 1891-563; 1892-529; 1893-1039; 1897-482; 1898-982; 1901-964; 1902-84,85; 1910-22,45; 1911-51; 1912-53; 1922-125; 1923-127; 1924-119,125; 1928-200; 1929-191,204; 1930-175; 1931-95; 1932-111; 1936-C40; 1943-84; 1944-79; 1947-195; 1948-178; 1949-243; 1958-80; 1961-133; 1962-142; 1963-134; 1964-176; 1965-253; 1966-256
EMPR BULL 28, pp. 49,52
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1987, pp. 139-145,147-153; 1990, pp. 331-356; 1992, pp. 463-473
EMPR OF 2001-11

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

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GSC MAP 1424A
GSC SUM RPT 1932, Part A, pp. 109-111
CJES Vol. 25, pp. 1608-1617
GCNL #1, #94, 1986
W MINER April, 1984
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/07/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 068**

NATIONAL MINERAL INVENTORY:

NAME(S): **MB, HALLEY, MT. KIMBALL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 56 53 N
LONGITUDE: 121 02 05 W
ELEVATION: 1524 Metres

NORTHING: 5868300
EASTING: 632042

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximately 2 miles northeast of Mount Kimball.

COMMODITIES: Lead Silver Gold

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Cunningham	
Hadrynian	Cariboo	Yankee Belle	

LITHOLOGY: Limestone
Quartzite
Dolomite
Quartz Vein
Phyllite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Cariboo Mountains
RELATIONSHIP: Pre-mineralization
GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 94.9600 Grams per tonne
Gold 1.3400 Grams per tonne
Lead 6.3000 Per cent

COMMENTS: 48 centimetre quartz sample from Yankee Belle Formation.
REFERENCE: Assessment Report 15421.

CAPSULE GEOLOGY

The MB showing is located within the Cariboo Terrane of the Omineca Belt underlain by rocks of the Cariboo Group, Cunningham Formation. The Pleasant Valley Thrust, a major thrust fault which marks the division between the Cariboo and Barkerville terranes, lies a short distance to the west of the showing.

The Cunningham Formation is characterized by limestone, dolostone and fine-grained marble in gradational contact with the underlying, dominantly clastic, rocks of the Issac Formation and the overlying clastic Yankee Belle Formation. These three formations are considered to be Hadrynian in age.

Mineralization consists of argentiferous galena within narrow northeast and northwest striking quartz veins cutting limestone and dolostone of the Cunningham Formation and quartzite of the Yankee Belle Formation. The best assay from grab samples in 1986 was 1.34 grams per tonne gold, 94.96 grams per tonne silver and 6.3 per cent lead (Assessment Report 15421).

BIBLIOGRAPHY

EMPR ASS RPT *4752, *15421

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1987-C255
EMPR GEM 1973-296
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/08

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 069**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOREHEAD CREEK**, PRIORITY, MOREHEAD MINING CO.,
LITTLE CK

STATUS: Past Producer Open Pit
REGIONS: British Columbia
NTS MAP: 093A12W
BC MAP:
LATITUDE: 52 38 12 N
LONGITUDE: 121 47 30 W
ELEVATION: 760 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Junction of Little Lake Creek and Morehead Creek, Morehead Mining Co. pits; Priority mine immediately down stream.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5832539
EASTING: 581769

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers
SHAPE: Irregular
DIMENSION: 0152 x 0152 x 0010 Metres STRIKE/DIP:
COMMENTS: Hydraulic Pit, Morehead Mining Co., approximate dimensions. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Pleistocene			Glacial/Fluvial Gravels

LITHOLOGY: Unconsolidated Glacial Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel

INVENTORY

ORE ZONE: LITTLE CREEK REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1927
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Gold 0.1700 Grams per tonne
COMMENTS: Average grade-1927 production given as \$0.22 per cubic yard; \$0.04 per cubic yard low grade gravels; \$0.40 per cubic yard high grade.
REFERENCE: Geological Summary of Canada Report 1932A1, page 100.

ORE ZONE: MOREHEAD CREEK REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1915
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Gold 0.1010 Grams per tonne
COMMENTS: Average grade from production 1913-1915 given as \$0.13 per cubic yard.
REFERENCE: Geological Survey of Canada Summary Report 1932A, page 100.

CAPSULE GEOLOGY

The largest placer workings on Morehead Creek occur at its junction with Little Lake Creek. The creek valley consists of about 23 to 30 metres of Pleistocene and Holocene alluvium on a basement of Upper Triassic basalt flows and flow breccias. The alluvium can be divided into three layers.

The top 0.0 to 6.0 metres consists of Holocene stream sediments and debris. The middle section is well stratified, glaciofluvial gravel approximately 15 metres thick. These are the "Upper Gravels" of the old hydraulic miners. These graded \$0.04 per cubic yard or 0.031 grams per tonne (Minister of Mines Annual Report 1927, p. C177). The lowest section, the "Lower Gravels" is variable in thickness, 3 to 10 metres, are poorly stratified, poorly sorted, and contain abundant cobbles/boulders. The Lower Gravels graded up

CAPSULE GEOLOGY

to \$0.40 per cubic yard or 0.31 grams per tonne, with high grade pockets at \$2.00 to \$10.00 per cubic yard or 4 to 21 grams per tonne (Minister of Mines Annual Report 1927, p. C177).

From early hydraulic mining, 1913 to 1915, an average grade of \$0.13 per cubic yard or 0.101 grams per tonne was attained (Minister of Mines Annual Report 1927, p. C177). The gold bearing gravels are of Pleistocene age.

Placer mining activity was sporadic over the first half of this century, due primarily to poor water supply. Originally, Morehead Creek was a water supply for the Bullion Mine. The Morehead Mining Co. worked a hydraulic mine from 1913 to 1915 and recovered about 978 ounces or 30,419 grams (Bulletin 28, page 51). The same company and other individuals recovered about 560 ounces (17,418 grams) during the period 1927 to 1945 (Bulletin 28, page 51). Since then testing and small production, a few thousand cubic metres with no recorded production, has been done through to the mid 1960's. Since then there is no record of activity.

Gulderand Mining Corp. has outlined a large buried gravel channel. Seismic data indicates a depth of approximately 25 metres, a width of approximately 76 metres and a length of 1524 metres, open at both ends. Initial bulk testing on stream gravels have indicated \$2,000,000 worth of gold in 500,000 yards (George Cross Newsletter #40, 1989). Further testing is planned for 1989.

Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion, is the likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

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EMPR BULL 28, pp. 49-51
EMPR AR 1912-53; *1913-63,64; *1927-C177; 1931-A92; 1932-A107; 1933-A140; 1939-A109; 1941-A89; 1947-A195; 1950-200; 1964-176; 1965-252; 1966-256
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A
GSC SUM RPT *1932, Part A1, pp. 98, et seq.
CJES Vol. 25, pp. 1608-1617
VSW Apr.10,28, 1989
GCNL #9, 1983; #15,#40, March, 1989; #53, 1990

DATE CODED: 1989/03/30
DATE REVISED: 1989/04/15

CODED BY: KDH
REVISED BY: DEJ

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093A 070**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIC**

MINING DIVISION: Cariboo

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093A14W
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 57 08 N
 LONGITUDE: 121 21 30 W
 ELEVATION: 1265 Metres

NORTHING: 5868217
 EASTING: 610290

LOCATION ACCURACY: Within 500M
 COMMENTS:

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 DIMENSION: 20 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Cariboo	Midas	

LITHOLOGY: Banded Limestone
 Quartzite
 Cherty Black Graphitic Shale

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
 TERRANE: Cariboo
 METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: TRENCH REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1977
SAMPLE TYPE: Chip	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	58.9300 Grams per tonne
Lead	13.1000 Per cent
Zinc	7.6000 Per cent

COMMENTS: A 20 cm sample from trench.
 REFERENCE: Assessment Report 6545.

CAPSULE GEOLOGY

The region is underlain by the Cariboo Terrane which, to the west, is in thrust contact (Pleasant Valley Thrust) with the Barker-ville Terrane. In the area of the Vic showing the Cariboo Terrane consists of (?)Hadrynian to Lower Paleozoic Cariboo Group rocks. The Cariboo group is an assemblage of epiclastic and calcareous sedimentary rocks regionally metamorphosed to greenschist facies and higher. The showing is underlain by Midas Formation rocks, one of the upper units of the Cariboo Group, possibly of late Hadrynian or Cambrian age. Hoy, et al suggests the showings occur in the Hardscrabble Mountain Succession (Devono-Mississippian) of the Snowshoe Group.

Mineralization consists of argentiferous galena and sphalerite within a thin siliceous unit in a 10-metre wide grey banded limestone. The limestone is part of a sequence of pyritic and locally cherty, black graphitic shale dipping vertically or steeply northeastwards. The galena and sphalerite is generally massive and fine-grained.

A 20-centimetre chip sample from a trench in 1977 assayed 58.93 grams per tonne silver, 13.1 per cent lead and 7.6 per cent zinc (Assessment Report 6545).

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RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

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EI FIELDWORK 1997, pp. 13-3 - 13-4
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EMPR GEM 1973-294
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/08

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 071**

NATIONAL MINERAL INVENTORY: 093A14 Au1

NAME(S): **CARIBOO HUDSON, CARIBOO-HUDSON, HUDSON, SHASTA, CUNNINGHAM, BLACK MARTIN, 605, MINERAL LEASE M32, WELBAR**

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 093A14W
 BC MAP:
 LATITUDE: 52 53 19 N
 LONGITUDE: 121 19 42 W
 ELEVATION: 1707 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS:

Underground
 MINING DIVISION: Cariboo
 UTM ZONE: 10 (NAD 83)
 NORTHING: 5861188
 EASTING: 612470

COMMODITIES: Gold Silver Lead Zinc Tungsten

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Pyrrhotite Scheelite
 Pyrite
 ASSOCIATED: Quartz Ankerite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
 CLASSIFICATION: Hydrothermal Replacement Epigenetic
 TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
 SHAPE: Bladed
 MODIFIER: Folded Sheared
 DIMENSION: 520 x 275 Metres
 COMMENTS: Area over which quartz veins are exposed. STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Micaceous Quartzite
 Micaceous Calcareous Quartzite
 Calcareous Sericitic Phyllite
 Chlorite Schist
 Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Barkerville
 METAMORPHIC TYPE: Regional
 PHYSIOGRAPHIC AREA: Quesnel Highland
 RELATIONSHIP:
 GRADE: Greenschist

INVENTORY

ORE ZONE: ORE SHOOT REPORT ON: Y
 CATEGORY: Inferred YEAR: 1996
 QUANTITY: 70000 Tonnes

<u>COMMODITY</u>	<u>GRADE</u>	
Gold	13.0000	Grams per tonne
Silver	21.0000	Grams per tonne

 COMMENTS: Exploration by Imperial Metals Corporation and Cathedral Gold Corporation has defined a mineral resource potential in one ore shoot within the Shasta vein, west of and parallel to the Hudson vein. Half of this resource is drill indicated, and is therefore classed as mineral inventory.
 REFERENCE: Property File - see 093H 006, Gold City Mining Corporation Brochure.

ORE ZONE: CARIBOO-HUDSON REPORT ON: Y
 CATEGORY: Indicated YEAR: 1987
 QUANTITY: 32655 Tonnes

<u>COMMODITY</u>	<u>GRADE</u>	
Gold	12.3000	Grams per tonne

 COMMENTS: Drill indicated.
 REFERENCE: Cathedral Gold Corp. Annual Report 1987.

CAPSULE GEOLOGY

The region is underlain by Proterozoic-Early Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south-

CAPSULE GEOLOGY

central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Cariboo Canyon showing comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

Rocks underlying the Cariboo-Hudson workings consist of fine-grained micaceous quartzite, in places calcareous, calcareous sericitic phyllite, chlorite schist and limestone. These rocks are complexly folded and exhibit a penetrative fabric in finer-grained rocks. The metasedimentary rocks generally strike to the northwest and dip steeply to the northeast.

Mineralization is reported to occur in quartz veins associated with north striking shears or faults. These quartz veins have been exposed on the surface and in underground workings over an area of about 520 by 275 metres. Three types of mineral assemblages have been noted: gold-galena, galena-sphalerite-pyrrhotite and scheelite (with ankerite). The two main veins are the Hudson and Shasta veins. Other types of mineralization present are massive pyrite and massive lenses of galena and pyrrhotite, occurring as replacement bodies. Gold mineralization is closely associated with sulphides, mainly pyrite.

A 1.2-metre sample taken from the adit in 1938 assayed 102.09 grams per tonne gold, 188.43 grams per tonne silver and 24 per cent lead (Geological Survey of Canada Paper 38-16, page 29).

The Cariboo-Hudson workings are again receiving attention due to the fact that the geological setting is similar to that of the Cariboo Gold Quartz mine (093H 019).

Drill indicated reserves are 32,655 tonnes grading 12.3 grams per tonne gold (Cathedral Gold Corp. Annual Report 1987).

Exploration by Imperial Metals Corporation and Cathedral Gold Corporation has defined a mineral resource potential in one ore shoot within the Shasta vein, west of and parallel to the Hudson vein, of 70,000 tonnes grading 13 grams per tonne gold and 21 grams per tonne silver. Half of this resource is drill indicated, and is therefore classed as mineral inventory (Property File - see Island Mountain (093H 006), Gold City Mining Corporation Information Brochure).

BIBLIOGRAPHY

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EM OF 1999-3
EMPR AR 1922-N119; 1923-A122; 1925-A150; 1927-C171; 1929-C191;
1930-A167; 1933-A124; 1937-C33; 1938-C47; 1939-A35,A42,A71;
1940-A57; 1946-A94; 1947-A115; 1948-A91; 1951-A120
EMPR ASS RPT *6226, *6314, 8281, *11916, 15443, 16262, 16743,
*17114, 21523
EMPR BC METAL MM00447
EMPR BULL 1, p. 63; *34, p. 57
EMPR EXPL 1976-E137; 1977-E182; 1978-E193; 1979-209; 1980-311;
1983-393; 1986-A51; 1987-C256
EMPR GEM 1973-294
EMPR INF CIRC 1995-9, p. 24; 1996-1, p. 24
EMPR MAP 65 (1989)
EMPR OF 1992-1, 1999-3, 2001-11
EMPR PF (Progress Report Cariboo-Hudson Gold Mines Ltd. 1938; Report
of Director in Charge of Development includes claim map,1938;
*Lay, D. (1938): Letter to Minister of Mines re: Cariboo-Hudson
Gold Mines, Ltd.; Scheelite occurrences on Level plans and open
cuts and notes, Cariboo Hudson 1942; Cariboo Hudson excerpt from
unknown publication circa 1942; Map of Underground Workings 1947;
Claim Map 1947; Miscellaneous Correspondence 1951-1954;
Underground workings with notes, date unknown; see Island
Mountain (093H 006), Gold City Mining Corporation Information
Brochure)
EMR MIN BULL MR 223 B.C. 207
GSC MAP 562A; 1424A
GSC MEM 149, p. 212
GSC P *38-16, p. 27
GCNL #141, 1980; #173,#217, 1983; #129, 1984
N MINER Dec.8, 1983; Jul.12, 1984
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/08

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **RIP, JOY, JOCK,
WONDER, TREADWELL, CEDAR CREEK,
MANX**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E

UTM ZONE: 10 (NAD 83)

BC MAP:
LATITUDE: 52 34 37 N
LONGITUDE: 121 30 58 W
ELEVATION: 838 Metres

NORTHING: 5826245
EASTING: 600552

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Lead Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Galena Arsenopyrite Pyrrhotite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Calcite Epidote Carbonate
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown
Quartz-Carb.

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Fractured Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Basaltic Breccia
Volcaniclastic
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1972
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 1.7826 Grams per tonne
Copper 0.4200 Per cent
COMMENTS: Grab sample #73005 from creek bed.
REFERENCE: Property File - Cedar City Mines Ltd. Prospectus May 26, 1972.

CAPSULE GEOLOGY

The Rip showing is underlain by Upper Triassic Nicola Group basaltic breccia within the central Quesnel belt. The showing is located near the eastern contact of Nicola Group rocks and the underlying phyllitic metasedimentary rocks. Interbedded with the basaltic breccia are volcaniclastic sedimentary rocks. The basalt and associated sedimentary rocks form part of a belt extending from Quesnel Lake in the south to north of Sundberg Lake. North of Sundberg Lake the basaltic rocks are truncated by the north striking Chiaz Creek fault.

The basaltic rocks of the Joy showing are cut by a zone of fracturing and shearing marked by quartz-carbonate alteration. Away from the shear zone the basalts have been propylitically altered to a chlorite-epidote-calcite assemblage. Within the shear zone, sulphide mineralization consisting of pyrite, pyrrhotite, arsenopyrite, galena and chalcopyrite occurs. Anomalous amounts of gold and silver reportedly occur with the sulphides. A 1972 grab sample from the creek bed on the Manx claims assayed 0.42 per cent copper and 1.7826 grams per tonne gold (Property File - Cedar City Mines Ltd. Prospectus May 26, 1972).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 123
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1923-A131; 1933-A136
EMPR ASS RPT 2606, 2835, 3278, 3279, 3943, 5198, 8124, 10864, *15133,
17647
EMPR GEM 1971-134; 1973-292
EMPR EXPL 1986-C308
EMPR FIELDWORK 1987, pp. 147-153
EMPR PF (Cedar City Mines Ltd. Prospectus May 26, 1972)
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **MURPHY LAKE**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 01 45 N
LONGITUDE: 121 15 52 W
ELEVATION: 1020 Metres

NORTHING: 5765704
EASTING: 619065

LOCATION ACCURACY: Within 500M

COMMENTS: Location of collar of diamond drill hole ML95-06, Figure 5, Assessment Report 25368.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite Magnetite
ALTERATION: K-Feldspar Quartz Chlorite
ALTERATION TYPE: Potassic Chloritic
MINERALIZATION AGE: Triassic-Jurassic

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Nicola	Undefined Formation	
Triassic-Jurassic			Takomkane Batholith

ISOTOPIC AGE: 187 million years
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Monzonite
Diorite
Gabbro
Mafic Porphyry Dike
Syenitic Dike

HOSTROCK COMMENTS: Hostrocks are monzonitic to gabbroic intrusive rocks west of, but similar to the Takomkane Batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1995

COMMODITY	GRADE	
Gold	0.0400	Grams per tonne
Copper	0.3400	Per cent

REFERENCE: Assessment Report 25368.

CAPSULE GEOLOGY

The Murphy Lake copper property is located 2 kilometres southwest of Murphy Lake and 25 kilometres northwest of Lac La Hache. It is readily accessible on bush roads from highway 97. The claims are underlain by monzonite and gabbro similar in texture to those of the Late Triassic to Early Jurassic Takomkane Batholith which outcrops east of the property (Assessment Report 25368). The Takomkane batholith is primarily composed of granodioritic intrusive rocks and has been dated at 187 million years (GSC Memoir 363). The monzonitic intrusive rocks intrude Upper Triassic to Lower Jurassic Nicola Group andesitic and basaltic volcanic flows, breccias and tuffs and coeval intrusive bodies and breccias (diorite, monzonite and syenite) informally called the Spout Lake Intrusive Suite. Calc-alkaline volcanic flows and related rocks of the Eocene Kamloops Group overlie the Mesozoic rocks a few hundred metres

CAPSULE GEOLOGY

west of drill hole ML95-6 (Assessment Report 25368).

Outcrop is poor on the property due to a cover of Pleistocene glacial till and glaciofluvial sediments, so the geological information is derived from drill holes. Holstrokes are monzonite, gabbro and diorite cut by fine grained syenitic to mafic porphyry dykes. Chalcopyrite and pyrite, the main sulphide minerals, occur mainly in fine fractures and in blebs in K-feldspar veins and rarely disseminated. Massive chalcopyrite-chlorite-quartz veins were intersected in hole ML95-06. Fractures carrying magnetite, k-feldspar and minor chalcopyrite offset k-feldspar veins. The best intersection was in ML95-06 which intersected 0.34 per cent copper and 0.04 grams per tonne gold over 53 metres. This included 1.14 per cent copper in the footwall of the zone.

Interest in the Spout Lake area was triggered in 1966 when the Geological Survey of Canada released the results of a regional airborne magnetic survey which outlined an annular magnetic anomaly 10 kilometres in diameter in the Spout Lake area. Subsequently in 1966 and 1967, Coranex Limited obtained anomalous results in follow-up stream sediment geochemical surveys and soil geochemical surveys in the area south of Peach Lake. Programs of geological, soil geochemical, magnetometer, induced polarisation and prospecting surveys were undertaken in 1967 in the area south of Peach Lake, leading to the discovery of the Peach Lake, Miracle, Spout Lake and several other occurrences.

In the Murphy Lake area, Craigmont Mines Limited identified a geochemical anomaly with up to 300 ppm copper in an area west of the Murphy Lake prospect (Assessment Report 4697) in 1973. Tide Resources Limited flew an airborne VLF-EM and magnetometer survey in 1988 (Assessment Report 18347). Cominco Limited completed reconnaissance induced polarisation survey in 1992 on logging roads. Work by the Lac La Hache Joint Venture (Regional Resources limited and GWR Resources Incorporated) began in 1993 with reconnaissance geological mapping, induced polarisation and geochemical surveys. In the winter of 1994/5, 27 kilometres of induced polarization and magnetometer surveys were completed. These surveys outlined zones of weak chargeability on the east flank of the regional magnetic "high". Later in 1995 (Assessment Report 25368) the Joint Venture drilled seven NQ holes totalling 1145.9 metres.

BIBLIOGRAPHY

EMPR ASS RPT 2370, 18347, 23382, 23920, 24413, 24428, *25368
GSC MAP 1424A
GSC MEM 363

DATE CODED: 2003/03/04
DATE REVISED: / /

CODED BY: RHM
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 074**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOBSON, LUCK, GOLDBLOCKS,
LANDING 3, LOST CABIN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)

LATITUDE: 52 36 18 N
LONGITUDE: 121 16 52 W
ELEVATION: 1524 Metres

NORTHING: 5829719
EASTING: 616401

LOCATION ACCURACY: Within 500M

COMMENTS: North of the Hobson Arm of Quesnel Lake on upper Spanish Creek. Location of Landing 3 on Luck claim (Property File - Matherly, M. et al, 1983, Prospecting Report, Hobson Claim Group).

COMMODITIES: Silver Copper Lead

MINERALS

SIGNIFICANT: Pyrite Galena
COMMENTS: Trace gold.
ASSOCIATED: Quartz
ALTERATION: Sericite Chlorite Mariposite
ALTERATION TYPE: Carbonate Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic	Quesnel River	Undefined Formation	
Triassic-Jurassic	Takla	Undefined Formation	

LITHOLOGY: Quartz Chlorite Schist
Quartz Chlorite Sericite Schist
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1983
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 1.0284 Grams per tonne
Copper 0.0110 Per cent
COMMENTS: Sample #14 (45781) from mariposite zone. Gold assayed less than 0.1714 grams per tonne.
REFERENCE: Property File - Matherly, M. et al, 1983.

CAPSULE GEOLOGY

The Hobson showing is located north of the Hobson Arm of Quesnel Lake on upper Spanish Creek. It lies within the eastern part of the Quesnellia terrane. This region is underlain dominantly by fine grained metasedimentary rocks in contact with the Barkerville terrane. The metasedimentary rocks comprise mainly dark grey phyllite and silty slate considered to be of Middle Triassic to Lower Jurassic age. These rocks have historically been correlated with the Takla and Quesnel River Groups as shown on GSC Map 1424A. Part of the black phyllite succession has more recently been informally correlated with the Nicola Group.

The Hobson showing is hosted in highly faulted, medium grained, pale green quartz chlorite schists grading to quartz chlorite sericite schists and greenstone (possibly metamorphosed andesite). The north trending fault zones contain carbonate mariposite

CAPSULE GEOLOGY

alteration zones. Mineralization consists of pockets of galena and galena with pyrite in quartz veins.

A grab sample (#14) from the carbonate mariposite zone at Landing 3 assayed 1.0284 grams per tonne silver, 0.011 per cent copper and less than 0.1714 grams per tonne gold (Matherly, M. et al, 1983, Prospecting Report, Hobson Claim Group).

BIBLIOGRAPHY

EMPR FIELDWORK *1987 pp.139-145
EMPR OF 2001-11
EMPR P 1990-3
EMPR PF (*Matherly, M. et al, 1983, Prospecting Report, Hobson Claim Group; Paterson, S., Matherly, M., 1983, Prospecting 1983 Report)
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1989/08/04
DATE REVISED: 1992/08/21

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 075**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOFFAT, FALLS**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 17 24 N
LONGITUDE: 121 26 05 W
ELEVATION: Metres

NORTHING: 5794447
EASTING: 606758

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Copper
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Miocene			Unnamed/Unknown Informal

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

A considerable area of south central British Columbia is underlain by Miocene plateau basalt, largely confined to the area between the Pinchi-Fraser fault system to the east and the Yalakom fault system to the west. However, remnants of the plateau basalt occur in Quesnellia. One of these remnants outcrops in the Moffat Creek area and is known as the Moffat or Falls showing.

Minor amounts of copper sulphide and native copper occur within the plateau basalt. This showing is one of two copper occurrences recorded in the area, the other is the Red occurrence (093A 064) slightly to the northwest.

BIBLIOGRAPHY

EMPR ASS RPT 13490
EMPR GEM 1973-290
EMPR EXPL 1985-C259
GSC OF 574 (Map)
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
EMPR FIELDWORK 1988, pp. 159-165

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 076**

NATIONAL MINERAL INVENTORY:

NAME(S): **F.S.**, KIM

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 29 55 N
LONGITUDE: 121 46 30 W
ELEVATION: 1006 Metres

NORTHING: 5817203
EASTING: 583158

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of F.S. claim block.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Basaltic Breccia
Sediment/Sedimentary
Quartz Monzonite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The F.S. showing occurs within basaltic breccia of the lower part of the Upper Triassic to Lower Jurassic Nicola Group of the central Quesnel belt. Stratigraphically underlying the basalt are Upper Triassic sedimentary rocks which outcrop immediately to the south. These rocks are intruded by the same quartz monzonite dikes as the Wet occurrence (93A 059).

Mineralization consists of minor amounts of pyrite and chalcopyrite in fractures within the basaltic breccia. Some of these fractures are filled with quartz and carbonate.

BIBLIOGRAPHY

EMPR ASS RPT 2458, 5105, 12683
EMPR FIELDWORK 1987, pp. 147-153
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 077**

NATIONAL MINERAL INVENTORY:

NAME(S): **KWUN LAKE, AL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 23 53 N
LONGITUDE: 121 21 13 W
ELEVATION: 884 Metres

NORTHING: 5806588
EASTING: 612016

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of drilling.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite
ASSOCIATED: K-Feldspar Gypsum Epidote Calcite
ALTERATION: Chlorite Epidote K-Feldspar Magnetite
ALTERATION TYPE: Potassic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 0004 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Zone containing anomalous gold in drill hole is 3 to 6 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic Nicola Undefined Formation
Lower Jurassic Kwun Stock

ISOTOPIC AGE: 185 +/- 6 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Diorite
Syeno Diorite
Monzonite
Breccia
Felsic Tuffaceous Breccia
Basalt
Basaltic Breccia
Basaltic Wacke

HOSTROCK COMMENTS: Intrudes Upper Triassic volcanic rocks

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Gold 1.0000 Grams per tonne
COMMENTS: Intersection over three to six metres containing 0.4 to 1.0 grams per tonne gold.
REFERENCE: Assessment Report 9925.

CAPSULE GEOLOGY

The Kwun Lake showing is located within the central Quesnel Belt which consists of Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks.

Alkalic subvolcanic plutons intruding the volcanic rocks commonly host copper and associated gold mineralization. These plutons are comagmatic with the upper, more felsic parts of the volcanic stratigraphy.

The Kwun Lake showing is underlain by a zoned (diorite to syenodiorite) stock (the Kwun stock) which is surrounded by felsic

CAPSULE GEOLOGY

tuff breccia to the north, east and south. To the west, a fault separates the stock and felsic breccias from older basalt. Basaltic wackes and basaltic breccia occur to the east of the felsic breccias and the Kwun stock.

Hydrothermal activity associated with the stock has resulted in a central potassic zone, characterized by secondary orthoclase, surrounded by a zone of propylitic alteration, characterized by the presence of chlorite, calcite and epidote. Secondary magnetite is common within propylitically altered rock.

Sulphide mineralization related to this hydrothermal system consists of small amounts of chalcopyrite, pyrite and bornite within brecciated and propylitically altered rock on the west side of the stock. A small zone, 3 to 6 metres wide, of anomalous gold containing values of 0.4 to 1.0 grams per tonne has been intersected in drill holes in a monzonitic phase of the stock (Assessment Report 9925).

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EMPR ASS RPT *4860, *5086, *5151, *5533, *8261, *9925, 14178, 15453, 16153
EMPR ASS RPT SUM 1981-156
EMPR EXPL 1975-E124; 1980-306; 1986-C304; 1987-C244
EMPR GEM 1971-136; 1973-291; 1974-238
EMPR FIELDWORK 1986, pp. 125-133; 1987, pp. 131-137; 1988, pp. 159-165
EMPR PF (Location of Drillholes, 1975)
EMPR INF CIRC 1989-1, p. 20
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 078**

NATIONAL MINERAL INVENTORY:

NAME(S): **WOODJAM**, MEGABUCK, HS,
DISCOVERY, TAKOM, RAVIOLI,
GOLDENUF, MB, LS,
LP

MINING DIVISION: Cariboo

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 15 26 N
LONGITUDE: 121 22 52 W
ELEVATION: 930 Metres

NORTHING: 5790882
EASTING: 610496

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of area of drilling. Located about 10 kilometres south of Horsefly village.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT:	Chalcopyrite	Pyrrhotite	Magnetite	Pyrite		
ASSOCIATED:	Quartz	Chlorite	Epidote	K-Feldspar		
ALTERATION:	Chlorite	Epidote	Tourmaline	Carbonate		
ALTERATION TYPE:	Propylitic		Argillic	Silicific'n	Carbonate	Tourmalin'z'n
MINERALIZATION AGE:	Unknown					

DEPOSIT

CHARACTER:	Vein	Stockwork	Podiform	Disseminated
CLASSIFICATION:	Hydrothermal	Epigenetic	Porphyry	
TYPE:	D03 Volcanic redbed Cu		L01	Subvolcanic Cu-Ag-Au (As-Sb)
	L03 Alkalic porphyry Cu-Au			
SHAPE:	Irregular			

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic			Takomkane Batholith
Eocene			Unnamed/Unknown Informal

LITHOLOGY: Hornblende Feldspar Porphyry Flow
Flow Breccia
Lapilli Tuff
Hornblende Granodiorite
Olivine Basalt
Volcanic Breccia
Sandstone

HOSTROCK COMMENTS: Intrusions are possibly related to Takomkane Batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: MEGABUCK	REPORT ON: Y
CATEGORY: Unclassified	YEAR: 1986
QUANTITY: 725000 Tonnes	
COMMODITY	<u>GRADE</u>
Gold	1.3000 Grams per tonne
Copper	0.1500 Per cent
COMMENTS: A near-surface resource.	
REFERENCE: Property File - Prospectus, Big Rock Gold Ltd., G.R. Peatfield, 1986.	

ORE ZONE: MAIN	REPORT ON: Y
CATEGORY: Unclassified	YEAR: 1986
QUANTITY: 1360000 Tonnes	
COMMODITY	<u>GRADE</u>
Gold	0.7000 Grams per tonne
COMMENTS: Surrounds the near-surface resource.	
REFERENCE: Property File - Prospectus, Big Rock Gold Ltd., G.R. Peatfield, 1986.	

CAPSULE GEOLOGY

The Megabuck prospect is underlain predominantly by Tertiary volcaniclastic rocks. A large part of this area is covered by a

CAPSULE GEOLOGY

thick mantle of till and outcrops of bedrock are rare.

In the Discovery zone, mineralization is hosted by silicified and partially propylitized hornblende-feldspar porphyry flows and flow breccias of Eocene age. These rocks are very similar in appearance to those seen in the Toodoggone area. Eocene purple and tan lapilli tuffs are also present.

The Discovery zone is intensely silicified, and contains blebs and pods of epidote and thin stringer veins of quartz, magnetite and chalcopyrite. There is a remarkable lack of pyrite mineralization. The gold is associated with disseminated and microvein chalcopyrite.

An intrusion of medium grained hornblende granodiorite occurs at the south end of the property past a central cover of Miocene olivine flood basalt. This is possibly an extension of the Triassic to Jurassic Takomkane batholith. Locally the granodiorite has been extensively tourmalinized with minor pyrite mineralization. The tourmaline is black, iron rich and occurs as small radiating masses. The granodiorite appears vuggy in the zone of tourmalinization.

A near-surface resource of 725,000 tonnes grading 1.3 grams per tonne gold is surrounded by an additional 1.36 million tonnes grading 0.7 gram per tonne gold (Property File - Prospectus, Big Rock Gold Ltd., G.R. Peatfield, December 1986).

Phelps Dodge Corporation of Canada Limited optioned the property, now known as Woodjam, from Wildrose Resources Ltd. in 1999.

Wildrose Resources Ltd. held the property as the Woodjam claims. Phelps Dodge Corp. of Canada optioned the property in 1999. Wildrose began a drilling program in 2002.

BIBLIOGRAPHY

EMPR ASS RPT *4766, *5237, *5311, *5548, *5731, *11379, *12301,
*12522, 16717, 22670
EMPR EXPL 1975-E125; 1983-375; 1984-271; 1999-13-24; 2002-13-28
EMPR FIELDWORK 1988, pp. 159-165
EMPR GEM 1973-290; 1974-236
EMPR OF 1992-1
EMPR PF (Big Rock Gold Ltd. Prospectus June, 1987)
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
GCNL #198, 1984; #33, 1985; #62(Mar.30), 1999
N MINER Apr.12, 1999
PR REL Wildrose Resources Ltd., Sept.23, 2002; Fjordland Exploration
Inc., Oct.13, Nov.18, 2002
WWW <http://www.eastfieldgroup.com/wildrose/wrshome.html>;
<http://www.infomine.com/index/properties/WOODJAM.html>
Chevron File
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 079**

NATIONAL MINERAL INVENTORY:

NAME(S): **BREN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 18 44 N
LONGITUDE: 121 02 18 W
ELEVATION: 1265 Metres

NORTHING: 5797577
EASTING: 633724

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of trenching.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Arsenopyrite Pyrrhotite Pyrite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Alkali Basalt
Quartz Porphyry Dike
Diorite Syenite Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Bren showing is located south of Horsefly Mountain towards the eastern margin of the Upper Triassic to Lower Jurassic Nicola Group volcanic assemblage. The lowermost volcanic rocks consist of alkali basalt and alkali olivine basalt which, in this area, have been intruded by quartz porphyry dikes. A diorite syenite intrusion at Horsefly Mountain is probably of Lower Jurassic age but the age of the quartz bearing felsic dikes is not known.

The basaltic rocks have been silicified adjacent to the contacts with the quartz porphyry dikes and contain disseminated pyrite, pyrrhotite and arsenopyrite. Geochemical sampling carried out in 1982 indicates the presence of anomalous gold associated with sulphide mineralization.

BIBLIOGRAPHY

EMPR ASS RPT 12363
EMPR EXPL 1983-371
EMPR GEM 1973-290
EMPR FIELDWORK 1986, pp. 135-142; 1987, pp. 139-145; 1988,
pp. 159-165
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 080**

NATIONAL MINERAL INVENTORY:

NAME(S): **MURDER GULCH PLACER (PL.7139)**, MILLER PIT

STATUS: Past Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093A12E

BC MAP:

LATITUDE: 52 37 19 N

LONGITUDE: 121 57 19 W

ELEVATION: 762 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located on placer lease 7139 on the south bank of the Cariboo River,
9.6 kilometres upstream from Quesnel Forks.

UTM ZONE: 10 (NAD 83)

NORTHING: 5830729

EASTING: 570722

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer Residual

TYPE: C01 Surficial placers

DIMENSION: 0075 x 0004 Metres

COMMENTS: Upper layer exposed for 75 metres and is between 1 and 4 metres thick.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Pleistocene			Glacial/Fluvial Gravels

LITHOLOGY: Unconsolidated Glacial Gravel
Clay
Unconsolidated Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: MURDER GULCH

REPORT ON: Y

CATEGORY: Inferred YEAR: 1977

QUANTITY: 142500 Tonnes

COMMODITY: Gold GRADE: 3.6300 Grams per tonne

COMMENTS: Quantity is in cubic metres and grade is in dollars per cubic metre.

REFERENCE: Property File - Prospectus, Gavex Gold Mines Ltd., February 1977.

ORE ZONE: MURDER GULCH

REPORT ON: Y

CATEGORY: Indicated YEAR: 1977

QUANTITY: 37250 Tonnes

COMMODITY: Gold GRADE: 3.6300 Grams per tonne

COMMENTS: Quantity is in cubic metres and grade is in dollars per cubic metre.

REFERENCE: Property File - Prospectus, Gavex Gold Mines Ltd., February 1977.

CAPSULE GEOLOGY

The Murder Gulch placer deposit is located on P.L. 7139 on the banks of the Cariboo River about 9.6 kilometres upstream from Quesnel Forks.

There is some evidence of previous work on the deposit and numerous placer deposits have been worked in the area since before the turn of the century during the Cariboo gold rush.

This placer is located within the historical Cariboo goldfields where deposits occur in glacial, interglacial fluvial and till deposits of Pleistocene age. These lie unconformably on rocks belonging to the Slide Mountain, Cariboo, Barkerville and Quesnellia terranes which range in age from the Precambrian to the Jurassic.

The geology of the area consists of glacial clay mixed with coarser material and occasional outcrops of graphitic slate. Bedrock consisting of Quesnellia terrane rocks, primarily Takla Group volcanics, contains frequent quartz stringers containing abundant

CAPSULE GEOLOGY

pyrite.

In the Likely area, placer gold is associated with glacial and glacio-fluvial action. The auriferous gravels of the Murder Gulch deposit contain particles ranging from clay to boulder size. The gold is usually found in the top part of the gravel mixture. The richest gold concentrations are generally found on top of blue glacial clay, bedrock or in a rusty clay gravel boulder mixture. The gold is often quite rough with quartz fragments still attached indicating a nearby source and a short transportation distance.

The upper layer has been exposed for 75 metres and is between 1 to 4 metres thick.

Production from the upper bench in 1976 was 4,118 cubic metres resulting in 3,497 grams of gold. Indicated reserves in 1977 were 37,250 cubic metres with the same grade as the 1976 production (\$3.63 per cubic metre) with an additional 142,500 cubic metres inferred reserves (Property File - Gavex Gold Mines Ltd. Prospectus Feb. 1977).

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1925-A158; 1927-C175; 1931-A94
EMPR EXPL 1989, pp. 147-169
EMPR PF (Gavex Gold Mines Ltd. Prospectus Feb. 1977)
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

DATE CODED: 1989/05/16
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093A 081**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAEFORD LAKE**, SLATER, SLATER MOUNTAIN INDUSTRIES

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A15W 093A14E
BC MAP:

Open Pit

MINING DIVISION: Clinton

LATITUDE: 52 47 49 N
LONGITUDE: 120 59 23 W
ELEVATION: 1220 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5851577
EASTING: 635535

LOCATION ACCURACY: Within 1 KM

COMMENTS: Quarry on west shore of Maeford Lake, 100 kilometres east-southeast of Quesnel.

COMMODITIES: Marble

Dimension Stone

Building Stone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Pyrite Tremolite

MINERALIZATION AGE: Hadrynian

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Sedimentary Metamorphic

TYPE: R04 Dimension stone - marble

Industrial Min.

R09 Limestone

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Unnamed/Unknown Group

FORMATION

Cunningham

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Marble
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

Marble of the Hadrynian Cunningham Formation(?) is being quarried at Maeford Lake, 100 kilometres east-southeast of Quesnel.

The marble is medium grained, milky white in colour and is occasionally cut by pyrite stringers. The marble also locally contains patches of tremolite.

Slater Mountain Industries began a hand operation quarrying the beautiful white marble in 1990. The marble is sold locally for use as dimension stone. The deposit is classed as producing less than 100,000 tonnes per year (Mineral Market Update July, 1991).

BIBLIOGRAPHY

EMPR Mineral Market Update *July, 1991
EMPR OF 1992-1, 1992-9, 2001-11
GSC MAP 1424A; 42-1961; 1-1963
GSC P 70-1A

DATE CODED: 1991/05/24
DATE REVISED: 1991/05/24

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 082**

NATIONAL MINERAL INVENTORY:

NAME(S): **GREEN ICE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 40 26 N
LONGITUDE: 120 35 31 W
ELEVATION: 2042 Metres

NORTHING: 5838716
EASTING: 662808

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic Replacement

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Marble Breccia
Limestone

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Mountains

RELATIONSHIP: Pre-mineralization GRADE:

CAPSULE GEOLOGY

This area is within the Barkerville Terrane in the Omineca Belt, separated from the Cariboo Terrane to the east by the Pleasant Valley Thrust. The showing occurs adjacent to the thrust fault, immediately to the east. The rocks of the region are probably part of the (?) Hadrynian to Lower Paleozoic Snowshoe Group.

At the Green Ice showing mineralization consists of sphalerite, mainly disseminated, in partially brecciated and sericitized white marble.

BIBLIOGRAPHY

EMPR ASS RPT *7655
EMPR EXPL 1979-206
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/06

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 083**

NATIONAL MINERAL INVENTORY:

NAME(S): **MICA MOUNTAIN**, CLEARWATER MICA

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A01W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 08 03 N
LONGITUDE: 120 26 36 W
ELEVATION: 1920 Metres

NORTHING: 5779044
EASTING: 674977

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located 65 kilometres north-northwest of Clearwater, 3 kilometres west of Wells Grey Provincial Park.

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Muscovite
ASSOCIATED: Quartz Feldspar
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Podiform
CLASSIFICATION: Pegmatite Magmatic Industrial Min.
TYPE: O03 Muscovite pegmatite
SHAPE: Irregular
DIMENSION: 60 Metres STRIKE/DIP:
COMMENTS: A 60-metre wide north-trending zone of pegmatite pods and dikes 1.5 to 9 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz. GROUP: Snowshoe FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Quartz Mica Schist
Quartz Pegmatite Dike

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1931
SAMPLE TYPE: Grab
COMMODITY: Mica GRADE: 30.0000 Per cent

COMMENTS: Early work indicated 25 to 30 per cent mica.
REFERENCE: Minister of Mines Annual Report 1931, page 109.

CAPSULE GEOLOGY

The Mica Mountain prospect is located about 65 kilometres north-northwest of Clearwater, 3 kilometres west of Wells Grey Provincial Park.

A 60-metre wide zone of irregular pods and dikes of pegmatite in quartz mica schist of the Snowshoe Group has been traced northward across the summit of Mica Mountain. Individual pods and dikes range from 1.5 to 9 metres in width. The pegmatite varies considerably in composition, with quartz and feldspar predominating, accompanied by subordinate muscovite mica. The muscovite occurs as irregularly distributed, well-developed "books", up to 15 centimetres in length. The mica tends to be more abundant near surface. Early work (1931) indicated that the mica grades up to 25 to 30 per cent.

BIBLIOGRAPHY

EMPR AR *1931-109
EMPR PF (Mellin, R.C. 1930, Report on the Clearwater Mica Mine; Calquhoun, M.E. circa 1930, excerpt from Report on Clearwater Mica Mine; Claim Map of Area, date unknwn)
GSC P 70-1A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 140
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 42-1961; 1-1963; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1991/06/12

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 084**

NATIONAL MINERAL INVENTORY:

NAME(S): **LIKELY MAGNETITE** LIKELY GOLD MINING

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 36 54 N
LONGITUDE: 121 39 37 W
ELEVATION: 762 Metres

NORTHING: 5830287
EASTING: 590705

LOCATION ACCURACY: Within 1 KM

COMMENTS: On the left bank of the south fork of the Quesnel River, approximately 800 metres from Likely, B.C.

COMMODITIES: Magnetite Gold

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
ALTERATION: Hematite Specularite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Volcanogenic Industrial Min.
SHAPE: Regular
MODIFIER: Fractured
DIMENSION: 0007 x 0004 Metres STRIKE/DIP: 302/75E TREND/PLUNGE:
COMMENTS: Lense dips steeply northeast, is exposed on surface for 7.6 metres and is up to 4.27 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1936
SAMPLE TYPE: Chip
COMMODITY GRADE
Gold 0.6856 Grams per tonne
COMMENTS: Sample of magnetite where locally containing sulphides.
REFERENCE: Property File - Lay, D. 1936, Report on Likely Gold Mining Syndicate.

CAPSULE GEOLOGY

The Likely magnetite showing has been described in British Columbia Energy, Mines and Petroleum Resources Annual Report 1936. In all probability the workings described as cutting this showing are part of the historical Bullion Pit workings.

The showing consists of a magnetite lens which strikes 302 degrees and dips steeply east. The greatest exposed width of the lens is 4.27 metres and surface stripping has traced the lens for 7.62 metres along strike. The lens is hosted in fractured andesitic volcanics most likely belonging to the Upper Triassic to Lower Jurassic Takla Group. The lens locally contains chalcopyrite and pyrite. The fractures in the vicinity of the lens are filled with pyrite, chalcopyrite and specularite. Malachite staining is seen in surface exposures.

A chip sample of the lens from where it locally contained sulphides assayed 0.6856 grams per tonne gold in 1936 (Property File - Lay, D., 1936, Report on Likely Gold Mining Syndicate).

BIBLIOGRAPHY

EMPR AR 1936-C38
EMPR PF (*Lay, D. 1936, Report on Likely Gold Mining Syndicate)

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 142
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1989/08/04
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093A 085**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAUD CREEK PLACER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 18 N
LONGITUDE: 121 50 28 W
ELEVATION: 840 Metres

NORTHING: 5830816
EASTING: 578450

LOCATION ACCURACY: Within 1 KM

COMMENTS: Placer leases 6592, 6747, 6937 and 6945, located near the junction of Maud Creek and Quesnel River. Location of PL. 6937.

COMMODITIES: Gold Silver Platinum

MINERALS

SIGNIFICANT: Gold Silver Platinum

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Unconsolidated Glacial Gravel
Unconsolidated Sediment/Sedimentary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel

YEAR: 1970

COMMODITY	GRADE	
Silver	13.7120	Grams per tonne
Gold	3.4280	Grams per tonne

COMMENTS: Surface samples taken over entire length of buried channel. Some samples assayed 0.1714 grams per tonne platinum.

REFERENCE: Property File - Kiepprien, A.J. 1971.

CAPSULE GEOLOGY

The Maud Creek placer is located near the junction of Maud Creek and the Quesnel River in the Cariboo district.

This placer is located within the historical Cariboo goldfields, where these deposits occur in glacial, interglacial fluvial and till deposits of Pleistocene age. These lie unconformably on rocks belonging to the Slide Mountain, Cariboo, Barkerville and Quesnellia terranes which range in age from the Precambrian to the Jurassic.

The Maud Creek placer occurs in an area underlain by rocks of the Quesnellia terrane, primarily Upper Triassic to Lower Jurassic Takla Group volcanic rocks.

There has been no recorded production from this showing but it was evaluated between 1968 and 1970 by Maud Creek Explorations Co. Ltd.

A buried river channel 213 metres long, 15 metres wide and estimated to be 15 metres deep was located on Lease 6937. Samples taken from the surface over the full length of the channel assayed 3.428 grams per tonne gold and 13.712 grams per tonne silver (Property File - Kiepprien, A.J., 1971, Progress Report from Maud Creek Explorations Co. Ltd.).

Testing on the other leases resulted in assays of between 2.057 to 20.225 grams per tonne gold and between 6.857 to 13.712 grams per tonne silver. Several of these assays (unspecified) contained 0.1714 grams per tonne platinum (Property File - Kiepprien, A.J. 1971 Progress Report from Maud Creek Explorations Co. Ltd.).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 144
REPORT: RGEN0100

CAPSULE GEOLOGY

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EM FIELDWORK 2001, pp. 303-312
EM GEOFILE 2000-2; 2000-5
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (Kiepprien, A.J. 1971, Progress Report from Maud Creek Explorations Co. Ltd.)
GSC MAP 1424A

DATE CODED: 1989/08/15
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093A 086**

NATIONAL MINERAL INVENTORY: 093A12 Cu2

NAME(S): **BAYSHORE**, B.I., KEY

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 31 30 N
LONGITUDE: 121 37 35 W
ELEVATION: Metres

NORTHING: 5820319
EASTING: 593190

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Igneous-contact
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Triassic-Jurassic
Upper Triassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Polley Stock
Bootjack Stock

LITHOLOGY: Syeno Diorite
Volcanic
Felsic Breccia
Felsic Intrusive
Basalt
Nepheline Syenite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Bayshore showing occurs within the Upper Triassic to Lower Jurassic central Quesnel sedimentary and volcanic rock of south central British Columbia. These rocks comprise the northern extension of the Nicola Group. Felsic stocks of alkalic composition have intruded the volcanic rocks and are comagmatic with proximal felsic breccias of Lower Jurassic age.

The showing is located at the southeastern end of Bootjack Lake where syenodiorite of the Polley stock and nepheline syenite of the Bootjack stock outcrop. The Polley stock hosts the Cariboo Bell copper deposit (093A 008) on the flanks of Mt. Polley to the north. Small outcrops of Lower Jurassic felsic breccia and Upper Triassic maroon basalt also occur in the area.

Mineralization consists of disseminated chalcopyrite occurring within syenodiorite of the Polley stock and Lower Jurassic volcanic rocks. This mineralization was probably deposited during the same mineralizing event which formed the copper deposits of Cariboo Bell, a few kilometres to the north.

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GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
EMPR OF 1991-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 087**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAE, S.F.**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 47 48 N
LONGITUDE: 120 59 29 W
ELEVATION: Metres

NORTHING: 5851543
EASTING: 635424

LOCATION ACCURACY: Within 1 KM
COMMENTS: Located west of Maeford Lake.

COMMODITIES: Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopryite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Stockwork
CLASSIFICATION: Volcanogenic Replacement
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Snowshoe	Downey Succession	

LITHOLOGY: Garnet Schist
Black Phyllite
Calc-silicate Gneiss
Siliceous Limestone
Dolomite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Mae showing is located just west of Maeford Lake. The property was staked in 1988, following the discovery of sulphide-bearing float and a follow-up soil geochemical survey. Subsequent soil surveys outlined three zones with coincident lead-zinc anomalies. Despite limited outcrop, mineralization was discovered in two of the anomalous zones.

The area is underlain by a northwest dipping succession of garnet schist, black phyllite, calcsilicate gneiss and minor marble and amphibolite of the Downey Succession (Cambrian?). Immediately to the north, this succession is overlain by a thick limestone-marble unit, the Bralco limestone. Late northwest trending faults, with displacements of a few tens of metres, cut these units. The regional metamorphic grade is high, with garnets and staurolites developed in pelitic units and amphibole in calcsilicates and mafic metavolcanics.

The showing comprises a number of layers of stratabound lead-zinc-copper mineralization in the calcsilicate-amphibolite assemblage. Mineralization in the first anomalous zone comprises dispersed sulphides in thin, rusty-weathering, fine-grained quartz-garnet amphibolite layers. The amphibolites are interlayered with coarse-grained garnet-biotite schist, minor calcsilicate gneiss and thin impure marble layers. Pyrite (and marcasite) occurs in late veinlets and replacing pyrrhotite.

The second anomalous zone, on the slopes above the first zone, is underlain mainly by the Bralco limestone. The only discovered mineralization is minor galena in a sparry dolomite filled fracture within the marble.

These showings and host succession have similarities with manganese-rich, stratabound lead-zinc showings of the Bend prospect (083D 001) north of Golden. They also have similarities with volcanogenic sulphide deposits, in particular Besshi-type deposits. These include a mixed mafic volcanic (?)/metasedimentary host succession and a copper, zinc and lead metal content.

MINFILE NUMBER: **093A 087**

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 147
REPORT: RGEN0100

BIBLIOGRAPHY

EI FIELDWORK 1997, p. 13-4
EM EXPL 1999-65-77
EMPR AR 1966-131
EMPR ASS RPT *19327
EMPR OF 1999-2
GSC MAP 1424A
GSC MEM 421
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1997/12/23

CODED BY: GSB
REVISED BY: TH

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 088**

NATIONAL MINERAL INVENTORY: 093A6 Cu3

NAME(S): **WOOD**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 15 02 N
LONGITUDE: 121 19 05 W
ELEVATION: Metres

NORTHING: 5790239
EASTING: 614817

LOCATION ACCURACY: Within 500M

COMMENTS: 11.2 kilometres southeast of Horsefly on Woodjam Creek.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP
Triassic-Jurassic	Nicola
Lower Jurassic	

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER
Takomkane Batholith

LITHOLOGY: Hornblende Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The geology of the region consists of Upper Triassic to Lower Jurassic Nicola Group volcanic rocks intruded by the Lower Jurassic Takomkane batholith granodiorite. Plateau basalt of probable Miocene age overlies the Takomkane batholith.

Chalcopyrite and pyrite occur in closely spaced fractures within hornblende granodiorite which outcrops in Woodjam Creek. The age of mineralization is not known but it is likely similar in age to porphyry-type mineralization that occurs elsewhere in the granodioritic stocks (i.e. Lower Jurassic).

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GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
EMPR FIELDWORK 1988, pp. 159-165

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 089**

NATIONAL MINERAL INVENTORY:

NAME(S): **DL (DECEPTION LEDGE)**, DECEPTION LEDGE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A02E
BC MAP:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)

LATITUDE: 52 00 39 N
LONGITUDE: 120 34 31 W
ELEVATION: 975 Metres

NORTHING: 5765019
EASTING: 666406

LOCATION ACCURACY: Within 500M

COMMENTS: Located approximately 500 metres west of Deception Creek and on the north bank of a small creek that flows eastward into Deception Creek.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Arsenopyrite Stibnite
ASSOCIATED: Quartz Carbonate Limonite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I01 Au-quartz veins
SHAPE: Tabular
DIMENSION: Metres STRIKE/DIP: 105/45N TREND/PLUNGE:
COMMENTS: Parallel foliation and also crosscutting (310/90).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Quesnel River	Unnamed/Unknown Formation	
Upper Triassic	Nicola	Unnamed/Unknown Formation	

LITHOLOGY: Black Phyllite
Slaty Phyllite

HOSTROCK COMMENTS: Black "knotty" phyllites and grey slaty phyllites of the Quesnel River Group or Nicola Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Zeolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1997
SAMPLE TYPE: Chip
COMMODITY GRADE
Gold 42.9060 Grams per tonne
Silver 34.7000 Grams per tonne
COMMENTS: A 1-metre chip sample across a zone of en echelon veins above the adit.
REFERENCE: Assessment Report 23201.

CAPSULE GEOLOGY

The DL prospect consists of a number of auriferous quartz-carbonate-sulphide veins that typically are oriented parallel to foliation in the host phyllites (Upper Triassic Quesnel River Group or Nicola Group). Old workings, consisting of a partly caved adit and several trenches, were discovered in 1987. Exploration in the area since that time indicates that the veins are generally narrow (< 1 metre wide) and discontinuous. However, a 1-metre chip sample across a zone of en echelon veins above the adit assayed 42.906 grams per tonne gold and 34.7 grams per tonne silver (Assessment Report 23201). This indicates that the system has potential for bonanza-style gold mineralization. The setting is not unlike the CPW past producer (093A 043) near Spanish Mountain.

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RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 150
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 42-1961; 1-1963; 1424A

DATE CODED: 1997/07/31
DATE REVISED: 1997/09/09

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093A 090**

NATIONAL MINERAL INVENTORY:

NAME(S): **SKARN, ROUNDTOP, RAND,**
SCARN, COPPER CREEK, COPPER PENNY CREEK

STATUS: Past Producer	Underground	MINING DIVISION: Cariboo
REGIONS: British Columbia		UTM ZONE: 10 (NAD 83)
NTS MAP: 093A14W		NORTHING: 5863038
BC MAP:		EASTING: 612259
LATITUDE: 52 54 19 N		
LONGITUDE: 121 19 51 W		
ELEVATION: 1493 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Located on Copper Penny Creek.		

COMMODITIES: Silver Gold Copper Lead Zinc
 Tungsten

MINERALS

SIGNIFICANT: Scheelite	Tetrahedrite	Galena	Sphalerite	Pyrite
ASSOCIATED: Quartz	Ankerite			
ALTERATION: Ankerite				
ALTERATION TYPE: Carbonate				
MINERALIZATION AGE: Unknown				

DEPOSIT

CHARACTER: Vein	Disseminated		
CLASSIFICATION: Hydrothermal	Epigenetic	Replacement	
SHAPE: Irregular			
DIMENSION: 0250	Metres	STRIKE/DIP:	TREND/PLUNGE:
COMMENTS: Mineralized veins and lenses occur for 250 metres along Copper Penny Creek.			

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Quartz Sericite Schist
 Limestone
 Marble
 Quartzite
 Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?)
 Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: FOOTWALL	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1971
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	4391.2700 Grams per tonne
Gold	1.3700 Grams per tonne
Copper	4.5400 Per cent
Lead	10.2400 Per cent
COMMENTS: Well mineralized sample across 1 metre of the footwall of a quartz vein.	
REFERENCE: Property File - Coast Interior Ventures Ltd. Prospectus July, 1971.	

CAPSULE GEOLOGY

The geology of the region consists of dominantly metasedimentary (?)Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Cariboo Canyon showing comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

The Skarn showing is underlain by quartz-sericite schist and

CAPSULE GEOLOGY

interbedded limestone. Quartz veins and lenses occur in the limestone over a distance of about 250 metres along Copper Penny Creek. Mineralization in the quartz veins and lenses consists of pyrite, galena, sphalerite, tetrahedrite and scheelite. Pyrite and scheelite occur, in some cases, as disseminations in wallrock.

Ankerite occurs within the schist adjacent to the quartz veins. It is not, however, clear whether ankerite is a primary metamorphic mineral or the result of metasomatism associated with sulphide mineralization.

A well mineralized sample (#5475) taken in 1970 across 1 metre of the footwall of a vein on the Roundtop 43 and 44 claims (exact location uncertain) assayed 1.37 grams per tonne gold, 4391.27 grams per tonne silver, 4.54 per cent copper and 10.24 per cent lead; other samples were significantly lower (Property File - Coast Interior Ventures Ltd. Prospectus July, 1971). In 1980, the Coast Interior Ventures Ltd. property was operated by Chaput Logging Ltd. At this time, 61 metres of tunnelling on the Roundtop 1, 3, 43 and 44 claims was completed (Exploration in B.C. 1980, page 311). Government documents record 172 tonnes of ore milled with 721 grams of gold, 243,385 grams of silver, 10,386 kilograms of lead, 3956 kilograms of zinc and 1072 kilograms of copper recovered.

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*10270, 11831, 13550, 14132, 17115
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EMPR EXPL *1980-311; 1985-C275; 2002-13-28
EMPR OF 1991-17, 2001-11
EMPR PF (Coast Interior Ventures Ltd. Prospectus July, 1971)
GSC MAP 1424A
GSC MEM 421
GSC P *38-16, p. 26

DATE CODED: 1985/07/24
DATE REVISED: 1989/03/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 091**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO THOMPSON**, CONIAGAS, WENDLE,
NORTH, RAND, COPPER CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 54 25 N
LONGITUDE: 121 20 39 W
ELEVATION: 1402 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Underground
MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5863203
EASTING: 611358

COMMODITIES: Gold Silver Lead Zinc Tungsten

MINERALS

SIGNIFICANT: Scheelite Galena Sphalerite Arsenopyrite Pyrite
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
SHAPE: Tabular
DIMENSION: 3 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Veins vary in width up to 3.0 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Quartzite
Quartz Vein
Marble
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?)
Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Drill Core
COMMODITY: Gold GRADE: 26.6000 Grams per tonne
COMMENTS: Across 3.04 metres.
REFERENCE: George Cross Newsletter #88, May 8, 1989.

CAPSULE GEOLOGY

The geology of the region consists of dominantly metasedimentary Hadrynian to Paleozoic(?) Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Cariboo Canyon showing comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

Located in the same area as the Skarn occurrence (93A 090), mineralization here consists of north-striking quartz veins within quartzite. The veins, which vary in width up to 3 metres, contain galena, sphalerite, scheelite, arsenopyrite and pyrite. A small sample (four tonnes) mined in 1937 from the Wendle vein yielded 933 grams of gold, 311 grams of silver, 69 kilograms of lead and 22 kilograms zinc. It appears, however, that the gold content of most of these veins is low.

Recent drilling results report an assay of 26.60 grams per tonne

CAPSULE GEOLOGY

gold over 3.04 metres of the Coniagas vein (George Cross Newsletter #88, May 8, 1989)

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EMPR BC METAL MM00448
EMPR BULL *34, p. 76
EMPR EXPL 1987-C256
EMPR OF 1991-17, 1999-3, 2001-11
EMPR PF (Plan of Cariboo Thompson Mine workings, 1936; Survey of Surface and Underground Workings, 1942; Stevenson, J.S. 1942 Sample locations and notes on scheelite showings in Copper Creek, on the Wendle Group; Drill hole and trench locations, 1946; Sampling results from Coniagas Tunnel, 1951; Sampling in shaft in Wendle Tunnel, 1951; Work Map showing Trenches, Roads, Drill holes, 1973; Diamond-drill hole locations, 1973; Vertical Projection of drill holes in Copper Creek area, 1973)
GSC MAP 562A; 1424A
GSC MEM 421
GSC P *38-16, pp. 24,25
GCNL #88, 1989

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 092**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORKS**, TEP, AR,
MCKAY RIVER, ARCHIE CREEK, ARMADA

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A07W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 25 26 N
LONGITUDE: 120 47 37 W
ELEVATION: 945 Metres

NORTHING: 5810476
EASTING: 650025

LOCATION ACCURACY: Within 500M

COMMENTS: Located in the McKay River Valley, near the junction ("forks") of the Horsefly and McKay rivers. The location is for the grab sample from the TEP 1 claim (Prospectus - Armada, 1988).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Mineralogy not specifically mentioned, probably similar to Frasergold.
ASSOCIATED: Quartz Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
SHAPE: Irregular
MODIFIER: Folded
DIMENSION: STRIKE/DIP: 130/60W TREND/PLUNGE:
COMMENTS: Stratigraphy folded in northeast limb of Eureka Peak syncline. Dip varies between 30 degrees west and vertical.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic	Quesnel River	Undefined Formation	
Triassic-Jurassic	Takla	Undefined Formation	

LITHOLOGY: Porphyroblastic Black Phyllite
Limestone
Quartzite
Black Phyllite

HOSTROCK COMMENTS: Mineralization confined to stratigraphic horizon known as the "knotted" phyllite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 2.2282 Grams per tonne
COMMENTS: 25 centimetre sample from boudinaged quartz vein in phyllite.
REFERENCE: Property File - Armada Gold and Minerals Ltd. Prospectus May 1988.

CAPSULE GEOLOGY

The Forks showing is located 100 kilometres east of Williams Lake in the McKay River Valley, east of Big Slide mountain. The Forks showing covers the predicted northeastern extension of the geologically similar Frasergold deposit (093A 150). The area is underlain mainly by Upper Triassic Quesnel River Group black phyllite with minor interbedded limestone and quartzite. These rocks form the upright northeast limb of the major northwesterly trending Eureka syncline. Locally, the rocks form asymmetric drag folds which contain metamorphically derived quartz ("sweats") in the hinges. Mineralization is associated with the "knotted" or porphyroblastic black phyllite unit which occurs in a 200 to 300 metre wide zone within the phyllite sequence. Gold mineralization typically

CAPSULE GEOLOGY

occurs near the base of the "knotted" phyllite.

The quartz "sweats" strike at 130 degrees (plus or minus 10 degrees) and dip 30 degrees to vertically west. These host gold mineralization (rarely visible) and quartz-carbonate material.

A 25 centimetre grab sample of a boudinaged quartz vein taken from a phyllite exposure on the TEP 1 claim assayed 2.2282 grams per tonne gold (Property File - Armada Gold and Minerals Ltd. Prospectus May 1988).

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EMPR ASS RPT 16961, 18471
EMPR P 1990-3
EMPR PF (*Armada Gold and Minerals Ltd. Prospectus May 1988)
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GSC OF 574
GSC P 72-35
W MINER Vol.57 No.4, 1984, pp.15-20

DATE CODED: 1989/08/15
DATE REVISED: 1989/08/15

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 093**

NATIONAL MINERAL INVENTORY: 093A14 W3

NAME(S): **PETER GULCH** CUNNINGHAM AND CUTLER GROUPS, HOMESTAKE,
CARIBOO HUDSON, PENNY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 53 40 N
LONGITUDE: 121 20 22 W
ELEVATION: 1509 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5861820
EASTING: 611708

COMMODITIES: Tungsten Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Pyrite Scheelite
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Replacement Epigenetic
TYPE: I01 Au-quartz veins K02 Pb-Zn skarn
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Replacement zone up to 1.2 metres wide located near the mouth of
Pearce Creek.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Downey Succession

LITHOLOGY: Quartz Sericite Schist
Limestone
Quartz Ankerite Vein
Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?)
Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?) Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the Peter Gulch showings comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

The Peter Gulch showings occur adjacent and are similar to the Cariboo-Hudson (93A 071) occurrence but at a lower elevation. In addition to quartz veins with sulphides, a replacement deposit occurs within limestone in a zone up to 1.2 metres wide near the mouth of Pearce Creek. Mineralization in this deposit consists of galena, sphalerite, pyrrhotite and pyrite. A 2.4 metre-wide shear zone in schist is reported to contain nodules or lenses of scheelite.

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EMPR EXPL 1976-E137; 1977-E182; 1978-E193; 1979-209; 1980-311;
1983-393; 1987-C256
EMPR GEM 1973-294

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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PAGE: 158
REPORT: RGEN0100

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EMPR OF 1991-17, 2001-11
GSC EC GEOL *17, p. 70
GSC MAP 562A; 1424A
GSC MEM 421
GSC P *38-16, p. 30
GCNL #69,#88, 1989

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 094**

NATIONAL MINERAL INVENTORY:

NAME(S): **CRAZY CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 54 47 N
LONGITUDE: 121 21 01 W
ELEVATION: 1372 Metres

NORTHING: 5863873
EASTING: 610932

LOCATION ACCURACY: Within 500M

COMMENTS: Located near the confluence of Crazy Creek and Peter Gulch.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers
DIMENSION: 0300 Metres
COMMENTS: Placer operations extend for 300 metres up Peter Gulch.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by metasedimentary Snowshoe Group rocks, which are probable sources for the placer gold.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Alluvial gravels derived from and overlying Snowshoe Group rocks, were deposited within creeks draining the region. The Crazy Creek placer deposit covers operations which extend for about 300 metres up Peter Gulch from its confluence with Crazy Creek. No production records are available.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1952-238
EMPR BULL 34, p. 51
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR OF 2001-11
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 095**

NATIONAL MINERAL INVENTORY:

NAME(S): **INTERNATIONAL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 52 10 N
LONGITUDE: 121 18 34 W
ELEVATION: 1372 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Two quartz veins occur near the northwest corner of L. 3488.

UTM ZONE: 10 (NAD 83)
NORTHING: 5859086
EASTING: 613791

COMMODITIES: Gold Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Arsenopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: 101 Au-quartz veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Downey succession is informal name. The Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization
	GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1954
SAMPLE TYPE: Channel	
COMMODITY: <u>Gold</u>	<u>GRADE</u>
	109.2900 Grams per tonne

COMMENTS: A sample across about 11.5 centimetres on a quartz vein near the northwest corner of Lot 3488.
REFERENCE: Bulletin 34, page 64.

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the showing comprise the Downey succession (informal name). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

The International showing consists of quartz veins which are hosted by quartzite. Mineralization in these veins consists of pyrite, galena, sphalerite and arsenopyrite with associated gold.

A channel sample across 11.5 centimetres of a quartz vein near the northwest corner of Lot 3488 assayed 109.29 grams per tonne gold (Bulletin 34, page 64).

BIBLIOGRAPHY

EMPR ASS RPT 10270
EMPR BULL 34, p. 64
EMPR OF 2001-11
GSC MAP 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 096**

NATIONAL MINERAL INVENTORY: 093A2 Au1

NAME(S): **MCKEE**, TIMBER LINE, MCKEE LAKE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A07W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 15 02 N
LONGITUDE: 120 47 37 W
ELEVATION: 1036 Metres

NORTHING: 5791200
EASTING: 650613

LOCATION ACCURACY: Within 500M

COMMENTS: Location of shaft (now caved).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT:	Gold	Chalcopyrite	Pyrite			
ASSOCIATED:	Quartz	Sericite				
ALTERATION:	Malachite	Pyrite	Carbonate	Sericite		
ALTERATION TYPE:	Oxidation		Sericitic	Carbonate		Pyrite
MINERALIZATION AGE:	Unknown					

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Basaltic Breccia
Basaltic Tuff
Epiclastic
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1934

SAMPLE TYPE: Chip

COMMODITY: Gold GRADE Grams per tonne
Gold 10.2800

COMMENTS: Chip sample (probable) across 3.58 metres of a quartz vein in 1934.

REFERENCE: Minister of Mines Annual Report 1934, page C32.

CAPSULE GEOLOGY

The Timber Line showing is located in the central Quesnel Belt underlain by Nicola Group basaltic rocks. These basalts comprise the lower part of the volcanic stratigraphy of the region. To the east these are underlain by fine-grained epiclastic sedimentary rocks with volcanic interbeds.

The showing is underlain by basaltic breccias and tuffs, typical of the lower part of the Nicola stratigraphy in the region. Weak pyrite and carbonate alteration has affected the basalt. A shaft has been dug at 117 degrees on a shear zone containing mineralized quartz veins. Mineralization consists of free gold, chalcopyrite, pyrite and abundant sericite. Minor amounts of pyrite, malachite and chalcopyrite are present near the shaft.

The presence of quartz veining and sericitic alteration is atypical of mineralization within Nicola Group basalts. This suggests that felsic intrusive rocks related to the nearby Takomkane batholith may be present.

A sample (assumed to be a chip sample) across 3.58 metres of a quartz vein assayed 10.28 grams per tonne gold (Minister of Mines Annual Report 1934, page C32).

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BIBLIOGRAPHY

EMPR AR 1934-C32
EMPR ASS RPT 12067
EMPR P 1990-3
EMPR EXPL 1983-369
EMPR PF (Salat, H.P. (1988) Report on the Mackee Claims)
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
W MINER April, 1984
N MINER April, 1984
GCNL #65, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/09

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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PAGE: 164
REPORT: RGEN0100

MINFILE NUMBER: **093A 097**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO SCHEELITE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A10W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 44 24 N
LONGITUDE: 120 51 53 W
ELEVATION: Metres

NORTHING: 5845487
EASTING: 644150

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
DIMENSION:
COMMENTS: Attitude of veins.

STRIKE/DIP: 020/30E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Limestone
Garnet Schist
Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Pre-mineralization

GRADE:

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the showing is underlain by garnetiferous schist. Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

Scheelite mineralization occurs within quartz veins which crosscut limestone. The limestone strikes at 160 degrees and dips 20 degrees to the west. The veins strike 020 degrees and dip 30 degrees east.

BIBLIOGRAPHY

EMPR AR 1951-A121
EMPR EXPL 1983-382
GSC MAP 1424A
CJES Vol. 25, pp. 1608-1617
EMPR OF 1991-17

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 097**

MINFILE NUMBER: **093A 098**

NATIONAL MINERAL INVENTORY:

NAME(S): **SYLVAIN, HOMESTAKE, NUMBER ONE,
MONTE CRISTO**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 48 36 N
LONGITUDE: 121 20 05 W
ELEVATION: 1387 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5852435
EASTING: 612243

COMMODITIES: Gold

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
DIMENSION: 0004 Metres
COMMENTS: Veins are up to 4.5 metres in width.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz.
GROUP: Snowshoe
FORMATION: Downey Succession
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Quartzite
Limestone
Phyllite

HOSTROCK COMMENTS: Inferred to be Downey succession (informal name). The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by Snowshoe Group rocks of the Barkerville Terrane. Mapped as undifferentiated Snowshoe Group (Geological Survey of Canada Map 1638A), it is probable that the Sylvain showing is underlain by the Lower Paleozoic Downey succession. Lithologies underlying the showing include limestone, phyllite, quartzite and other metasediments. Quartz veins, up to about 4.5 metres wide, contain pyrite (in places oxidized) and gold.

BIBLIOGRAPHY

EMPR AR 1934-C34
EMPR ASS RPT 10209, 11117
EMPR ASS RPT SUM 1981-234
EMPR EXPL 1982-275
EMPR OF 2001-11
GSC MAP 562A; 1424A
GSC P *38-16, p. 42

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 099**

NATIONAL MINERAL INVENTORY: 093A14 Pb2

NAME(S): **PLATEAU D'OR**, GORRIE, ASTRIDE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 52 03 N
LONGITUDE: 121 24 21 W
ELEVATION: 1737 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5858721
EASTING: 607309

COMMODITIES: Silver Gold Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
COMMENTS: Largest veins are subparallel set striking northwest.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age. Keithley and Harveys Ridge successions are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: WEST VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1938
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 219.2600 Grams per tonne
Gold 9.5900 Grams per tonne
Lead 7.6000 Per cent
COMMENTS: Channel sample across 2.6 metres.
REFERENCE: Geological Survey of Canada Paper 38-16, page 36.

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in this area comprise the Keithley and Harveys Ridge successions but which further to the east are undifferentiated. Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

Mineralization consists of minor galena and pyrite within quartz veins cutting quartzite. The larger quartz veins comprise a subparallel set striking to the northwest. Gold and silver are associated with the sulphide mineralization.

A 2.6 metre channel sample across the Plateau D'Or west vein assayed 9.59 grams per tonne gold, 219.26 grams per tonne silver, and 7.6 per cent lead (Geological Survey of Canada Paper 38-16, page 36).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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BIBLIOGRAPHY

EMPR ASS RPT 10209, 10775, 11194, *13663
EMPR ASS RPT SUM 1981-234
EMPR BULL *34, p. 75
EMPR EXPL 1982-273,275; 1985-C274
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421
GSC P *38-16, p. 35

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 100**

NATIONAL MINERAL INVENTORY: 093A14 Pb1

NAME(S): **CORNISH LEDGES**, SCOTT NO. 5

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 52 34 N
LONGITUDE: 121 25 01 W
ELEVATION: 1829 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5859663
EASTING: 606540

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena Pyrite Marcasite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
DIMENSION: 0075 x 0045 x 0001 Metres STRIKE/DIP: 125/
COMMENTS: Veins occur in zone 75 by 45 metres and are up to 1.2 metres wide. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Keithley and Harveys Ridge successions are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions, but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

About ten parallel quartz veins occur within quartzite in a zone approximately 45 by 75 metres. The veins, which are up to 1.2 metres wide and strike at about 125 degrees, contain minor amounts of galena, pyrite and marcasite.

BIBLIOGRAPHY

EMPR ASS RPT 10269, 11194, 13663
EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 60
EMPR EXPL 1982-273
GSC MAP 562A; 1424A
GSC MEM 421
GSC P *38-16, p. 34

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 101**

NATIONAL MINERAL INVENTORY: 093A14 Au2

NAME(S): **HEBSON VEIN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 52 20 N
LONGITUDE: 121 26 39 W
ELEVATION: 1800 Metres

NORTHING: 5859190
EASTING: 604717

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Lead Zinc

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 0490 x 0004 Metres STRIKE/DIP: 355/70E TREND/PLUNGE:
COMMENTS: Vein exposed over 490 metres length and varies in width between 1.2 to 7.5 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Keithley and Harveys Ridge successions are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions, but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

The Hebson quartz vein, exposed over a length of about 490 metres and varying in width between 1.2 and 7.5 metres, occurs within a north-trending fault zone cutting quartzite. Sparse pyrite, galena and sphalerite with minor visible gold occur within the vein.

BIBLIOGRAPHY

EMPR AR 1912-K54; 1934-C31
EMPR ASS RPT 10269, 11194, 13663
EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 62
EMPR EXPL 1982-273
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421
GSC P 38-16, p. 32

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 102**

NATIONAL MINERAL INVENTORY: 093A14 W1

NAME(S): **TAYLOR TUNGSTEN**, GOLD COIN, HEBSON

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 52 24 N
LONGITUDE: 121 26 47 W
ELEVATION: 1798 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5859310
EASTING: 604565

COMMODITIES: Tungsten Lead Zinc

MINERALS

SIGNIFICANT: Scheelite Galena Sphalerite Pyrite
COMMENTS: A small amount of disseminated galena occurs in the wall rocks.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: STRIKE/DIP: 120/75S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Keithley Succession	
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Quartzite
Marble
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Keithley and Harveys Ridge succession are informal names.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1943
SAMPLE TYPE: Chip
COMMODITY GRADE
Tungsten 26.2000 Per cent
COMMENTS: A sample taken over the full 10 cm width of the vein over a length of 1.2 metre.
REFERENCE: Property File - Stevenson, J.S. (1943) - Tungsten Deposits of B.C.

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions, but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

The Taylor Tungsten quartz veining is essentially a continuation of the zone in which the Hebson vein (093A 101) occurs. The quartz vein occupies a fault zone crosscutting quartzite. The vein strikes 120 degrees and dips 75 degrees to the south. As well as containing galena, sphalerite and pyrite, scheelite has also been recognized in the quartz vein at this locality.

A chip sample taken over a 10 centimetre width and a 1.2 metre length assayed 26.20 percent tungsten (Property File: Stevenson,

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CAPSULE GEOLOGY

J.S., 1943).

BIBLIOGRAPHY

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EMPR ASS RPT SUM 1981-249
EMPR BULL *10, p. 67; *10-Revised, p. 98; *34, p. 86
EMPR EXPL 1982-273
EMPR EXPL 1982-273
EMPR OF 1991-17, 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 103**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRALCO**, WENDLE, E

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 53 36 N
LONGITUDE: 121 19 17 W
ELEVATION: 1800 Metres

NORTHING: 5861724
EASTING: 612925

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz veining is scattered over a number of crown grants.

COMMODITIES: Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Vein
CLASSIFICATION: Hydrothermal Replacement Epigenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag 101 Au-quartz veins

SHAPE: Irregular DIMENSION: 6 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Mineralized replacement zone is 5.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian-Mississipp. Snowshoe Hardscrabble Mtn Succession

LITHOLOGY: Quartz Sericite Schist
Phyllite
Limestone
Marble
Quartzite

HOSTROCK COMMENTS: Hardscrabble Mountain Succession is informal name. Snowshoe Group is (?) Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly meta-sedimentary rocks within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite. In the Yanks Peak area these rocks comprise the Keithley and Harveys Ridge successions, but further to the east they remain undifferentiated. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Gold-bearing quartz veins occur only in greenschist facies rocks.

The Bralco showings are scattered over a number of claims which are underlain by rocks considered to belong to the Hardscrabble Mountain succession (Devono-Mississippian). Mineralization consists of galena, sphalerite, chalcopyrite and pyrite occurring in quartz veins which cross cut quartz sericite schist, phyllite and limestone. A 5.8-metre wide replacement zone in limestone is well mineralized with sphalerite and contains some pyrite and galena. Grades of 2 grab samples averaged 5.3 per cent lead, 15 per cent zinc and 30.9 grams per tonne silver (Assessment Report 6545).

BIBLIOGRAPHY

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EMPR AR 1938-C47
EMPR ASS RPT 6545, 7106, 10270, 11193, 13664
EMPR EXPL 1982-272; 1985-C273
EMPR OF 2001-11
GSC MAP 562, 1424A
GSC MEM 421

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RUN TIME: 11:27:59

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GSC P *38-16, p. 26

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 104**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANTLER MOUNTAIN**, ARMSTRONG

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 59 55 N
LONGITUDE: 121 26 58 W
ELEVATION: Metres

NORTHING: 5873241
EASTING: 604058

LOCATION ACCURACY: Within 1 KM

COMMENTS: Extends north onto map sheet 93H03W.

COMMODITIES: Gold Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
DIMENSION:
COMMENTS: Attitude of one of three sets of quartz veins.

STRIKE/DIP: 125/50E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.
Proterozoic-Paleoz.

GROUP

Snowshoe
Snowshoe

FORMATION

Downey Succession
Harveys Ridge Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillaceous Quartzite
Schist
Marble
Phyllite

HOSTROCK COMMENTS: Downey and Harvey Ridge successions are informal names. Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1987

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

12.3070

Grams per tonne

COMMENTS: From oxidized surface showing over 1.1 metres.

REFERENCE: George Cross Newsletter #80, Apr. 27, 1987.

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks, which occur within the Barkerville Terrane of south central British Columbia. These metasedimentary rocks consist primarily of marble, quartzite and phyllite which in the area of the showing comprise the Downey and Harveys Ridge succession (informal names). Metamorphism of the region varies from chlorite grade to sillimanite and higher. The lode gold deposits of the region occur in rocks metamorphosed no higher than greenschist facies.

The Antler Mountain showing is underlain by massive to fissile quartzite, argillaceous quartzite and schist. These units are crosscut by three sets of quartz veins, one set at 120 to 130 degrees and dipping about 50 degrees to the northeast, the second set striking at 055 to 075 degrees and the third set striking more or less to the north. Oxidized pyrite occurs in many of the veins and occasionally, galena, sphalerite and arsenopyrite. An oxidized surface showing in 1987 assayed 12.307 grams per tonne gold over 1.1

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CAPSULE GEOLOGY

metres (George Cross Newsletter #80 Apr.27, 1987).

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EMPR AR 1933-A122
EMPR BULL 38, p. 89
EMPR OF 2001-11
EMPR PF (Photo: Antler Mountain, 1953)
GSC MAP 562A; 1424A
GSC MEM 421
GSC P 38-16, p. 22
GCNL #80, 1987

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 105**

NATIONAL MINERAL INVENTORY:

NAME(S): **NUGGET MOUNTAIN**, SLIDE, CUNNINGHAM CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 57 05 N
LONGITUDE: 121 21 35 W
ELEVATION: 1280 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5868122
EASTING: 610199

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Hardscrabble Mtn Succession	

LITHOLOGY: Limestone
Graphitic Shale
Greywacke
Silty Carbonate

HOSTROCK COMMENTS: Hardscrabble Mountain succession is an informal name. Snowshoe Group
(?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1977
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 9.5900 Grams per tonne
Lead 0.6100 Per cent
Zinc 3.6500 Per cent
REFERENCE: Assessment Report 6545.

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 25.0240 Grams per tonne
Gold 34.6230 Grams per tonne
COMMENTS: Across 3.1 metres of vein.
REFERENCE: George Cross Newsletter #88, May 8, 1989.

CAPSULE GEOLOGY

The Nugget Mountain or Slide showing, located within the Barkerville Terrane, is underlain by the Hardscrabble Mountain succession of the Snowshoe Group. The Pleasant Valley Thrust which separates the Barkerville Terrane from the Cariboo Terrane lies immediately to the east of the property.

Lithologies underlying the showing are typical of the Hardscrabble Mountain succession, comprising graphitic shales, silty carbonate and greywacke. Mineralization consists of sphalerite, argentiferous galena and pyrite.

A grab assay in 1977 assayed 9.59 grams per tonne silver, 3.65

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RUN TIME: 11:27:59

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per cent zinc and 0.61 per cent lead (Assessment Report 6545).
Recent drilling on the Nugget Mountain vein resulted in an assay of
34.623 grams per tonne gold and 25.024 grams per tonne silver across
3.1 metres (George Cross Newsletter #88, May 8, 1989).

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EMPR ASS RPT 6314, *6545, 7106
EMPR GEM 1973-294
EMPR OF 2001-11
GCNL #88, 1989
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 106**

NATIONAL MINERAL INVENTORY:

NAME(S): **CANADIAN**, PARK, A ZONE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 55 20 N
LONGITUDE: 121 21 40 W
ELEVATION: 1463 Metres

NORTHING: 5864876
EASTING: 610180

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz Ankerite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Replacement Epigenetic Hydrothermal
TYPE: I01 Au-quartz veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz. GROUP: Snowshoe FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Quartzitic/Quartzose Sericite Phyllite
Carbonate

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain by (?)Hadrynian to Paleozoic Snowshoe Group rocks. This is an assemblage of dominantly metasedimentary rocks of the Barkerville Terrane of south central British Columbia. The metasedimentary rocks consist of mainly marble, quartzite and phyllite which in the area of the property comprise the Downey succession. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Mineral deposits of the region are confined to greenschist facies rocks.

The Canadian showing is underlain predominantly by quartzose and sericitic phyllite with interbedded carbonate units. Galena, sphalerite and pyrite, with associated gold and silver values, occur disseminated in oxidized carbonate and also in cross cutting quartz veins. An occurrence of coarse galena as fracture filling has also been recognized.

BIBLIOGRAPHY

EMPR ASS RPT 3521, 4587, 4642, 5609, *6545, *6855, *7106, 10762, 11831, 13085, 13550
EMPR EXPL 1982-273; 1984-294; 1985-C274
GSC MAP 562; 1424A
GSC MEM 421
GSC P *38-16, p. 23

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 107**

NATIONAL MINERAL INVENTORY:

NAME(S): **STERLING**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 52 50 N
LONGITUDE: 121 20 34 W
ELEVATION: Metres

NORTHING: 5860270
EASTING: 611519

LOCATION ACCURACY: Within 1 KM
COMMENTS: Precise location not given.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I01 Au-quartz veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Schist
Limestone
Quartz

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Downey succession is an informal name.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. The metasedimentary rocks consist mainly of marble, quartzite and phyllite which in the area of the showing comprise the Downey succession. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Mineral deposits of the region are generally confined to greenschist facies rocks.

The Sterling showing consists of pyrite mineralization in quartz veins subparallel to bedding and in cross cutting quartz stringers. The veins and stringers are hosted by a sequence of interbedded quartzite, schist and limestone. One low gold value was reported but nothing further is known of the gold distribution in these veins.

BIBLIOGRAPHY

EMPR OF 2001-11
GSC MAP 562A; 1424A
GSC MEM 421
GSC P 38-16, p. 31

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 108**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO - NORDINE**, ASTER

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 53 36 N
LONGITUDE: 121 22 45 W
ELEVATION: Metres

NORTHING: 5861635
EASTING: 609039

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Quartzite
Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic. Downey succession is an informal name.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. The metasedimentary rocks consist mainly of marble, quartzite and phyllite which in the area of the showing comprise the Downey succession. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Mineral deposits of the region are generally confined to greenschist facies rocks.

The showing consists of pyrite and galena with low gold values in quartz veins cutting quartzite and schist of the Downey succession. These veins have variable attitudes.

BIBLIOGRAPHY

EMPR ASS RPT 17220
EMPR OF 2001-11
GSC MAP 562A; 1424A
GSC MEM 421
GSC P 38-16, p. 32

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 109**

NATIONAL MINERAL INVENTORY: 093A14 Au5

NAME(S): **IMPERIAL**, GORRIE, ASTER,
RIDGE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:
LATITUDE: 52 52 28 N
LONGITUDE: 121 25 59 W
ELEVATION: 1726 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5859454
EASTING: 605459

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 0355 x 0013 Metres STRIKE/DIP: 005/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Midas	

LITHOLOGY: Quartzite
Quartz Vein

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE:

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. The metasedimentary rocks consist mainly of marble, quartzite and phyllite which in the area of the showing comprise the Downey succession. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Mineral deposits of the region are generally confined to greenschist facies rocks. The Imperial showing covers a 13 metre wide quartz vein which has been traced over a length of 335 metres. The vein strikes north 5 degrees and dips vertically to steeply eastward. The vein occupies a fault zone within quartzite of the Midas Formation. The dump of an adit near the southern end of the vein, now caved, contains quartz pitted with cavities from weathering of pyrite. The quartz has a bleached and barren appearance. Samples are reported to contain low gold values. This vein may lie along the continuation of the zone that hosts the Midas (093A 033) and Jane (093A 030) veins.

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EMPR ASS RPT 10269, 11194
EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 64
EMPR EXPL 1982-273
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421
GSC P 38-16, p. 34

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 110**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAYBE**, CARIBOO, BOO

STATUS: Developed Prospect

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093A14E

BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 43 N

LONGITUDE: 121 11 44 W

ELEVATION: 1171 Metres

NORTHING: 5856585

EASTING: 621524

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond-drill hole 87-B3 collar, 1.75 kilometres east of the Cariboo River, 8 kilometres northeast of the northern tip of Cariboo Lake, 7 kilometres south-southwest from the summit of Black Stuart Mountain (Assessment Report 17357).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena
ASSOCIATED: Ankerite Quartz Sericite
ALTERATION: Carbonate Ankerite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Stratabound Massive
CLASSIFICATION: Sedimentary
TYPE: E13 Irish-type carbonate-hosted Zn-Pb
SHAPE: Cylindrical
DIMENSION: 1500 x 8 Metres STRIKE/DIP: 300/55N TREND/PLUNGE:
COMMENTS: Mineralized zones.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Cariboo Undefined Formation

LITHOLOGY: Phyllite
Limestone
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Cariboo
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: MAYBE REPORT ON: Y
CATEGORY: Unclassified YEAR: 1987
QUANTITY: 400000 Tonnes
COMMODITY GRADE
Zinc 3.2000 Per cent
Lead 0.8000 Per cent

COMMENTS: At a 1% combined Pb-Zn cutoff, reserves are for the lower part of the main zone and other zones; estimated grade is 4% combined Pb-Zn, with a zinc/lead ratio averaging 5/1.

REFERENCE: Assessment Report 17357, pages 4,5.

CAPSULE GEOLOGY

The Maybe occurrence and surrounding area are underlain by three rock formations which strike northwest and appear to dip northeast. The rocks lie along the southwest flank of a large synclinalorium and are assumed to belong to the Hadrynian to Cambrian Cariboo Group. The first formation is a thick sequence of grey to white medium-grained marble limestone and dolostone. The second is a complex sequence of black, grey-green and light grey phyllite containing numerous beds or lenses of medium grey to black limestone and minor dark quartzite. This formation underlies most of the occurrence area and hosts lead-zinc mineralization. The third formation is a thick monotonous assemblage of grey-green phyllite and minor medium green quartzite.

Rock types encountered in diamond-drilling belong to the aforementioned second formation and have been further subdivided into

CAPSULE GEOLOGY

three units. The uppermost of the three is a black banded phyllite unit consisting almost entirely of finely laminated black graphitic phyllite. The next is a complex sequence of limestone-phyllite consisting of short, often thick, discontinuous black to medium grey limestone beds and lenses interbedded with, and interfingering with, an array of light grey, greenish-grey and brownish-grey phyllites. Minor fragmental rock (greywacke) occur closely associated with the limestone. A continuous black graphite phyllite member occurs near the base of this unit and serves as a marker horizon. The third and lowest unit is a black phyllite-quartzite section consisting of black banded phyllite, minor limestone, minor grey phyllite and a thick dark grey quartzite member at its base. The three units appear structurally conformable and have an average strike of 300 degrees and dip of 55 degrees northeast.

Numerous intersections of sphalerite-galena mineralization occur in these three units. Strong "bull" quartz veining occurs within and adjacent to the mineralized zones, and in some cases carry galena-sphalerite mineralization. Most of the higher grade zones have a core of massive sphalerite-galena mineralization up to one metre wide contained within a buff to greenish-brown matrix consisting of iron carbonate, quartz and sericite. Small clots and veinlets of massive galena-sphalerite often occur peripheral to these core zones and create assay widths up to six metres.

The mineralized zones can be structurally aligned to form three systems, referred to as the Main zone, Upper zone and Lower zone. The Main zone contains the majority of the surface showings and has the most apparent continuity and can be traced for a distance of 160 metres. The Upper zone lies north of the Main zone and is stratigraphically above the Main zone. It has been traced for a distance of at least 180 metres but is not exposed at surface. The Lower zone lies south, and stratigraphically below the Main zone. It has been traced for a distance of 50 metres and is exposed on the surface in two areas. The three zones strike approximately 300 degrees and dip 50 to 60 degrees northeast, conformable to bedding attitudes of the host rocks. The Main and Lower zone show a rapid decrease in grade with depth.

At a 1 per cent combined lead-zinc cutoff, the lower part of the Main zone contains 200,000 tonnes of continuous mineralization, and probably a similar volume of material occurs combined in the other zones, for a total of 400,000 tonnes at 4 per cent combined lead-zinc (Assessment Report 17357, pages 4,5). Gibraltar Mines drilled 20 holes (3044 metres) on the property in 1988. Sable Resources Ltd. conducted geological and geochemical surveys in 1989.

Barker Mineral Ltd. conducted geophysical and soil surveys in 1998. This work extended the surface strike length of the known mineralization to 1.5 kilometres.

BIBLIOGRAPHY

- EMPR ASS RPT *17357, 19027, 25437
- EMPR BULL 47
- EMPR EXPL 1988-C149; 1997, pp. 13-1-13-12
- EMPR OF 1992-1, 2001-11
- EMPR PF (Barker Minerals Ltd. Website (Mar. 1999): Cariboo Prospect, 1 p.; Barker Minerals Ltd. brochure)
- GSC MAP 1424A; 3-1961; 59-1959; 561A
- WWW <http://www.barkerminerals.com>
- GCNL #107(June 5), 2000

DATE CODED: 1989/09/06
DATE REVISED: 1999/03/25

CODED BY: GO
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 111**

NATIONAL MINERAL INVENTORY:

NAME(S): **SYLVAIN/LANGIS**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 15 N
LONGITUDE: 121 17 28 W
ELEVATION: Metres

NORTHING: 5855562
EASTING: 615110

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Replacement Hydrothermal Epigenetic
SHAPE: Irregular
DIMENSION: 0003 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Replacement zone 3 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Limestone
Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Downey succession is informal name.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. The metasedimentary rocks consist mainly of marble, quartzite and phyllite which in the area of the showing form part of the Downey succession. Metamorphism of the region varies from chlorite to sillimanite and higher grade. Mineral deposits of the region are generally confined to greenschist facies rocks.

The Sylvain/Langis showing, where outcrop is present, is underlain by limestone in which pyrite replacement has occurred over a width of 3 metres. A more highly mineralized central zone of about 10 per cent pyrite over a width of 30 centimetres contains low gold values.

BIBLIOGRAPHY

EMPR ASS RPT 11580, 15862
EMPR EXPL 1987-C258
EMPR OF 2001-11
GSC MAP 562A; 1424A
GSC P 38-16, p. 43
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 112**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOOK**, HOOKER, LEA

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 25 58 N
LONGITUDE: 121 22 19 W
ELEVATION: 914 Metres

NORTHING: 5810421
EASTING: 610682

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of drilling.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ALTERATION: Chlorite Carbonate
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic Unknown	Nicola	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Monzonite
Syeno Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The showing is located within the Central Quesnel Belt, a region underlain by the Upper Triassic to Lower Jurassic Nicola Group. The Nicola Group consists of mafic and felsic volcanic and volcanoclastic rocks and sedimentary derivatives. Intruding this sequence are alkalic felsic stocks considered to be comagmatic with the volcanic rocks which they intrude. These stocks commonly have associated copper mineralization, often with anomalous gold.

The Hook showing occurs in one of these alkalic plutons where it's composition is fine to medium grained monzonite and syenodiorite with weak propylitic alteration. Drilling encountered up to 5 per cent sulphides, mainly pyrite with minor amounts of chalcopyrite, in fractures cutting the stock.

BIBLIOGRAPHY

EMPR ASS RPT *5087, *5088, *5089, 17647
EMPR GEM 1973-288; 1974-237
GSC MAP 1424A
CJES Vol 25, pp. 1608-1617
W MINER Apr., 1984
EMPR FIELDWORK 1986, pp. 125-133; 1987, pp. 131-137; 1988, pp. 159-165

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 113**

NATIONAL MINERAL INVENTORY:

NAME(S): **SL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 01 36 N
LONGITUDE: 121 17 29 W
ELEVATION: Metres

NORTHING: 5765382
EASTING: 617223

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Copper Coal

MINERALS

SIGNIFICANT: Chalcopyrite Coal
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Eocene
Triassic-Jurassic

GROUP

Kamloops

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Takomkane Batholith

LITHOLOGY: Quartz Monzonite
Granodiorite
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

South of Horsefly, the Upper Triassic to Lower Jurassic rocks of the Central Quesnel Belt have been intruded by the Lower Jurassic Takomkane batholith. The Takomkane batholith is of quartz monzonite to granodioritic composition. South of Murphy Lake the batholith is overlain by remnants of the Eocene Kamloops Group sedimentary and volcanic rocks.

The SL showing comprises minor amounts of chalcopyrite within the Takomkane batholith. The overlying Kamloops Group sediments include thin coal seams.

BIBLIOGRAPHY

EMPR GEM 1973-288; 1974-235
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 114**

NATIONAL MINERAL INVENTORY:

NAME(S): **COREY**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 21 12 N
LONGITUDE: 121 05 29 W
ELEVATION: Metres

NORTHING: 5802053
EASTING: 629987

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Corey 1-82 claims from claim map.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Igneous-contact Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Mafic Volcanic
Syeno Diorite
Monzonite

HOSTROCK COMMENTS: Not known if volcanic rocks or an alkalic intrusive are the main host.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Corey showing is located on Horsefly Mountain, south of Horsefly Lake. Here, a Lower Jurassic monzonite to syenodiorite intrusion has intruded mafic volcanic rocks of the Upper Triassic Nicola Group. Little is known of the nature and distribution of this mineralization other than it consists of fracture controlled chalcopyrite.

BIBLIOGRAPHY

EMPR GEM 1973-289; 1974-239
GSC MAP 1424A
CJES Vol.25, pp. 1608-1617
W MINER Apr., 1984
EMPR FIELDWORK 1988, pp. 159-165

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 115**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANT**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 24 18 N
LONGITUDE: 121 32 35 W
ELEVATION: Metres

NORTHING: 5807084
EASTING: 599112

LOCATION ACCURACY: Within 1 KM

COMMENTS: Coordinates approximate centre of ANT 1-58 claim group.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Igneous-contact Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Breccia
Syeno Diorite
Volcanic
Alkalic Intrusive

HOSTROCK COMMENTS: Mineralization occurs in both intrusive and volcanic rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Ant showing is located within the central Quesnel Belt. This region is underlain dominantly by sedimentary and mafic to felsic volcanic rocks of Upper Triassic to Lower Jurassic age, correlated with the Nicola Group. Intruding the upper part of the volcanic stratigraphy are intermediate to felsic alkalic stocks which are comagmatic with the felsic volcanic rocks. The age of these stocks ranges from Lower to Middle Jurassic. Copper mineralization with anomalous gold is commonly associated with the felsic stocks.

The showing is underlain by polyolithologic breccias containing clasts of both felsic and mafic composition. These breccias have been intruded by a small syenodioritic complex which is probably made up of dikes rather than a discrete stock. Mineralization consists of minor amounts of pyrite and chalcopyrite which occurs as disseminations in both intrusive and volcanic rocks.

BIBLIOGRAPHY

EMPR GEM 1974-235
EMPR ASS RPT *14250, *14339
GSC MAP 1424A
EMPR FIELDWORK 1987, pp. 131-137; 1988, pp. 159-165
EMPR EXPL 1985-C256,257

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/11

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 116**

NATIONAL MINERAL INVENTORY:

NAME(S): **BM**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 25 18 N
LONGITUDE: 121 23 05 W
ELEVATION: Metres

NORTHING: 5809166
EASTING: 609841

LOCATION ACCURACY: Within 1 KM
COMMENTS: North of Jim Lowry Lake.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Basalt
Felsic Intrusive

HOSTROCK COMMENTS: Rock type not indicated but mapping indicates area is mainly underlain by Upper Triassic basaltic rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The BM showing occurs to the north of Jim Lowry Lake in the Central Quesnel Belt. The Central Quesnel Belt consists of alkalic basalt, felsic volcanics and sedimentary rocks correlative with the Upper Triassic to Lower Jurassic Nicola Group. Intruding the volcanic rocks are intermediate to felsic plutons of alkaline compositions which commonly have associated copper mineralization.

The showing is underlain by Upper Triassic rocks of basaltic composition which, to the north near Hooker Lake, have been intruded by a small felsic stock. Minor chalcopyrite occurs within the basalt. It is not known whether this mineralization is related to the Hooker Lake stock.

BIBLIOGRAPHY

EMPR EXPL FORM 1974
GSC MAP 1424A
CJES Vol.25, pp. 1608-1617
EMPR FIELDWORK 1986, pp. 125-133; 1987, pp. 131-137; 1988, pp. 159-165

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 117**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOR**, DO, DOREEN LAKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A07W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 18 14 N
LONGITUDE: 120 56 15 W
ELEVATION: 1341 Metres

NORTHING: 5796842
EASTING: 640623

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of trenching. Near Doreen Lake, 12 kilometres east of Horsefly, 85 kilometers east of Williams Lake.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite
ALTERATION: Chlorite Sericite Silica
ALTERATION TYPE: Chloritic Sericitic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
CLASSIFICATION: Hydrothermal Porphyry Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured Sheared
DIMENSION: STRIKE/DIP: 040/55E TREND/PLUNGE:
COMMENTS: Attitude of stratigraphy.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Hornblende Andesite
Pyroxene Hornblende Andesite
Argillite
Ferricrete
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

6.3760

Grams per tonne

COMMENTS: Across 1.5 meters of altered andesite.

REFERENCE: Assessment Report 17089.

CAPSULE GEOLOGY

The Dor showing, 85 kilometers east of Williams Lake, is located within the eastern part of the Central Quesnel Belt. The region is underlain by alkalic volcanic, volcanoclastic and sedimentary rocks correlative with the Upper Triassic to Lower Jurassic Nicola Group. These have been intruded by comagmatic stocks and dikes.

The Dor showing is underlain by hornblende and hornblende pyroxene andesite with lesser interbedded argillite intruded by quartz diorite of possible Cretaceous age. The sequence, faulted and fractured, is sericitized, silicified and sometimes chloritized. The stratigraphy strikes at 40 degrees and dips 50 to 60 degrees east.

Mineralization consists of massive to semi-massive pyrite, pyrrhotite and chalcopyrite in shear zones, and disseminated pyrite and pyrite stringers in andesite. Massive sulphide mineralization, hosting sporadic but locally high gold values, is controlled by east-west trending structures interpreted to be shear zones. Ferricrete containing sulphides assayed up to 5.3 grams per tonne gold. The highest gold values came from pyritic, silicified andesite samples. A grab sample taken in 1985 over 1.5 meters of altered

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RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
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PAGE: 191
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CAPSULE GEOLOGY

andesite assayed 6.376 grams per tonne gold (Assessment Report 17089).

BIBLIOGRAPHY

EMPR ASS RPT *10118, *11905, *13172, *17089
EMPR EXPL 1983-380; 1984-277
EMPR P 1990-3
EMPR GEM 1974-239
EMPR PF (Rebagliati, C.M. 1974, Doreen Lake Cariboo Project)
GSC MAP 1424A
CJES Vol.25, pp. 1608-1617
W MINER Apr., 1984
N MINER Mar.7, 1985

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 118**

NATIONAL MINERAL INVENTORY: 093A12 Cu7

NAME(S): **ML, MOOREHEAD LIMECAP,
COPPER RIDGE, LL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 35 42 N
LONGITUDE: 121 46 47 W
ELEVATION: 1000 Metres

NORTHING: 5827918
EASTING: 582656

LOCATION ACCURACY: Within 500M
COMMENTS: Two kilometres south of the west end of Moorehead Lake.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stratabound
CLASSIFICATION: Epigenetic
TYPE: E04 Sediment-hosted Cu

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sandstone
Limestone
Basalt Breccia
Felsic Breccia
Syenitic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The ML showing is located within the Central Quesnel Trough. The area is underlain by sedimentary and mafic to felsic volcanic rocks of Upper Triassic to Lower Jurassic age. This sequence has been intruded by small alkalic stocks of diorite to syenite compositions. This sedimentary and volcanic assemblage is correlative with the Nicola Group.

The showing is located at the boundary between Upper Triassic basalt breccia, sandstone and limestone and Lower Jurassic poly-lithologic felsic breccias. These have been intruded by a small syenitic stock or dike complex of probable Lower to Middle Jurassic age.

Mineralization consists of chalcocite within maroon sandstone near the top of the Upper Triassic assemblage and as chalcopyrite and chalcocite within the limestone which marks the Triassic/Jurassic boundary. Similar occurrences of copper mineralization in limestone of the same stratigraphic horizon exist throughout the region.

BIBLIOGRAPHY

EMPR EXPL 1975-E126; 1983-390; 1984-290
EMPR FIELDWORK 1975, p. 64; 1987, pp. 147-153; 1988, pp. 167-172
EMPR ASS RPT 815, 1097, 11830, 13063, 14401
EMPR AR 1966-249; 1967-123,286
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 119**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAUD, LEM**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 43 38 N
LONGITUDE: 121 55 43 W
ELEVATION: 1158 Metres

NORTHING: 5842465
EASTING: 572353

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of 1982 drilling.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Disseminated
CLASSIFICATION: Volcanogenic Porphyry
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Pyrite Volcanic Breccia
Alkalic Intrusive
Diorite
Monzonite
Mafic Volcanic
Felsic Volcanic
Volcaniclastic

HOSTROCK COMMENTS: Intruded by a small alkalic intrusion of diorite, monzodiorite and monzonite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1970
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Copper	0.0500 Per cent

COMMENTS: Two grab samples from Lem 15 claim.
REFERENCE: Property File - Tully, D.W. 1970.

CAPSULE GEOLOGY

The Maud showing lies within the Central Quesnel belt of the Quesnellia Terrane, near Maud Lake. The area is underlain by Upper Triassic sedimentary and mafic volcanic rocks overlain by dominantly felsic volcanic rocks and pyritic fine grained sedimentary rocks of Lower Jurassic to possibly Middle Jurassic age. These latter sedimentary rocks probably lie unconformably on both basaltic and felsic volcanic rocks. This assemblage is correlative with the Nicola Group.

Underlying the showing is a small alkalic intrusion of diorite, monzonite and monzodiorite which has intruded mafic and felsic volcanic and volcaniclastic rocks. Chalcopyrite and gold mineralization occur within pyritic volcanic breccias adjacent to the stock. Two grab samples from the Lem 15 claim assayed 0.05 per cent copper (Property File - Tully, D.W. 1970).

BIBLIOGRAPHY

EMPR ASS RPT 9449, *9956, *10527, 17747
EMPR GEM 1970-207; 1974-240
EMPR EXPL 1975-E126
EMPR PF (*Tully, D.W., (1970): Report and maps on the LEM Claim Group)

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A
W MINER Apr., 1984
GCNL #65, 1983
EMPR FIELDWORK 1987, pp. 147-153; 1988, pp. 167-172
EMPR PRELIM MAP 67
EMPR INF CIRC 1989-1, p. 120

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/13

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 120**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUE LEAD**, BARON

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 42 30 N
LONGITUDE: 120 21 04 W
ELEVATION: Metres

NORTHING: 5843118
EASTING: 678947

LOCATION ACCURACY: Within 500M

COMMENTS: Main claim block. Baron claims (3) situated approximately 7 kilometres south.

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian	Cariboo	Cunningham	
Proterozoic-Paleoz.	Cariboo	Undefined Formation	

LITHOLOGY: Limestone
Dolomite
Marble
Sediment/Sedimentary Rock

HOSTROCK COMMENTS: The Cariboo Group is Upper Paleozoic to Lower Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The Blue Lead showing lies within the Cariboo Terrane of the Omineca Belt. The area is underlain by the Hadrynian Cunningham Formation, Cariboo Group. The Pleasant Valley Thrust, a major thrust fault which marks the division between the Cariboo Terrane to the east and the Barkerville Terrane to the west, lies immediately to the west of the showing.

The Cunningham Formation is characterized by limestone, dolomite and fine grained marble. These rocks are in gradational contact with the underlying, dominantly clastic, rocks of the Issac Formation and the overlying clastic Yankee Belle Formation. These three formations are all considered to be of Hadrynian age.

Mineralization consists of galena in quartz stringers cutting Cunningham Formation limestone.

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EMPR EXPL 1975-E125; 1983-382
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/13

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 121**

NATIONAL MINERAL INVENTORY: 093A12 Au2

NAME(S): **QR, MAIN, WEST,
MIDWEST, EAST, QUESNEL RIVER GOLD,
NORTH, NORTHWEST**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A12W
BC MAP:
LATITUDE: 52 40 08 N
LONGITUDE: 121 47 11 W
ELEVATION: 1036 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5836129
EASTING: 582066

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Gold Galena
COMMENTS: Trace galena.
ASSOCIATED: Pyrite Calcite Arsenopyrite
COMMENTS: Trace arsenopyrite.
ALTERATION: Epidote Carbonate Chlorite Pyrite
ALTERATION TYPE: Propylitic Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated Podiform
CLASSIFICATION: Porphyry Replacement Hydrothermal
TYPE: L02 Porphyry-related Au K04 Au skarn
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 300 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Main zone dips north.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Nicola	Undefined Formation	
Lower Jurassic			QR Stock

ISOTOPIC AGE: 201 +/- 7 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Calcareous Tuff
Basaltic Tuff
Calcareous Lapillistone
Breccia
Siltstone
Basaltic Flow
Conglomerate
Calcareous Black Argillite
Monzodiorite
Hornblende Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: NORTHWEST

REPORT ON: Y

CATEGORY: Proven
QUANTITY: 120000 Tonnes

YEAR: 1998

COMMODITY: Gold GRADE Grams per tonne
3.5000

COMMENTS: Greater than 100,000 tonnes of at-surface reserves with a strip ratio of about 0.3:1.

REFERENCE: Exploration in BC 1998, page 36.

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Combined YEAR: 1998
QUANTITY: 320000 Tonnes
COMMODITY: Gold GRADE: 5.0800 Grams per tonne
COMMENTS: Proven and probable reserves.
REFERENCE: Exploration in BC 1998, page 36.

ORE ZONE: WEST REPORT ON: Y
CATEGORY: Proven YEAR: 1998
QUANTITY: 270000 Tonnes
COMMODITY: Gold GRADE: 5.2000 Grams per tonne
COMMENTS: Remaining reserves are open pitable with a strip ratio of about 9:1.
REFERENCE: B. Lane, personal communication, 1998.

CAPSULE GEOLOGY

The QR deposit is located 73 kilometres east of Quesnel. The QR deposit is hosted by a thick succession of Upper Triassic basaltic, volcanic, volcanoclastic and epiclastic rocks of the Nicola Group. Basal flows, conglomerates and breccias grade upward into calcite-cemented tuffs and lapillistones. Calcareous black argillite and siltstone overlie the volcanic sequence. The pyroclastic rocks contain 5 to 20 per cent pyrite as delicate framboids and banded rip-up clasts. The sedimentary rocks contain up to 10 per cent fine-grained, disseminated pyrite. The whole sequence has been intruded by the Early Jurassic, zoned, monzodiorite QR stock and hornblende porphyry dikes.

Mineralization, consisting of native gold and sulphides, occurs in 3 discrete zones.

The Main zone is a discordant, 300-metre long, steeply plunging, northerly dipping (at 50 degrees) tabular body. The Main zone is truncated at depth by Wally's fault. Massive propylitic alteration, consisting of epidote, carbonate and chlorite occurs in the lapillistones and coarse tuffs. Disseminated to massive lenses of pyrite with 1 to 5 per cent associated chalcopyrite occurs within zones of propylitic alteration. The majority of the gold occurs in propylitically altered carbonate-rich rocks associated with pyrite mineralization. Fracture networks and stockworks in the basaltic flows, conglomerates and breccias contain 2 to 5 per cent pyrite with some associated gold and minor calcite. The Main zone contains an estimated 616,760 tonnes grading 4.4 grams per tonne gold will be mined by open-pit methods (Information Circular 1996-1, page 5).

The faulted extension of the Main zone, the North zone, occurs in the footwall of Wally's fault. Another zone, the East zone, appears to be a small unfaulted body. The grade of the North and East zones are comparable to the other zones but the ore is too deep to be economic at present.

The West zone, an elongate tabular body with a slight synclinal shape, is composed of propylitized basaltic tuff, breccia and interbedded siltstone. Discontinuous seams and lenses of massive pyrite with subordinate pyrrhotite, chalcopyrite and trace galena and arsenopyrite occur in these rocks. Coarse gold, up to 1 millimetre in diameter, has been observed in drill core from the West zone. The West zone contains probable reserves of 168,700 tonnes grading 6.64 grams per tonne gold and will be mined underground during the latter years of the mine's life (Information Circular 1996-1, pages 5,6). About 4500 tonnes have been mined and milled from the West zone pit yielding approximately 40,000 grams of gold (R. Lane, personal communication, 1996).

The Midwest zone is a tabular body with a moderate westerly plunge. In June 1996, Kinross Gold Corporation began driving a ramp from the upper pit west wall of the Main zone to the hangingwall of the Midwest zone, a few hundred metres to the west. Production from the Midwest zone, with probable reserves of 440,800 tonnes grading 4.32 grams per tonne gold, is expected to begin in October 1996 (Information Circular 1996-1, page 5). Twenty to thirty per cent of the gold is recovered by gravity concentration from the Main zone ore.

Mineralization has a strong spatial relationship to both the siltstone-volcanic contact and the alteration front. The ore grade mineralization generally occurs within 50 metres of the alteration front and 150 to 300 metres from the contact with the intrusive rocks.

In 1995, with support from the Explore B.C. Program, Kinross

CAPSULE GEOLOGY

Gold Corporation completed 2579.4 metres of diamond drilling in 8 holes. Three holes tested the east extension of the Main zone and confirmed the continuity of favourable alteration and intersected marginal gold values. Five holes tested the projected west extension of the West zone and found that this projection has been removed by erosion. A third possible extension of the orebody, farther to the northwest, remains to be tested (Explore B.C. Program 95/96 - A107).

Reserves as of January 1, 1996 are 1,287,239 tonnes grading 4.35 grams per tonne gold (T. Schroeter and R. Lane, personal communication, 1996). Mining at QR started April 1995 and mill startup was June 1, 1995. Mining is taking place from a small starter pit on the northwest end of the West zone, as well as from the 980 level bench of the Main zone. A temporary shutdown of all mining will take place in mid-December 1996 and last for approximately 6 to 8 weeks. During that time the mill will process stockpiled ore from the Main and West zones. Mining is scheduled to resume in January-early February 1997 from the underground developments on the Midwest zone. Later on mining will resume from the Main zone, but reserves there will be exhausted by August 1997. Approximately 170,000 tonnes will be mined from the southeast end of the West zone, also. The mineral resource in 1996 for QR is: 300,000 tonnes grading 4.3 grams per tonne gold for the Main zone; 350,000 tonnes grading 4.9 grams per tonne gold for the Midwest zone; and 550,000 tonnes grading 4.9 grams per tonne gold for the West zone. An exploration budget of at least one million dollars has been established for 1997. Areas targeted for drilling will be the basalt-siltstone contact east of the Main zone, North zone and West zone (B. Lane, personal communication, 1996).

At December 31, 1996, reserves and resources are as follows (WWW <http://www.kinross.com/opps/mining/opqrare.htm>):

Reserves/Resource	Tonnes	Gold (g/t)
Proven ore:	525,000	4.03
Probable ore:	1,049,000	3.97
Total Proven & Probable:	1,574,000	3.99
Possible ore:	21,000	5.52
Drill Indicated Resources:	109,000	6.50

Production at the QR gold mine, at an average milling rate of 1056 tonnes per day, totalled 1,342,240 grams of gold and 515 kilograms of silver from 382,472 tonnes of ore milled in 1996, the first full year of production. Reserves estimated by Kinross Gold Corporation at January 1, 1997 were 1,574,000 tonnes grading 3.99 grams per tonne gold. Mining of the underground Midwest zone (985 level) began at 600 tonnes per day in the fall of 1997, using longwall stoping methods. Towards the end of the year, the mill was processing 800 to 900 tonnes per day. Gold production in the third quarter was 274 kilograms, 37 per cent lower than the same period in 1996.

Lower production and increased costs were incurred because of a slope failure in the Main zone pit which temporarily halted production and decreased both millhead grades and daily throughput. Underground production from the Midwest zone carries inherently higher mining costs, and development of a new ramp to access remaining reserves in the Main zone also contributed to higher costs.

A decision to close down operations on March 1, 1998 was announced in December. Surface exploration drilling (169 holes, 24,495 metres) was carried out in several areas of the property in 1997. The drilling tested the North zone and areas between the Midwest and West zones, focusing principally on the siltstone-basalt contact within a few hundred metres of the contact with the diorite (Information Circular 1998-1, page 8). The QR mine was placed on a care and maintenance program in April 1998.

In 1998, drilling consisted of 84 holes, totalling 6318 metres. A new zone, Northwest, represents approximately 120,000 tonnes grading 3.5 grams per tonne gold (Tom Schroeter, 1998). In June 1998, Kinross merged with Amax Gold Inc.

In 1999, Big Valley Resources began negotiations to purchase the QR mine. Remaining open pit and underground proven and probable reserves are 320,000 tonnes grading 5.08 grams per tonne gold (Exploration in BC 1998, page 36).

Cross Lake Minerals Ltd. reported additional possible reserves of 19,485 tonnes grading 7.41 grams per tonne gold and a resource (measured, indicated and inferred) of 463,221 tonnes grading 5.03 grams per tonne gold. These data are based on Kinross' pre-National Instrument 43-101 mine status report from January 25, 1999 (PR REL July 10, 2002). The combined reserve and resource figure is 802,584 tonnes grading 5.65 grams per tonne gold.

Cross Lake Minerals Ltd. drilled 5 holes in the West zone during 2002 and reported a 14.5-metre intersection that assayed 4.0

CAPSULE GEOLOGY

grams per tonne gold.

Cross Lake Minerals Ltd. drilled one hole in the North zone, 13 holes in the Northwest zone and five holes in the West zone during 2002.

Cross Lake Minerals Ltd. drilled four holes in February 2003 into the untest west zone. All four holes encountered intercepts carrying gold values including 8.5 metres in drillhole CL-03-2022 grading 11.2 grams per tonne (Press Release, Cross Lake Minerals Ltd., March 6, 2003).

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N MINER Aug.18, 1983; Mar.29, 1984; Mar.7, 1985; Apr.17, 1989; June 18, Aug.20, 1990; Apr.8, May 27, Aug.5, Dec.16, 1991; Oct.5, 1992; Dec. 15, 1997
N MINER MAG Feb., 1986
PR REL Kinross Gold Corporation, Feb.5, 1998 (production 1995-1997), Gold Giant Ventures Inc., Aug.20, Nov.13, 2002; Jan.31, 2003; Cross Lake Minerals Ltd., July 10, Dec.12, 2002; Jan.13, Feb.5,13, Mar.6, 2003
W MINER April, 1984
WWW <http://www.kinross.com>;
http://www.infomine.com/index/properties/QR_MINE.html;
<http://www.crosslakeminerals.com>
Schroeter, Monthly Report-1995

DATE CODED: 1985/07/24
DATE REVISED: 1998/12/04

CODED BY: GSB
REVISED BY: TGS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 122**

NATIONAL MINERAL INVENTORY:

NAME(S): **OPAL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 11 54 N
LONGITUDE: 121 52 17 W
ELEVATION: Metres

NORTHING: 5783698
EASTING: 577136

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Opal Gemstones

MINERALS

SIGNIFICANT: Opal
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: Q08 Sediment-hosted opal

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Argillite
Limestone
Meta Volcanic Rock

HOSTROCK COMMENTS: Rock type not specified, mapped as Mississippian to Triassic Cache Creek Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The region in which the Opal showing is located is underlain by rocks of the Mississippian to Triassic Cache Creek Group near the boundary with the Quesnellia Terrane. In this area the Cache Creek Group is composed of argillite, limestone and metavolcanic rocks. The host lithology of this opal occurrence has not been specified.

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EMPR EXPL 1976-E206; 1977-253
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 123**

NATIONAL MINERAL INVENTORY:

NAME(S): **DAPHNE, JCB, RUSTY,**
NYLAND LAKE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 45 50 N
LONGITUDE: 121 59 16 W
ELEVATION: 960 Metres

NORTHING: 5846486
EASTING: 568300

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F-type)
SHAPE: Irregular
MODIFIER: Sheared Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous

Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite
Aplite Dike
Diorite

HOSTROCK COMMENTS: The mineralization occurs in a dominantly quartz monzonite batholith considered to be of Cretaceous age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Daphne showing occurs in an area where aplite dikes cut quartz monzonite of a large intermediate to felsic batholith. The batholith has intruded Upper Triassic to Lower Jurassic rocks of the Central Quesnel Belt and is similar in appearance to the Naver Intrusions. The Naver Intrusions, occurring to the north, are considered to be of Lower Cretaceous age. This batholith has been displaced by a fault (known informally as the Chiaz fault) considered to be part of the Pinchi-Quesnel fault system. The fault has displaced rocks as old as Upper Triassic and as young as Eocene.

Molybdenite mineralization occurs in quartz filled fractures and shears in both aplite and quartz monzonite. Mineralization occurs as disseminations in the aplite and as fracture coatings in the quartz monzonite.

In 1965, Coranex Limited examined the property as the Rusty claims. In 1976, Rio Tinto Canada Exploration conducted surveys. In 1987, Kim Resources conducted surveys in the area.

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EMPR PF (Woodcock, J.R.C. (1965): Property Report - Rusty Group)
EMPR PRELIM MAP 67
GSC MAP 1424A
GCNL #136, 1985
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/12

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 124**

NATIONAL MINERAL INVENTORY:

NAME(S): **WL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 14 48 N
LONGITUDE: 121 22 11 W
ELEVATION: Metres

NORTHING: 5789726
EASTING: 611300

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of WL-4 claim.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Magnetite Pyrite
ALTERATION: Chlorite Epidote
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Igneous-contact
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Nicola	Undefined Formation	Takomkane Batholith
Lower Jurassic			Unnamed/Unknown Informal
Eocene			

LITHOLOGY: Granodiorite
Andesitic Breccia
Dacitic Breccia
Volcanic

HOSTROCK COMMENTS: Mineralization is hosted by granodiorite and (?)Eocene volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The region in which the WL showing is located is underlain by dominantly mafic to intermediate alkalalic volcanic rocks of Upper Triassic to Lower Jurassic age, correlative with the Nicola Group. Intruding this assemblage is a large Early Jurassic granodiorite batholith known as the Takomkane batholith. Dominantly intermediate volcanic rocks of probable Eocene age overlie these older rocks.

The showing is underlain by the northernmost part of the Takomkane batholith and probable Eocene age volcanic rocks. Mineralization, which consists of chalcopyrite, pyrite, magnetite and minor molybdenite, occurs as disseminations, in quartz stringers and along fractures in both the granodiorite and Eocene andesitic and dacitic breccias.

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EMPR ASS RPT *5411, *6315, 12261, *13741
EMPR EXPL 1985-C255
EMPR GEM 1977-E179
EMPR OF MAP 1989-14
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 125**

NATIONAL MINERAL INVENTORY:

NAME(S): **F.M. WELLS**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 54 11 N
LONGITUDE: 121 23 36 W
ELEVATION: 1540 Metres

NORTHING: 5862695
EASTING: 608062

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Schist
Quartzite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. These metasedimentary rocks comprise mainly marble, quartzite and phyllite which, in this area, are mainly undifferentiated. Metamorphism of the region varies from chlorite to sillimanite facies and higher, but most of the mineralization in the region is confined to those areas metamorphosed no higher than greenschist grade.

The F.M.Wells showing consists of quartz veins which cut schist and quartzite. There is no direct evidence for gold mineralization in these veins, but quartz veins on surrounding claims assayed gold. No other geological information is available on this showing.

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EMPR OF 2001-11
GSC MAP 562A; 1424A
GSC MEM 421
GSC P 38-16, p. 32

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 126**

NATIONAL MINERAL INVENTORY:

NAME(S): **CRYSTAL**, GORRIE, STOCKWORK

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 52 03 N
LONGITUDE: 121 24 51 W
ELEVATION: 1783 Metres

NORTHING: 5858709
EASTING: 606748

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION: 0004 Metres

COMMENTS: The quartz veins are up to 3.7 metres wide.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1954

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver 267.2300 Grams per tonne

Gold 0.3400 Grams per tonne

Lead 20.5000 Per cent

COMMENTS: A selected sample from a vein near the western side of the zone.

REFERENCE: Bulletin 34, page 86.

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. These metasedimentary rocks comprise mainly marble, quartzite and phyllite which, in this area, are mainly undifferentiated. Metamorphism of the region varies from chlorite to sillimanite facies and higher, but most of the mineralization in the region is confined to those areas metamorphosed no higher than greenschist grade.

The Crystal showing is underlain dominantly by quartzite which is cut by several sets of quartz-filled fractures. A few of these are mineralized with galena, sphalerite and pyrite. The quartz veins are up to 3.7 metres wide. A selected sample from a vein near the western side of the zone assayed 0.34 grams per tonne gold, 267.23 grams per tonne silver and 20.5 per cent lead (Bulletin 34 p. 86).

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EMPR ASS RPT SUM 1981-249
EMPR BULL *34, p. 86
EMPR EXPL 1982-273
EMPR OF 2001-11

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 205
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424-A, 562A
GSC MEM 421
GSC P *38-16, p. 34

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 127**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOOSE**, LUKIN, EASY

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 17 N
LONGITUDE: 121 31 59 W
ELEVATION: 823 Metres

NORTHING: 5831165
EASTING: 599303

LOCATION ACCURACY: Within 500M
COMMENTS: Recent work on Easy claims.

COMMODITIES: Gold Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena Arsenopyrite
ALTERATION: Pyrite
ALTERATION TYPE: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Nicola Undefined Formation

LITHOLOGY: Black Phyllite
Andesite Tuff
Augite Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Chip

COMMODITY	GRADE	
Silver	0.2000	Grams per tonne
Gold	0.3050	Grams per tonne
Copper	0.0561	Per cent

COMMENTS: Across 1.5 metres in drillhole 329-P24 of augite porphyry containing 5 per cent quartz and trace pyrite.
REFERENCE: Assessment Report 16669.

CAPSULE GEOLOGY

The Moose showing is located towards the eastern margin of the Quesnellia Terrane near its contact with the Barkerville Terrane. In this region, the rocks consist of the lower part of an assemblage of Upper Triassic to Lower Jurassic volcanic and sedimentary rocks correlative with the Nicola Group.

Quartz stringers cut Upper Triassic black phyllite with interbedded mafic tuff. These stringers contain minor amounts of chalcopyrite, sphalerite, galena and arsenopyrite with anomalous gold and silver values. Pervasive pyritization of the wallrocks has occurred. Augite porphyry outcrops on the Easy claims and has been encountered in drilling. Diamond drilling in 1987 on the Easy claims resulted in a chip sample which assayed 0.0561 per cent copper, 0.2 grams per tonne silver, 0.305 grams per tonne gold over 1.5 metres of augite porphyry containing 5 per cent quartz and trace pyrite (Assessment Report 16669).

BIBLIOGRAPHY

EMPR ASS RPT *7635, 9168, *10460, 10987, 11658, 16669
EMPR EXPL 1978-E192; 1979-208; 1980-310; 1987-C249
EMPR AR 1933-A136; 1967-122
GSC MAP 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 207
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.25, pp. 1608-1617
EMPR FIELDWORK 1987, pp. 139-145,147-153; 1988, pp. 167-172

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 128**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLD RECOVERIES LTD.**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 47 03 N
LONGITUDE: 121 20 19 W
ELEVATION: 850 Metres

NORTHING: 5849555
EASTING: 612047

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz. GROUP: Snowshoe FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Graphitic Schist
Sericite Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. These metasedimentary rocks comprise mainly marble, quartzite and phyllite and are, in this area, mainly undifferentiated. Metamorphism of the region varies from chlorite to sillimanite facies and higher, but most of the mineralization in the region is confined to those areas metamorphosed no higher than greenschist grade.

The Gold Recoveries Ltd. showing consists of graphitic and sericitic schist in which two zones of quartz veins, lenses and stringers have associated pyrite and galena mineralization.

BIBLIOGRAPHY

EMPR ASS RPT 11848
EMPR OF 2001-11
GSC MAP 562A, 1424A
GSC MEM 421
GSC P 38-16, p. 41

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 129**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT BURDETT**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 58 30 N
LONGITUDE: 121 29 36 W
ELEVATION: 1890 Metres

NORTHING: 5870552
EASTING: 601168

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

SHAPE: Irregular

DIMENSION: 0400 x 0030 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Quartz veins are up to 400 metres long and 30 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Midas	

LITHOLOGY: Marble
Quartzite
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Host rock unspecified but probably Midas Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. These metasedimentary rocks comprise mainly marble, quartzite and phyllite which, in this area, are mainly undifferentiated. A small area, located near the top of Mt. Burdett, is underlain by rocks of the Harveys Ridge succession. Metamorphism of the region varies from chlorite to sillimanite facies and higher, but most of the mineralization in the region is confined to those areas metamorphosed no higher than greenschist grade.

The showing, thought to be underlain by Midas Formation rocks, consists of quartz veins that range up to 400 metres long and 30 metres wide. The veins carry minor amounts of pyrite with associated anomalous gold values.

BIBLIOGRAPHY

EMPR AR 1922-N116
EMPR OF 2001-11
GSC MAP 562A; 1424A; 2046
GSC MEM 149, pp. 187,213,421

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 130**

NATIONAL MINERAL INVENTORY:

NAME(S): **SOVEREIGN**, WIM, DODO CREEK,
WIM-TA, WIM-CAL, TOM

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 59 15 N
LONGITUDE: 121 51 51 W
ELEVATION: 1000 Metres

NORTHING: 5871484
EASTING: 576247

LOCATION ACCURACY: Within 500M
COMMENTS: Nickel showing on the southwest flank of Sovereign Mountain (Open File 1990-27).

COMMODITIES: Nickel Talc

MINERALS

SIGNIFICANT: Pentlandite Talc
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Replacement Industrial Min.
TYPE: M07 Ultramafic-hosted talc-magnesite

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

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

LITHOLOGY: Serpentinite
Serpentinized Ultramafic
Talc Carbonate Schist

HOSTROCK COMMENTS: The Crooked Amphibolite is Mississippian to Permian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel Slide Mountain
PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1972
SAMPLE TYPE: Chip
COMMODITY: Nickel GRADE: 0.1700 Per cent
COMMENTS: Average of 62 chip samples (1731 ppm).
REFERENCE: Assessment Report 4289.

CAPSULE GEOLOGY

The Sovereign nickel occurrence is on the southwest flank of Sovereign Mountain, about 35 kilometres east of Quesnel. Access is by the Swift River forestry access road. The claims concerned are the WIM, WIM-TA, and TOM groups, owned by Trifco Minerals Ltd. Locally, the basement geology consists of three units, described from west to east. The first are Late Triassic phyllites and argillites of the Quesnel trough. These unconformably overlie ultramafic rocks of the Mississippian to Permian Crooked Amphibolite in the Slide Mountain terrane. These rocks are thrust over undivided quartzites, phyllites and limestones of the Hadrynian to Paleozoic Ramos succession in the Barkerville terrane. Locally, folding has caused repetition and thickening of beds. The area is heavily mantled by Quaternary alluvium (Geological Survey of Canada Memoir 421). Nickel and talc mineralization are localized in sheared ultramafic rocks. Exploration to date has identified a small reserve of good quality talc (Sovereign Creek deposit, 093A 013). Nickel mineralization is minimal at the site. It has been identified in sulphide form as pentlandite, finely disseminated throughout the ultramafics. Investigation of talcose rock indicates that the total sulphide content, of unspecified type, is maximum two per cent.

CAPSULE GEOLOGY

Seventeen undocumented grab samples from the claims averaged 0.22 per cent nickel with a range of 0.15 to 0.26 per cent, these however may represent best assay values (Property File - Findlay, D.C., 1971). Seven other representative ultramafic samples, collected in 1971, indicated nickel values of 0.11 to 0.20 per cent (ibid.). Geochemical and chip sampling in 1972 found only spot anomalies of nickel and further exploration was not recommended (Assessment Report 4287).

Analysis of talc concentrates for sulphides assayed 0.08 to 0.15 per cent nickel content. Testing of floatation and magnetic separates of nickel from talc indicated a maximum recovery of 33 per cent (Property File - DeGraff, K., 1988). To date, only the evaluation of the talc potential has been done (refer to the Sovereign Creek deposit).

BIBLIOGRAPHY

EMPR OF 1988-19 pp. 43-45; *1990-27
EMPR ASS RPT *4287, *14808, *15522, 16424, 16589, *16875, 16941, 17246
EMPR PF (In 093A 089 - Findlay, D.C. (1971): Quesnel Nickel Prospect, Sovereign Creek area, unpublished report; DeGraff, K. (1988): Production of sulphide concentrates from Talc Ore, unpublished letter to Trifco Minerals Ltd.)
EMPR GEM 1972-333
EMPR EXPL 1987-C255
GSC MEM 421
GSC MAP 1424A, 1637A

DATE CODED: 1988/01/21
DATE REVISED: 1989/11/15

CODED BY: MM
REVISED BY: KDH

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 131**

NATIONAL MINERAL INVENTORY:

NAME(S): **SELLERS CREEK, SELL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 40 20 N
LONGITUDE: 121 20 50 W
ELEVATION: 1200 Metres

NORTHING: 5837091
EASTING: 611753

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of Sell 3 claim.

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Carboniferous
Mississippian
Triassic-Jurassic

GROUP

Slide Mountain
Quesnel River

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Quartzite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1999

COMMODITY

Copper
Lead
Zinc

GRADE

GRADE	Per cent
0.3920	Per cent
0.1850	Per cent
0.0838	Per cent

REFERENCE: Exploration in BC 1999.

CAPSULE GEOLOGY

In 1999, Barker Minerals Ltd. discovered a 2 to 3-metre thick bed of sulphide-bearing limy quartzite, bounded by grey limestone. A grab sample from the showing, containing disseminated chalcopyrite, sphalerite and galena, assayed 3920 ppm copper, 1850 ppm lead and 838 ppm zinc (Exploration in BC 1999, p. 23).

The area is underlain by the Mississippian to Pennsylvanian Slide Mountain Group and the Upper Triassic to Lower Jurassic Quesnel River Group.

BIBLIOGRAPHY

EM EXPL *1999, p. 23
EMPR OF 2001-11

DATE CODED: 2000/02/28
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 132**

NATIONAL MINERAL INVENTORY:

NAME(S): **NOV, SUNSHINE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 39 00 N
LONGITUDE: 121 29 05 W
ELEVATION: Metres

NORTHING: 5834415
EASTING: 602508

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of 1982 Drilling.

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Silica Carbonate
ALTERATION: Limonite Silica Carbonate
ALTERATION TYPE: Oxidation Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: 0003 Metres STRIKE/DIP:
COMMENTS: Sunshine vein is about 3.5 metres wide, strikes northwest and dips shallowly east. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Black Phyllite
Argillite
Slate
Siltstone

HOSTROCK COMMENTS: Triassic black phyllites informally correlated with the Nicola Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1933
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 27.4000 Grams per tonne
COMMENTS: Sample across a selected 3.5 metre section.
REFERENCE: Minister of Mines Annual Report 1933, page A136.

ORE ZONE: ADIT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 151.8600 Grams per tonne
Gold 28.0400 Grams per tonne
Lead 2.8000 Per cent
COMMENTS: 0.91 kilogram grab sample (#691) from adit, material containing pyrite, galena and limonite.
REFERENCE: Property File - Malcolm Resources Ltd., Mar.14, 1988, Prospectus.

CAPSULE GEOLOGY

The Nov showing occurs 7 kilometres northeast of Likely B.C. immediately to the west of the Eureka thrust fault. This thrust separates the essentially Mesozoic Quesnellia Terrane from the Hadrynian to Paleozoic Barkerville Terrane. The showing is underlain by deformed black phyllitic metasedimentary rocks, slate, argillite and siltstone of Middle to Upper Triassic age which form the lower

CAPSULE GEOLOGY

part of the Mesozoic assemblage of the Quesnellia Terrane. The unnamed black phyllite sequence which forms the basal unit of the Quesnel Belt, is known to host economic deposits elsewhere in the region.

Mineralization consists of galena and pyrite with associated gold and silver values in quartz veins within the black phyllite. The mineralization is commonly associated with the altered calc-silicate selvage within these veins. The quartz veins generally strike northwest and dip shallowly to the northeast. The Sunshine vein is about 3.5 metres wide and carried significant amounts of galena near one wall. A selected sample across a 3.5 metre section assayed 27.4 grams per tonne gold (Energy Mines and Petroleum Resources Annual Report 1933, p. A136). A 0.91 kilogram grab sample of convergent quartz veins containing pyrite, galena and limonite from an adit on the Nov 2 claim assayed 28.04 grams per tonne gold, 151.86 grams per tonne silver and 2.8 per cent lead (Property File - Malcolm Resources Ltd. Mar. 14, 1988 Prospectus).

BIBLIOGRAPHY

EMPR AR 1933-A136
EMPR ASS RPT *9916, *10812, *11773, *13306, 17103
EMPR EXPL 1979-207; 1982-265; 1983-386
EMPR FIELDWORK 1986, pp. 125-133,135-141; 1987, pp. 139-145
EMPR INF CIRC 1989-1, p. 20
EMPR OF 2001-11
EMPR P 1990-3
EMPR PF (Malcolm Resources Ltd., Mar.14, 1988, Prospectus)
GSC MAP 1424A
GSC OF MAP 574
CJES Vol.25, pp. 1608-1617
GCNL #117,#157, 1983; #4, 1984
Campbell, R.B., (1978)

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 134**

NATIONAL MINERAL INVENTORY: 093A6 Sia1

NAME(S): **HORSEFLY**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 17 24 N
LONGITUDE: 121 19 32 W
ELEVATION: 869 Metres

NORTHING: 5794614
EASTING: 614203

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of Lots 12108 and 12148.

COMMODITIES: Silica Volcanic Ash

MINERALS

SIGNIFICANT: Silica
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: R11 Volcanic ash - pumice
DIMENSION: 2400 x 350 Metres
COMMENTS: Volcanic ash covers an area 2.4 kilometres long and 300 to 400 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Volcanic Ash
Tephra

HOSTROCK COMMENTS: Host rock is a lightly indurated volcanic ash.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
COMMENTS: Suspect Terrane Overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP: Syn-mineralization
GRADE:

INVENTORY

ORE ZONE: HORSEFLY
REPORT ON: Y
CATEGORY: Measured
QUANTITY: 27000000 Tonnes
COMMODITY: Silica
GRADE: 89.6000 Per cent
YEAR: 1960
COMMENTS: Contains trace sulphur, 0.21 per cent magnesium and 0.55 per cent moisture.
REFERENCE: Energy, Mines and Resources CORPFILE - Orofino Mines Ltd., 1960.

CAPSULE GEOLOGY

The region in which the showing is located forms part of the Quesnellia Terrane. The Quesnellia Terrane is an assemblage of Upper Triassic to Lower Jurassic sedimentary and volcanic rocks, overlain by Eocene volcanics which may be correlative with the Kamloops Group. These volcanic rocks comprise a variety of tuffs and breccias of dominantly andesitic to trachyandesitic composition, commonly distinguished from underlying Mesozoic volcanic rocks by the presence of biotite.

The Horsefly deposit consists of poorly indurated volcanic ash which covers an area approximately 2.4 kilometres long by 300 to 400 metres wide. The ash has a more silicic composition than most of the Eocene volcanics in the region. The ash assayed 89.6 per cent silica, 0.21 per cent magnesium, trace sulphur and a moisture content of 0.55 per cent. Reserves are estimated at 27 million tonnes (Energy, Mines and Resources CORPFILE - Orofino Mines Ltd., 1960).

BIBLIOGRAPHY

EMPR OF 1989-14
EMPR FIELDWORK 1988, pp. 159-165
EMPR PF (In 093A General - Bergman, E.E., (1938): Report of a Geophysical Survey of the Horsefly River Valley, British Columbia)

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 217
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A
EMR MP CORPFILE (Orofino Mines Limited, 1960)
EMR MR 181 p.A37
CJES Vol.25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1988/05/28

CODED BY: GSB
REVISED BY: MAB

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 135**

NATIONAL MINERAL INVENTORY: 093A5 Ni1

NAME(S): **PONTIAC**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 17 13 N
LONGITUDE: 121 49 46 W
ELEVATION: Metres

NORTHING: 5793599
EASTING: 579843

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Nickel

MINERALS

SIGNIFICANT: Garnierite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Felsite
Serpentinite
Limestone
Argillite
Meta Volcanic

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Nickel
GRADE: 0.1000
YEAR: 1929
Per cent

COMMENTS: Selected sample.
REFERENCE: Minister of Mines Annual Report 1929, page C195.

CAPSULE GEOLOGY

The Pontiac showing is located within the Cache Creek Terrane, underlain by limestone, argillite, metavolcanic rocks and serpentinite of the Cache Creek Group. The dominant rock type is serpentinite which has been intruded by felsite and veined with quartz. Within the felsite is a small amount of garnierite. Selected samples assayed up to 0.1 per cent nickel (Annual Report 1929-C195).

BIBLIOGRAPHY

EMPR AR 1929-C195
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 136**

NATIONAL MINERAL INVENTORY: 093A12 Pb1

NAME(S): **SHAW**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 40 13 N
LONGITUDE: 121 39 40 W
ELEVATION: 762 Metres

NORTHING: 5836434
EASTING: 590534

LOCATION ACCURACY: Within 500M

COMMENTS: East of Quesnel Forks at confluence of Quesnel and Cariboo Rivers.

COMMODITIES: Lead

Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Shaw showing is located east of Quesnel Forks at the confluence of the Quesnel and Cariboo rivers. The geology of the region consists of an Upper Triassic to Lower Jurassic assemblage of sedimentary and volcanic rocks, correlative with the Nicola Group. The showing is underlain mainly by basalt which is interpreted as being part of the lower mafic volcanic assemblage which overlies older sedimentary rocks further to the east.

The basalt is cut by small quartz veins which contain galena, sphalerite and pyrite mineralization.

BIBLIOGRAPHY

EMPR AR 1933-A136
GSC MAP 1424A
CJES Vol.25, pp. 1608-1617
EMPR FIELDWORK 1987, pp. 147-153; 1988, pp. 167-172
EMPR EXPL 1985-C267
EMPR ASS RPT 13865

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 137**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUXTON CREEK**

MINING DIVISION: Cariboo

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093A12W

BC MAP:

LATITUDE: 52 39 45 N

LONGITUDE: 121 57 13 W

ELEVATION: Metres

LOCATION ACCURACY: Within 500M

COMMENTS: At mouth of Buxton Creek adjacent to Quesnel River.

UTM ZONE: 10 (NAD 83)

NORTHING: 5835241

EASTING: 570769

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

COMMENTS: Occurs as coarse flattish nuggets.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer Residual

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel
Unconsolidated Sediment/Sedimentary

HOSTROCK COMMENTS: Bedrock consists of Cretaceous granodiorite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: BUXTON CREEK

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1978

QUANTITY: 306000 Tonnes

COMMODITY

GRADE

Gold

4.2310

Grams per tonne

COMMENTS: Quantity is in cubic metres. A conservative estimate of the grade of the gravel is \$21.92 per cubic metre.

REFERENCE: N Miner, Jan.19, 1978; George Cross Newsletter #3,#47, 1978.

CAPSULE GEOLOGY

The Buxton Creek placer claims are located at the mouth of Buxton Creek, adjacent to the Quesnel River. Bedrock underlying the claims comprises mainly medium to coarse grained quartz monzonite to granodiorite of probable Cretaceous age which has intruded basalt and fine grained sedimentary rocks of Upper Triassic age.

The claims cover late Tertiary gravels deposited on a bench well above the present level of the Quesnel River. In part, the gravels are related to Buxton Creek fluvial deposition rather than the Quesnel River itself. Gold in these gravels is predominantly coarse, occurring as flattish nuggets. Indicated reserves in 1978 were 306,000 cubic metres grading 4.231 grams per tonne gold (Northern Miner Jan. 19, 1978). A conservative estimate of the grade of the gravels is \$21.92 per cubic metre.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR FIELDWORK 1987, pp. 147-153; 1988, pp. 167-172; 1990, pp. 331-356; 1992, pp. 463-473
EMPR EXPL 1989, pp. 147-169
EMPR ASS RPT 16853

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 221
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A
GCNL #3, #47, #66, #82, #134, 1978
N MINER Mar. 15, 1979

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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MINFILE NUMBER: **093A 138**

NATIONAL MINERAL INVENTORY:

NAME(S): **OCHILTREE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 14 30 N
LONGITUDE: 121 49 35 W
ELEVATION: Metres

NORTHING: 5788567
EASTING: 580133

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Serpentinite
Argillaceous Meta Sediment/Sedimentary
Limestone
Mafic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Ochiltree showing is underlain by rocks of the Cache Creek Terrane, comprising argillaceous metasediments, limestone, mafic metavolcanics and serpentinite. The showing consists of outcrops of serpentinite with narrow veins of chrysotile.

BIBLIOGRAPHY

EMPR OF 1995-25
GSC MAP 3-1961, 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 138**

MINFILE NUMBER: **093A 139**

NATIONAL MINERAL INVENTORY:

NAME(S): **FONTAINE CREEK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 56 36 N
LONGITUDE: 121 47 47 W
ELEVATION: Metres

NORTHING: 5866645
EASTING: 580879

LOCATION ACCURACY: Within 1 KM

COMMENTS: Near junction of Reddish and Fontaine Creeks.

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Carboniferous	Slide Mountain	Crooked Amphibolite	

LITHOLOGY: Ultramafic
Serpentinite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Fontaine Creek showing is underlain by rocks of the Mississippian to Pennsylvanian Crooked Amphibolite Formation. These are considered to be correlative to the Slide Mountain Group. The Crooked Amphibolite is located along a major thrust fault (the Eureka Thrust) separating the Quesnellia Terrane from the Barkerville Terrane. Included within the Crooked Amphibolite are a number of ultramafic bodies, discontinuously distributed along the Eureka Thrust.

Near the junction of Reddish and Fontaine creeks is a serpentinized ultramafic with scattered occurrences of short fibre asbestos veinlets.

BIBLIOGRAPHY

EMPR OF 1995-25
GSC MAP 3-1961; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/10

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 140**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO**, MT. BURDETT, BALD MOUNTAIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W 093A13E 093H04E
BC MAP:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5870089
EASTING: 601197

LATITUDE: 52 58 15 N
LONGITUDE: 121 29 35 W
ELEVATION: Metres

LOCATION ACCURACY: Within 1 KM
COMMENTS: Coordinates of Mt Burdett.

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I07 Silica veins
DIMENSION: 4000 x 2500 Metres STRIKE/DIP:
COMMENTS: Quartz veining occurs in a belt at least 40 kilometres long and varies from 0.5 to 5 kilometres in width.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u> Proterozoic-Paleoz.	<u>GROUP</u> Snowshoe	<u>FORMATION</u> Undefined Formation	<u>IGNEOUS/METAMORPHIC/OTHER</u>
---	--------------------------	---	----------------------------------

LITHOLOGY: Quartzite
Phyllite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

Cariboo
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Quesnel Highland
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Chip
COMMODITY
Silica GRADE 98.7300 Per cent

REFERENCE: Geological Survey of Canada Paper 81-1A, pages 213-216 .

CAPSULE GEOLOGY

The geology of the region consists of (?)Hadrynian to Paleozoic Snowshoe Group rocks. The Snowshoe Group is an assemblage of dominantly metasedimentary rocks within the Barkerville Terrane. These metasedimentary rocks comprise mainly marble, quartzite and phyllite which, in this area, are mainly undifferentiated. A small area, located near the top of Mt. Burdett, is underlain by rocks of the Harveys Ridge succession. The Downey and Hardscrabble Mountain successions occur to the west of Roundtop Mountain. Metamorphism of the region varies from chlorite to sillimanite facies and higher, but most of the mineralization in the region is confined to those areas metamorphosed no higher than greenschist grade.

Quartz veining occurs in a belt at least 40 kilometres long that varies in width from about 0.5 to 5 kilometres. The belt extends from the area of Roundtop Mountain northwesterly to the Sugar Creek area. The veins outcrop prominently on Mount Burdett and Bald Mountain. On Bald Mountain, vein outcrops are widely scattered and vary in size from one by three metres to 1.5 by 10 metres. A prominent swarm of parallel veins outcrops on Mount Burdett in an area just over 100 metres wide. There are at least four major veins with the largest being up to 37 metres in width and traceable for 470 metres through discontinuous outcrop. Two chip samples collected by the Geological Survey Branch from this vein returned 97.72 and 98.73 per cent silica (Geological Survey of Canada Paper 81-1A pp. 213-216).

RUN DATE: 26-Jun-2003
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BIBLIOGRAPHY

EMPR BULL 34, pp. 40-44; 38, pp. 65-67
EMPR OF 1987-15, pp. 19-21, 2001-11
GSC MAP 1424A
GSC MEM 181, pp. 9-13
GSC P 81-1A, pp. 213-216; 82-1B, pp. 117-124
GSC SUM RPT 1932A, pp. 26-58

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 141**

NATIONAL MINERAL INVENTORY:

NAME(S): **CEDAR CREEK**, OGDEN MINE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 52 34 07 N
LONGITUDE: 121 30 15 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5825335
EASTING: 601381

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cenozoic			Glacial/Fluvial Gravels

LITHOLOGY: Fluvial Gravel
Unconsolidated Sediment/Sedimentary

HOSTROCK COMMENTS: Bedrock is correlative with the Nicola Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Cedar Creek placer workings were among the earliest workings in the Likely area. The creek drains an area containing black phyllite in the Spanish Mountain area which overlies mafic volcanic rocks of Upper Triassic age. This assemblage forms part of the Upper Triassic to Lower Jurassic assemblage of the Central Quesnel Belt, correlative with the Nicola Group.

Early placer workings along the creek were largely confined to post-glacial gravels in the bed of the creek. Later, benches along the creek, above the present creek level, were mined.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

- EMPR GEM 1973-525; 1974-359
- EMPR AR 1875-14; 1883-1891-tables; 1902-60; 1921-116; 1922-118,125; 1923-127; 1924-126; 1927-172; 1928-197; 1929-203; 1930-172; 1931-92; 1932-111; 1934-C34; 1935-C37; 1942-89; 1943-84; 1945-127; 1946-200; 1947-195; 1948-178; 1950-201; 1951-205; 1952-238; 1955-86; 1956-141; 1958-80; 1959-148; 1960-124; 1961-133; 1962-142; 1963-135; 1966-256; 1967-297; 1970-484
- EMPR PF (Sectional Plan 1922; Cedar Creek Placer Leases Map 1922; Dolmage, V., (1931): Report on the Properties of Cedar Creek Placer Gold Company Ltd.; Drill Lines and Topography, 1931; Claim Map, 1931; Sections A to G, 1931; Cedar Creek Placer Leases and Topography Map, 1931; Drill Sections Lines 1 to 3, 1931; Claim Sketch Map post-1933; Ogden Placer Mine, 1969)
- EMPR BULL 28, pp. 49-50
- EMPR ASS RPT 9168, 10460, 10987, 11658, 15133
- EMPR EXPL 1983, p. 384; 1989, pp. 147-169
- EMPR FIELDWORK 1987, pp. 139-145,147-153; 1988, pp. 167-172; 1990, pp. 331-356; 1992, pp. 463-473
- GSC SUM RPT *1932, Part A, pp. 130-137
- GSC MAP 1424A

RUN DATE: 26-Jun-2003
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BIBLIOGRAPHY

CJES Vol.25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 142**

NATIONAL MINERAL INVENTORY:

NAME(S): **ACE**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A14E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 48 24 N
LONGITUDE: 121 08 57 W
ELEVATION: 1070 Metres

NORTHING: 5852370
EASTING: 624758

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Gold Lead Zinc Silver

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Sphalerite Gold Pyrite
ASSOCIATED: Pyrrhotite Pyrite Marcasite Bismuthinite
ALTERATION: Albite Silica Sericite K-Feldspar
ALTERATION TYPE: Albite Silicific'n Potassic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Disseminated Vein Massive
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Cambrian

GROUP

Snowshoe

FORMATION

Downey Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sericitic Schist
Chlorite Phyllite
Biotite Schist
Quartzite
Greenstone
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

Kootenay

CAPSULE GEOLOGY

The Ace property is located on the south side of the Little River, approximately 35 kilometres northwest of Likely. It was discovered by Louis Doyle in 1994-95. Work on the property includes sampling, some geophysical surveys, soil geochemistry and considerable trenching.

Two deposit types are apparent: (1) semi-massive to massive sulphides and (2) gold-quartz sulphide veins. Both occur in sericitic schists, chloritic schists and minor quartzites of the Downey Succession (Cambrian?).

'Massive' sulphide mineralization comprises dominantly pyrrhotite, minor chalcopyrite and pyrite +/- sphalerite in a granular quartz-feldspar-biotite schist. The schist is commonly banded due to either variable sulphide or possibly biotite content. This banding appears to be a tectonic rather than a primary fabric. The schist comprises dominantly plagioclase (andesine and albite) and quartz with varying amounts muscovite, sericite, biotite, ankerite, calcite and opaques. Several per cent apatite is common, with local concentrations greater than 20 per cent.

Numerous white quartz veins, locally with abundant sulphides, occur on the Ace property. Some are folded along with their host rock while others are clearly post tectonic, cutting across foliation. Veins contain variable amounts of quartz and pyrite, generally minor base metal sulphides and muscovite, biotite, chlorite and tourmaline. The gold veins contain some sulphides and are anomalous in gold, silver, arsenic, lead, bismuth and tellurides. The mineralized quartz veins occur along a 5-kilometre northwest trending strike length.

Barker Minerals Ltd. surveyed the area in 1996 and 1997. They drilled 7 holes for 1260 metres in 1998. Barker Minerals Ltd. drilled 5 holes in 2002 (PR REL Barker Minerals Ltd., August 27, 2002).

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RUN TIME: 11:27:59

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BIBLIOGRAPHY

EM EXPL 1996-C9; 1997-30; 1998-33-45; 1999-65-77; 2002-13-28
EM FIELDWORK *1997, pp. 13-1-13-12; 2001, pp. 59-82
EMPR ASS RPT 23733, 24286, 24988, 24989, 25437
EMPR BULL 47
EMPR OF 1999-2; 2001-11
EMPR PF (Barker Minerals Ltd. Pamphlet, 1999; Barker Minerals Ltd.
Website (Mar. 1999): Ace Project, 9 p.)
GSC MAP 561A; 59-1959; 3-1961; 1424A
GCNL #107(June 5), 2000
PR REL Barker Minerals Ltd., Aug.27, Nov.18, Nov.21, 2002
WWW <http://www.barkerminerals.com>

DATE CODED: 1997/12/16
DATE REVISED: 1997/12/23

CODED BY: TH
REVISED BY: TH

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093A 143**

NATIONAL MINERAL INVENTORY:

NAME(S): **BIG GULP**, FRANK CREEK, MASS,
JESS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)

LATITUDE: 52 43 40 N
LONGITUDE: 121 23 24 W
ELEVATION: 1320 Metres

NORTHING: 5843204
EASTING: 608722

LOCATION ACCURACY: Within 500M

COMMENTS: The Big Gulp is located on 'C' Road off the main 8400 Road. See also Frank Creek (093A 152).

COMMODITIES: Zinc Copper Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Pyrite
ASSOCIATED: Pyrite
ALTERATION: Quartz Sericite Ankerite Calcite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform Stratabound Vein Shear
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Snowshoe	Downey Succession	

LITHOLOGY: Sericitic Schist
Chlorite Phyllite
Mafic Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville Kootenay

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1997
SAMPLE TYPE: Grab
COMMODITY GRADE
Zinc 4.5000 Per cent
Copper 0.0600 Per cent
REFERENCE: Hoy and Ferri (1998): Geological Fieldwork 1997.

CAPSULE GEOLOGY

Big Gulp, discovered by Barker Minerals Ltd. in 1996, is located 1.5 kilometres south of Cariboo Lake, 25 kilometres northeast of Likely. Work on the property is limited to reconnaissance mapping, some sampling, and a soil geochemical survey.

Big Gulp is a stratabound semi-massive sulphide occurrence in the Downey succession (Cambrian?). Immediate host rocks are pale grey to green sericite phyllite and darker chlorite phyllite; both contain abundant dispersed ankerite and variable amounts of calcite. These phyllites are interpreted to be altered mafic tuffs. The phyllites overlie Quesnel Lake orthogneiss immediately to the southwest and are structurally overlain by a 'chert to cherty tuff' horizon and then argillite.

Mineralization comprises a number of thin layers with dark sphalerite, and minor chalcopyrite and pyrite, dispersed in a siliceous, sericitic matrix. It is streaked parallel to a prominent west-plunging mineral lineation. Sulphides also occur in thin, discontinuous foliation-parallel quartz stringers. A grab sample assayed 4.5 per cent zinc and 0.06 per cent copper (Fieldwork 1997).

The host succession and Zn-Cu tenor suggest similarities with Besshi-type massive sulphide mineralization. Alteration, including sericitic, silicification and 'brownish-white carbonate' just

CAPSULE GEOLOGY

northwest of the showing, is also characteristic of this deposit type.

Rio Algoma Exploration Inc. surveyed the area as the Mass claims in the early 1990's. Barker Minerals Ltd. prospected and sampled the Frank Creek property in 1998 and 1999. See also Frank Creek (093A 152).

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EM EXPL 1999, p. 68
EM FIELDWORK *1997, pp. 13-1 - 13-12; 2002, pp. 77-96
EMPR ASS RPT 17696, 19345, 21930, 22599, 24662, 25752, 26003 \\
EMPR OF 1999-2; 2001-11
EMPR P 1990-3
EMPR PF (Barker Minerals Ltd. Website (Mar. 1999): Frank Creek Prospect, 2 p.)
GSC MAP 1424A
WWW <http://www.barkerminerals.com>

DATE CODED: 1997/12/16
DATE REVISED: 1997/12/23

CODED BY: TH
REVISED BY: TH

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093A 144**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROUNDTOP MTN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 55 39 N
LONGITUDE: 121 16 57 W
ELEVATION: 1798 Metres

NORTHING: 5865586
EASTING: 615450

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centered on surface trace of limestone belt as shown on GSC Open File 858.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Ferrudolomite Chlorite Quartz Muscovite Ankerite

MINERALIZATION AGE: Hadrynian

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Fossils

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

SHAPE: Regular

MODIFIER: Folded

DIMENSION: 1500 x 150 x 16 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Limestone folded about the northwest trending Cunningham anticline. Belt extends for 16 kilometres, is 1500 metres wide and at least 150 metres thick in this area.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Hadrynian

Cariboo

Cunningham

DATING METHOD: Fossil

MATERIAL DATED: Fossils

LITHOLOGY: Limestone
Dolomite
Phyllite
Quartzite
Chlorite Schist

HOSTROCK COMMENTS: The Cariboo Group is (?)Hadrynian to Lower Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Cariboo

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

A belt of limestone of the Hadrynian aged Cunningham Formation up to 1500 metres wide, extends northwest from the Cariboo River for 16 kilometres, passing just east of Roundtop Mountain. The limestone is exposed along the crest of the Cunningham anticline. Overlying chloritic schists, phyllites and quartzites of the Yankee Belle Formation outcrop along the flanks of the belt. The belt is truncated by faults to the northwest and southeast. The unit is at least 150 metres thick in the vicinity of Roundtop Mountain.

The belt is comprised of fine grained, black to dark grey limestone that is commonly bleached to a light grey to cream colour where fractured and cut by quartz veins. The limestone is commonly altered to ferroan dolomite. The upper 15 metres of the unit is composed of tightly folded limestone thinly interbedded with chloritic and argillaceous layers. Nodules and irregular masses of chert are sometimes present. Spherical to ellipsoidal pellets of ankerite or ferroan dolomite up to 5 millimetres in diameter form up to 40 percent of the rock just east of Roundtop Mountain. In thin section the rock displays up to 5 per cent in detrital quartz muscovite grains.

BIBLIOGRAPHY

EMPR BULL *34, p.16-17; *38, pp. 23-24; 47 pp.24-29

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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BIBLIOGRAPHY

EMPR OF 2001-11
GSC MAP 59-1959, 3-1961; 1424A
GSC OF 858
W MINER Apr., 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/16

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 146**

NATIONAL MINERAL INVENTORY:

NAME(S): **MITCHELL RIVER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A16W 093A09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 49 12 N
LONGITUDE: 120 19 47 W
ELEVATION: 2286 Metres

NORTHING: 5855589
EASTING: 679930

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on surface trace of limestone belt (Cunningham Formation), as shown on Geological Survey of Canada Map 1-1963.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite
MINERALIZATION AGE: Hadrynian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
COMMENTS: Limestone belt trends northwest for 35 kilometres. Deposit dimension is 35,000 X 16,000 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Cunningham	
DATING METHOD:	Fossil		

LITHOLOGY: Limestone
Dolomite
Shale
Quartz

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Mountains

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

A broad belt of variably dolomitic limestone of the Hadrynian aged Cunningham Formation extends southwest from Mitchell River and Mitchell Lake for 35 kilometres to Hobson Creek at the head of Hobson Lake. The belt varies from 12 to 16 kilometres in width. Numerous exposures of shale, quartzite and limestone of the overlying Yankee Belle Formation lie within the belt.

BIBLIOGRAPHY

EMPR BULL 34, pp. 16-17; 38, pp. 23-24; 47, pp. 24-29
EMPR IND MIN FILE (McCammon, J.W., (1973): Limestone Occurrences in B.C., p. 22 (in Ministry Library))
GSC MAP 1-1963; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 147**

NATIONAL MINERAL INVENTORY:

NAME(S): **TAM**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11W 093A12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 49 N
LONGITUDE: 121 30 05 W
ELEVATION: 1143 Metres

NORTHING: 5832198
EASTING: 601426

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz Carbonate
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>
Upper Triassic			Unnamed/Unknown Informal

LITHOLOGY: Black Phyllite
Black Slate
Fine Grained Tuff
Argillaceous Sediment/Sedimentary
Mafic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Pre-mineralization
Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The Tam showing lies within the Quesnellia Terrane, near its eastern boundary with the Barkerville Terrane. The geology of this region comprises dominantly black phyllite with interbedded deformed mafic volcanic rocks, considered to be of Upper Triassic age. These rocks are separated from the Barkerville Terrane to the east by the Eureka Thrust.

The primary lithology in the area of the showing is black slate and phyllite, interbedded with variable amounts of fine grained tuff. Quartz veins (+/- minor carbonate) occur predominantly within the argillaceous metasediments. The mineralization consists of argentiferous galena and pyrite with associated silver values.

BIBLIOGRAPHY

EMPR ASS RPT *8219, *10863
EMPR FIELDWORK 1987, pp. 139-145,147-153, 1988, pp. 167-172
EMPR OF 2001-11
EMPR P 1990-3
GSC MAP 1424-A
CJES Vol.25, pp. 1608-1617

DATE CODED: 1985/07/24
DATE REVISED: 1988/05/28

CODED BY: GSB
REVISED BY: MAB

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 148**

NATIONAL MINERAL INVENTORY:

NAME(S): **COMIN THROU BEAR, DEB**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A14E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 53 10 N
LONGITUDE: 121 04 05 W
ELEVATION: Metres

NORTHING: 5861349
EASTING: 629988

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location given is near the centre of an area containing showings.

COMMODITIES: Lead Zinc Silver Barite

MINERALS

SIGNIFICANT: Galena Sphalerite Barite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Stratabound Stratiform
CLASSIFICATION: Sedimentary Epigenetic Hydrothermal Industrial Min.
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Cariboo Black Stuart

LITHOLOGY: Dolomitic Breccia

HOSTROCK COMMENTS: Cariboo Group is Hadrynian to Lower Paleozoic in age. Black Stuart Group is Lower to Middle Proterozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Bowron Trench

CAPSULE GEOLOGY

The region is underlain by rocks of the Cariboo Terrane which, in this area comprises formations of both the Black Stuart and Cariboo Groups. Insufficient mapping has been carried out to allow identification of the specific formations.

Showings occur at a number of locations on the property. Two types of mineralization have been identified but both types occur within a dolostone breccia. One type has galena associated with barite and is considered to be of sedimentary or diagenetic origin. The other type has galena, sphalerite and possibly tetrahedrite occurring in brecciated quartz veining.

BIBLIOGRAPHY

EMPR ASS RPT *8582, *9819
EMPR ASS RPT SUM 1981-127
EMPR EXPL 1980-312
EMPR OF 2001-11
GSC MAP 1424A
NW PROSPECTOR Winter, 1985

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 149**

NATIONAL MINERAL INVENTORY:

NAME(S): **JAMBOREE, DOREEN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A07W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 17 53 N
LONGITUDE: 120 55 18 W
ELEVATION: 1097 Metres

NORTHING: 5796224
EASTING: 641721

LOCATION ACCURACY: Within 500M
COMMENTS: Doreen showing.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Chalcopyrite Arsenopyrite Pyrite
ALTERATION: Ankerite Silica
ALTERATION TYPE: Carbonate Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Phyllite
Feldspar Porphyritic Andesite
Basalt Breccia
Argillite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Pre-mineralization GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Gold

YEAR: 1983

GRADE: 4.9700 Grams per tonne

COMMENTS: Sample across 2 metres.
REFERENCE: Assessment Report 11382.

CAPSULE GEOLOGY

The Jamboree showing is located within the eastern part of the Quesnellia Terrane. The region is underlain mainly by fine grained sedimentary rocks. These rocks comprise the lower part of an Upper Triassic to Lower Jurassic sedimentary and volcanic assemblage correlative with the Nicola Group.

The showing is underlain by a northwesterly trending Triassic/Jurassic sequence of interbedded tuffs and argillites which grade to phyllites to the southeast. A basalt breccia occurs within the phyllite. A few zones have been outlined where phyllite contains abundant ankerite with 1 to 5 per cent pyrite and local silicification, quartz veins and rare chalcopyrite. One outcrop of phyllite and feldspar porphyritic andesite is silicified over widths of 1 or 2 metres and contains about 5 per cent pyrite with arsenopyrite and chalcopyrite. A 2 metre chip sample from a trench in 1983 assayed 4.97 grams per tonne gold (Assessment Report 11382).

BIBLIOGRAPHY

EMPR ASS RPT 10118, *10263, *10980, *11382, 10118, 11905, 16233, 17215, 17902
EMPR EXPL 1982-263; 1983-379,380; 1987-C248
EMPR ASS RPT SUM 1981-247
EMPR INF CIRC 1989-1, p. 20
EMPR P 1990-3

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 239
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A
IPDM Nov/Dec., 1983; Nov/Dec., 1985
GCNL #204,#208, 1983; #61, 1984
CJES Vol.25, pp. 1608-1617
W MINER Apr., 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/15

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 150**

NATIONAL MINERAL INVENTORY: 093A7 Au1

NAME(S): **FRASERGOLD, KAY, MAC,
EUREKA, JAY, H,
GROUSE**

MINING DIVISION: Cariboo

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093A07E

UTM ZONE: 10 (NAD 83)

BC MAP:
LATITUDE: 52 18 20 N
LONGITUDE: 120 34 43 W

NORTHING: 5797785
EASTING: 665083

ELEVATION: 1524 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of the area with the majority of drilling, 100 kilometres east of Williams Lake in the McKay River Valley.

COMMODITIES: Gold Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Sphalerite Galena Chalcopyrite

COMMENTS: Trace sphalerite, galena, chalcopyrite and gold.

ASSOCIATED: Quartz Dolomite Siderite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

L04 Porphyry Cu ± Mo ± Au

DIMENSION: STRIKE/DIP: 130/60W TREND/PLUNGE:

COMMENTS: Veins parallel the S1 cleavage which dips between 35 and 85 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Upper Triassic GROUP: Quesnel River FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Phyllite
Sediment/Sedimentary
Mafic Sill
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: FRASERGOLD

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1992

QUANTITY: 12000000 Tonnes

COMMODITY

GRADE

Gold

1.8500

Grams per tonne

COMMENTS: To a depth of 100 metres over a 3 kilometre strike length. Drill indicated reserves.

REFERENCE: George Cross Newsletter No.37, 1992.

CAPSULE GEOLOGY

The Frasergold deposit is located 100 kilometres east of Williams Lake in the McKay River Valley.

The area is underlain mainly by Upper Triassic Quesnel River Group black phyllite with minor interbedded siliceous sediment. These rocks form the upright northeast limb of the major northwesterly trending Eureka syncline. Locally, the rocks form asymmetric drag folds which contain metamorphically derived quartz veins in the hinges. Rotation of these folds by axial plane crenulation cleavage formed minor folds plunging slightly northwest of the earlier folds. Gold mineralization is apparently associated with the youngest structures.

Mineralization is also associated with a specific stratigraphic horizon. Within the phyllite sequence is a zone, 200 to 300 metres wide, of "knotted phyllite" which is made up of coarse elongated carbonate porphyroblasts in a lustrous, well-laminated phyllite. Gold mineralization typically occurs near the base of the "knotted

CAPSULE GEOLOGY

phyllite". Zones within this sequence contain 10 to 30 per cent quartz veins. Most of the veins parallel the S1 cleavage which strikes 130 degrees and dips between 35 and 85 degrees west. The veins contain up to 5 to 10 per cent pyrrhotite and pyrite in a quartz-dolomite-siderite gangue. A few have trace amounts of sphalerite, chalcopyrite, galena and coarse-grained gold. Gold distribution is erratic and to date unpredictable, posing serious practical mining problems (Faulkner, 1991).

In addition, copper mineralization occurs on the property as disseminations within the sheared marginal phase of a mafic sill unit and as porphyry copper type mineralization within granitic rocks.

Inferred (geological) reserves at Frasergold are 11 million tonnes grading 1.85 grams per tonne gold to depths of 100 metres and over a 3 kilometre strike length (George Cross Newsletter #37, 1992).

BIBLIOGRAPHY

- EMPR ASS RPT *8325, *9751, *11833, *12880, 14022, *15636, 15715, *16765, 16917, 17746, 20547, 21819
EMPR EXPL 1981-108; 1983-377; 1985-C260; 1986-B50-51; 1987-C246
EMPR FIELDWORK 1986, pp. 135-142
EMPR INF CIRC 1989-1, p. 20
EMPR MAP 65 (1989)
EMPR OF 1992-1
EMPR P 1990-3; 1991-4, pp. 186,187
EMPR PF (Sirius Resource Company Filing Statement Oct. 1988;
*Frasergold Project-Property description, Asarco Inc. and Eureka Resources Inc.; MacKay River Pelitic Suite, 1984 (10 pages);
Campbell, K.V. (1984): Brief Report on the Structural Geology at the Frasergold Project; Report on Frasergold property, 1985 (partial report, pages 25-42 only))
EMR MIN BULL MR 223 B.C. 202
EMR MP CORPFILE (Eureka Resources, Inc.; Amoco Canada Petroleum Company Ltd.; Southlands Mining Corporation)
GSC MAP 1-1963; 1424A
GSC P 69-1A p.18
GCNL #177,#201,#203,#219, 1983; #10,#90,#166,#179,#219, 1984; #69, #135, 1985; #40,#165,#228, 1986; #7,#25,#74,#75,#100,#116, #129, #157,#177,#228,#239,#240, 1987; #18,#19,#35,#43,#50,#68,#107, 1988; #80,#189(Oct.2),#236(Dec.8), 1989; #139(Jul.19), #202(Oct.18),#224(Nov.20), 1990; #32(Feb.14),#164(Aug.26), 1991; #37(Feb.21),#132(July 9), 1992
IDPM Mar/Apr 1984; Nov/Dec 1985
N MINER Oct.27, 1983; Jan.19, Nov.15, 1984; Mar.7, Apr.18, Jul.11, 1985; Mar.17, Dec.15, 1986; Feb.9, Apr.27, Sept.28, Dec.21, 1987; June 18, July 30, 1990; Mar.4, 1991; Mar.9, 1992
V STOCKWATCH June 4,17, July 3, Aug.27, Sept.4, Dec.14,15, 1987; Apr.26,27, May 1, 1989
W MINER April, 1984
WWW <http://www.infomine.com/>
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/07/06

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 151**

NATIONAL MINERAL INVENTORY:

NAME(S): **BIG**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 49 N
LONGITUDE: 121 23 54 W
ELEVATION: 1210 Metres

NORTHING: 5832348
EASTING: 608401

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Silver Gold Lead

MINERALS

SIGNIFICANT: Galena
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>
Upper Triassic	Nicola	Undefined Formation	

LITHOLOGY: Graphitic Silty Phyllite
Silty Slate

HOSTROCK COMMENTS: Part of black phyllite succession informally correlated with Nicola Group. Also been referred to as Quesnel River Group sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Big showing is located within the eastern part of the Quesnellia Terrane. This region is underlain dominantly by fine-grained metasedimentary rocks, in contact with the Barkerville Terrane. The metasedimentary rocks comprise mainly dark grey phyllite and silty slate considered to be of Middle to Upper Triassic age. Part of the black phyllite succession is informally correlated with the Nicola Group but has also been informally referred to as the Quesnel River Group sediments.

Mineralization consists of argentiferous galena with associated gold values in quartz veins cutting graphitic silty phyllite.

BIBLIOGRAPHY

EMPR ASS RPT *12566
EMPR EXPL 1983-383
EMPR FIELDWORK 1987, pp. 139-145
EMPR OF 2001-11
EMPR P 1990-3
GSC MAP 1424A
GSC OF MAP 574
CJES Vol.25, pp. 1608-1617
*Campbell, R.B. (1978)

DATE CODED: 1985/07/24
DATE REVISED: 1988/05/28

CODED BY: GSB
REVISED BY: MAB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 152**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRANK CREEK**, MASS, FRANK

MINING DIVISION: Cariboo

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093A11W 093A14W
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 44 52 N
 LONGITUDE: 121 21 41 W
 ELEVATION: 1100 Metres

NORTHING: 5845470
 EASTING: 610601

LOCATION ACCURACY: Within 500M

COMMENTS: Discovery trench is on 'D' Road, off the main 8400 Road.

COMMODITIES: Copper Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena

ALTERATION: Silica Chlorite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Disseminated
 CLASSIFICATION: Volcanogenic
 TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Snowshoe	Undefined Formation	

LITHOLOGY: Phyllitic Argillite
 Felsic Pyroclastic
 Pillow Basalt
 Quartzite
 Felsic Lapilli Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
 TERRANE: Barkerville Kootenay

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1999
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Copper	0.6500 Per cent
Gold	0.1400 Grams per tonne
Silver	69.0000 Grams per tonne
Lead	0.1200 Per cent
Zinc	0.1000 Per cent

COMMENTS: Channel sample 1.2 metres.
 REFERENCE: Exploration in BC 1999.

CAPSULE GEOLOGY

In June 1999, Barker Minerals Ltd. discovered sulphide float in a road cut. Trenching exposed a bed of massive sulphide mineralization in excess of 1.2 metres thick. It is composed mainly of fine-grained pyrite with local disseminations and wispy bands of chalcopyrite, pale brown sphalerite and galena. Fractures and a foliation-parallel fabric contain coarser grained base metal sulphides with silica +/- chlorite. Enclosing rocks are an overturned package of phyllitic argillites, reworked felsic pyroclastics and pillow basalts mapped as part of the Paleozoic Snowshoe Group (Harveys Ridge succession). A 1.2-metre (true width) channel sample assayed 0.65 per cent copper, 0.14 grams per tonne gold, 69 grams per tonne silver, 0.12 per cent lead and 0.10 per cent zinc. In addition to the main bed, numerous small lenses of massive sulphide, up to 10 centimetres thick were noted (Exploration in BC 1999, p. 23).

Barker Minerals Ltd. completed 1,459 metres of drilling in 11 holes on the Frank Creek and Ace (093A 142) occurrences in August 2002 (PR REL Barker Minerals Ltd., August 27, 2002).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 244
REPORT: RGEN0100

BIBLIOGRAPHY

EM EXPL *1999, pp. 23, 68-69; 2002-13-28
EM FIELDWORK 2001, pp. 59-80
EM INF CIRC 2000-1, p. 19
EMPR ASS RPT 19345, 26003
EMPR OF 2001-11
EMPR PF (Barker Minerals Ltd. Website (Feb.2000): Frank Creek, 7 p.;
Barker Minerals Ltd. Company Profile and Pamphlet)
GSC MEM 421
GSC OF 920
GCNL #107(June 5), 2000
N MINER Dec.2, 2002
PR REL Barker Minerals Ltd., Aug.27, Nov.18, 2002
WWW <http://www.barkerminerals.com>; <http://www.infomine.com/>

DATE CODED: 2000/02/28
DATE REVISED: 2000/02/28

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 153**

NATIONAL MINERAL INVENTORY:

NAME(S): **GALLEON**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A13E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 58 00 N
LONGITUDE: 121 42 35 W
ELEVATION: Metres

NORTHING: 5869341
EASTING: 586656

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Silver Lead Copper

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Arkosic Phyllite
Quartzite
Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian-Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Grab

COMMODITY	GRADE	
Silver	242.7000	Grams per tonne
Lead	11.4000	Per cent

REFERENCE: Assessment Report 13444.

CAPSULE GEOLOGY

The Galleon showing is located within the Barkerville Terrane, a few kilometres east of the Eureka Thrust which marks the contact with the Quesnellia Terrane. Rocks of the region have been mapped as undifferentiated Hadrynian to Lower Paleozoic Snowshoe Group (Geological Survey of Canada Map 1637A).

The showing is underlain by arkosic phyllite, quartzite and schist which are cut by quartz veins containing pyrite, chalcopyrite and galena. A grab sample returned assays of 11.4 per cent lead and 242.7 grams per tonne silver (Assessment Report 13444).

BIBLIOGRAPHY

EMPR ASS RPT *13444
GSC MAP 1424A
EMPR EXPL 1984-291
GSC MEM 421
GSC MAP 1037A

DATE CODED: 1985/08/29
DATE REVISED: 1989/02/16

CODED BY: AFW
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 154**

NATIONAL MINERAL INVENTORY:

NAME(S): **TRUMP**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 38 47 N
LONGITUDE: 121 26 59 W
ELEVATION: Metres

NORTHING: 5834063
EASTING: 604884

LOCATION ACCURACY: Within 500M

COMMENTS: Coordinates of the approximate centre of four mineralized quartz veins

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Black Phyllitic Argillite
Andesite Breccia
Andesite Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The Trump showing is underlain by Upper Triassic black phyllitic argillites, andesite breccias and tuffs which are metamorphosed to greenschist facies. Part of the black phyllite succession has been informally correlated with the Nicola Group, these have also been informally referred to as the Quesnel River Group sediments.

Quartz veining occurs in both the argillite and andesite units but four mineralized quartz veins are hosted by phyllitic argillite. Mineralization consists of discontinuous blebs of argentiferous galena and disseminated pyrite in the quartz veins. Disseminated pyrite also occurs throughout the argillite. Sericitic alteration halos up to 3 metres are associated with the galena-bearing veins.

BIBLIOGRAPHY

EMPR ASS RPT *13285
EMPR EXPL 1984-283
EMPR FIELDWORK 1987, pp. 139-145
EMPR OF 2001-11
EMPR P 1990-3
GSC MAP 1424A
CJES Vol.25, pp. 1608-1617

DATE CODED: 1986/04/15
DATE REVISED: 1988/05/28

CODED BY: GRF
REVISED BY: MAB

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 155**

NATIONAL MINERAL INVENTORY:

NAME(S): ~~BEEKEEPER~~, BEEHIVE, 96,
ARAB

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 23 40 N
LONGITUDE: 121 20 24 W
ELEVATION: 0853 Metres

NORTHING: 5806207
EASTING: 612952

LOCATION ACCURACY: Within 500M
COMMENTS: Coordinates of Trench E (1985).

COMMODITIES: Copper Gold Mercury

MINERALS

SIGNIFICANT: Chalcopyrite Cinnabar Pyrite
ASSOCIATED: Pyrrhotite
ALTERATION: Chlorite Orthoclase Epidote Calcite Quartz
Fluorite Ankerite
COMMENTS: It appears as if one alteration assemblage is superimposed on another.
ALTERATION TYPE: Propylitic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Nicola	Undefined Formation	Unnamed/Unknown Informal
Lower Jurassic			

LITHOLOGY: Basalt
Syenite
Syeno Diorite
Diorite
Hornblende Porphyry Syenite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Zeolite

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1996
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Gold 1.0400 Grams per tonne
COMMENTS: Drillhole 97-B-15 across 3 metres.
REFERENCE: George Cross News Letter No.82 (April 29), 1997.

CAPSULE GEOLOGY

The Beekeeper showing is located 60 kilometres northeast of Williams Lake and 10 kilometres northeast of Horsefly. The property lies within the Quesnellia Terrane of the Intermontane Belt underlain by Upper Triassic basalt correlative with the Nicola Group and intruded by a syenitic to dioritic stock (Kwun Lake intrusive) of probable Lower Jurassic age. The showing is part of the Kwun Lake-Al mineralized system. Mineralization comprises chalcopyrite, pyrite and pyrrhotite. Anomalous gold values occur in disseminations and fracture fillings, associated with pink potassium feldspar and calcite-epidote-chlorite alteration zones. A second period of mineralization characterized by cinnabar (up to 3,300,000 parts per billion mercury) with ankerite, fluorite and quartz appears to be superimposed on the chalcopyrite-gold mineralized zone. This mineralization is related to hornblende porphyry syenite dikes at the eastern margin of the Kwun Lake stock.

CAPSULE GEOLOGY

Drilling in 1990 intersected a 15-metre zone of 0.10 per cent copper and 2.19 grams per tonne gold (George Cross News Letter No.113, June 12, 1991). Drilling in October 1996 intersected 22 metres grading 0.7 per cent copper and 0.96 gram per tonne gold (George Cross News Letter No.42, February 28, 1997). A late winter drilling program in 1996 resulted in drillholes 97-B-15 and 97-B-12 testing the western and eastern extensions to mineralization. Hole 97-B-15 intersected 3 metres which assayed 1.04 grams per tonne gold; the drillhole ended in mineralization at a depth of 183 metres (George Cross News Letter No.29 (April 29), 1997).

Imperial Metals Corporation and Wildrose Resources Ltd. (formerly Eastfield Resources Ltd.) own the property. A 1997 diamond drilling project focused on expanding the '96 zone', a previously drilled mineralized stockwork. The zone was extended a further 200 metres, with the most interesting assay of 0.439 grams per tonne gold over 36 metres (Exploration in BC 1997, page 30).

BIBLIOGRAPHY

EMPR ASS RPT 9750, 12805, *14599, 15048, 16153, 17047, 20381
EMPR EXPL 1984-270; 1985-C258; 1986-C305; 1987-C245; 1996-C10; 1997-30
EMPR FIELDWORK 1986, pp. 125-133; 1987, pp. 131-132; 1988, pp. 159-165
EMPR PF (Eastfield Resources Ltd., Prospectus, Aug., 1987; see Mount Polley, 093A 008 - Imperial Metals Corporation information folder; see Nifty, 093D 006 - Wildrose Resources Ltd. Corporate Information)
GSC MAP 1424A
GCNL #113, 1991; #42(Feb.28), #59(Mar.25), #82(Apr.29), #129(July 7), #225(Nov.24), #231(Dec.2), 1997; #4(Jan.7), 1998
WWW <http://www.eastfieldgroup.com/wildrose/wrshome.html>
Imperial Metals Corporation, 1995 Annual Report

DATE CODED: 1989/03/13
DATE REVISED: 1997/04/02

CODED BY: DGB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 156**

NATIONAL MINERAL INVENTORY:

NAME(S): **141 MILE HOUSE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 00 30 N
LONGITUDE: 121 53 05 W
ELEVATION: 700 Metres

NORTHING: 5762552
EASTING: 576549

LOCATION ACCURACY: Within 1 KM
COMMENTS: Near 141 Mile House along the Caribou Road.

COMMODITIES: Hydromagnesite Magnesium

MINERALS

SIGNIFICANT: Hydromagnesite
COMMENTS: Hydromagnesite.
ASSOCIATED: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Residual Evaporite Industrial Min.
TYPE: F09 Playa and Alkaline Lake Evaporites
DIMENSION: 0030 Metres STRIKE/DIP:
COMMENTS: Area of hydromagnesite deposition is 30 metres across.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Hydromagnesite
Carbonate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Grab
COMMODITY _____ GRADE _____
Magnesium 12.1400 Per cent
COMMENTS: Sample A, 6 metres downstream from spring. Commodity is MgO. Also, 34.31 per cent calcium oxide present.
REFERENCE: Open File 1987-13, page 67.

CAPSULE GEOLOGY

Hydromagnesite is reported to occur in the area of 141 Mile House along the Cariboo Road. White and cream colored hydromagnesite is deposited in an area over 30 metres across and down-slope from a mineral spring near 141 Mile House and east of the railway tracks. The material contains freshwater shells and is predominantly calcium carbonate with magnesian carbonate and a small amount of alkalic carbonate. The material is earthy and granulated, similar to the impure hydromagnesite underlying the larger hydromagnesite deposits in central and northern British Columbia. Sample A was collected about 6 metres downstream from the spring and Sample B was collected about 30 metres downstream (all values are in per cent):

Sample A - 12.14 MgO; 34.31 CaO; 1.32 FeO; 3.58 Fe2O3; 8.78 SiO2; 0.10 Na2O; 0.58 K2O; Tr SO3; 36.84 CO2; 3.1 H2O; Nil LOI.
Sample B - 5.00 MgO; 43.32 CaO; 0.73 FeO; 0.64 Fe2O3; 5.22 SiO2; 0.02 Na2O; 0.36 K2O; Tr SO3; 35.10 CO2; 6.06 H2O; 4.01 LOI.

BIBLIOGRAPHY

EMPR FIELDWORK 2000, pp. 327-336
EMPR OF 1987-13, p. 67
GSC MAP 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 250
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 118, pp. 25,39,40,41

DATE CODED: 1986/10/22
DATE REVISED: 1989/02/16

CODED BY: BG
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 157**

NATIONAL MINERAL INVENTORY:

NAME(S): **ST. JOSEPH'S MISSION**, WILLIAMS LAKE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 04 00 N
LONGITUDE: 121 56 25 W
ELEVATION: Metres

NORTHING: 5768983
EASTING: 572641

LOCATION ACCURACY: Within 500M

COMMENTS: Southeast of Williams Lake near St. Joseph's Mission on a serpentinite

COMMODITIES: Magnesite

MINERALS

SIGNIFICANT: Magnesite
ALTERATION: Serpentine Carbonate
COMMENTS: Drilling confirmed serpentinite over this area.
ALTERATION TYPE: Serpentin'zn Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M07 Ultramafic-hosted talc-magnesite
DIMENSION: 1375 x 0900 x 0060 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	Unnamed/Unknown Informal
Permian			

LITHOLOGY: Serpentinite
Chert
Limestone
Greenstone
Argillite

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

A group of twenty-four mineral claims were located near St. Joseph's Mission, southeast of Williams Lake.
During 1941, the British Columbia Magnesium Co. Ltd. drill tested a ridge of serpentinitized rock within the Cache Creek Group. A total of 366 metres of diamond drilling confirmed serpentinite over an area greater than 900 by 1375 metres and to a depth of at least 60 metres. The extent and grade of the magnesian carbonate alteration is not reported.

BIBLIOGRAPHY

EMPR PF (093A157 *Correspondence from JMC 1941)
EMPR AR *1941-78
GSC MAP *3-1961; 1424A
EMPR OF 1987-13, p. 46

DATE CODED: 1986/10/24
DATE REVISED: 1989/02/16

CODED BY: BG
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 158**

NATIONAL MINERAL INVENTORY:

NAME(S): **CUNNINGHAM CREEK BARITE** TREHOUSE CREEK, BAR

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 55 30 N
LONGITUDE: 121 20 02 W
ELEVATION: 1707 Metres

NORTHING: 5865227
EASTING: 612003

LOCATION ACCURACY: Within 500M

COMMENTS: Barite exposure near the headwaters of Trehouse Creek on the western slopes of Roundtop Mountain, about 1.5 kilometres east of Cunningham Creek, 80 kilometres east of Quesnel (Assessment Report 7106).

COMMODITIES: Barite

MINERALS

SIGNIFICANT: Barite
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary Industrial Min.
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Hardscrabble Mtn Succession	

LITHOLOGY: Siltstone
Argillite
Phyllite
Micaceous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Complexly deformed metasediments of the Proterozoic to Early Paleozoic Snowshoe and Cariboo groups comprise the rocks in the area. At the Cunningham Creek Barite occurrence, the rock units strike northwesterly with steep northeasterly dips. Faults strike north to northeast. The oldest rocks on the property consist of dark siltstone, quartzite and shale of the Midas Formation of the Upper Proterozoic to Lower Cambrian Cariboo Group. Marble of the Bralco succession of the Proterozoic to Early Paleozoic Snowshoe Group has also been observed. The youngest rocks are black siltstone, argillite, phyllite and micaceous quartzite of the Hardscrabble succession of the Snowshoe Group, and is the host for barite.

The barite is 2 to 2.5 metres thick, thick bedded to massive. It strikes northwest and dips 65 degrees northeast and is very pale grey to cream coloured (D. Hora, S. Butrenchuk, personal communication, 1993).

In 1995, with Explore B.C. Program support, Miner River Resources Ltd. carried out a soil geochemical survey and diamond drilled 677 metres in 7 holes to test the property's potential for sedimentary exhalative silver-lead-zinc mineralization. Although a favourable environment appears to be present, drilling was disappointing and intersected much faulting (Explore B.C. Program 95/96 - M53).

BIBLIOGRAPHY

EMPR ASS RPT 6314, *6545, *7106, 19793, 23315, 23806, 24330
EMPR BULL 34; 38
EMPR Explore B.C. Program 95/96 - M53
EMPR OF 2001-11
EMPR PF (*Property description)
GSC MAP 562A; 1424A; 3-1961
GSC MEM 149
GSC OF 781
WWW <http://www.eagleplains.bc.ca/bc.htm>;

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 253
REPORT: RGEN0100

BIBLIOGRAPHY

<http://www.infomine.com/index/properties/bar.html>
EMPR OF 2000-22

DATE CODED: 1993/11/03
DATE REVISED: 1996/11/04

CODED BY: GO
REVISED BY: VAP

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 159**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIC BARITE**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 57 05 N
LONGITUDE: 121 21 34 W
ELEVATION: 1227 Metres

NORTHING: 5868123
EASTING: 610218

LOCATION ACCURACY: Within 500M

COMMENTS: Showing just west of Cunningham Creek, exposed by a placer operation, about 78 kilometres east of Quesnel (Property File - Location map).

COMMODITIES: Barite

MINERALS

SIGNIFICANT: Barite
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary Industrial Min.
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Hardscrabble Mtn Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Siltstone
Argillite
Phyllite
Micaceous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Complexly deformed metasediments of the Proterozoic to Early Paleozoic Snowshoe and Cariboo groups comprise the rocks in the area. At the Vic Barite occurrence, the rock units strike northwesterly with steep northeasterly dips. Faults strike north to northeast. The oldest rocks on the property consist of dark siltstone, quartzite and shale of the Midas Formation of the Upper Proterozoic to Lower Cambrian Cariboo Group. Marble of the Bralco succession of the Proterozoic to Early Paleozoic Snowshoe Group has also been observed. The youngest rocks are black siltstone, argillite, phyllite and micaceous quartzite of the Hardscrabble succession of the Snowshoe Group, and is the host for barite.

The barite is 0.25 to 1.0 metres thick, laminated to thin bedded and siliceous and is very pale grey to cream coloured (D. Hora, S. Butrenchuk, personal communication, 1993). See Vic (093A 070) for related information.

BIBLIOGRAPHY

EMPR ASS RPT 6314, 6545, 7106
EMPR OF 2001-11
EMPR PF (*Property description and location map)
GSC MAP 562A; 1424A; 3-1961
GSC MEM 149
GSC OF 781
EMPR OF 2000-22

DATE CODED: 1993/11/03
DATE REVISED: 1993/11/03

CODED BY: GO
REVISED BY: DH

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 160**

NATIONAL MINERAL INVENTORY:

NAME(S): **LLOYD-NORDIK**, LLOYD 2, LLOYD 3,
NORDIK SOUTHEAST, ROAD

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093A12E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 34 11 N
LONGITUDE: 121 38 29 W
ELEVATION: 1066 Metres

NORTHING: 5825274
EASTING: 592078

LOCATION ACCURACY: Within 500M

COMMENTS: Area of drilling, 1.5 kilometres north of the Mount Polley deposits (093A 008), west of Polley Lake, about 57 kilometres northeast of the community of Williams Lake (Assessment Report 23475).

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite
ALTERATION: K-Feldspar
ALTERATION TYPE: Potassic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Breccia Disseminated
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
DIMENSION: 250 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralized breccia zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Altered Volcanic Rock
Porphyritic Sill
Breccia
Porphyritic Dike
Diorite
Monzonite

HOSTROCK COMMENTS: Mount Polley stock.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel

INVENTORY

ORE ZONE: LLOYD 2 REPORT ON: Y
CATEGORY: Inferred YEAR: 1996
QUANTITY: 7190000 Tonnes
COMMODITY GRADE
Gold 0.2430 Grams per tonne
Copper 0.3100 Per cent

COMMENTS: Preliminary geological resource estimate for the Lloyd 2 target using a 0.10 per cent copper cutoff grade. At 0.25 per cent copper cutoff, the resource is 2,930,000 of 0.401 grams per tonne gold and 0.531 per cent copper.

REFERENCE: George Cross News Letter No.60 (March 25), 1996.

ORE ZONE: LLOYD 2 REPORT ON: Y
CATEGORY: Indicated YEAR: 1996
QUANTITY: 2500000 Tonnes
COMMODITY GRADE
Copper 0.5500 Per cent
Gold 0.3900 Grams per tonne

COMMENTS: Cutoff grade of 0.20 per cent copper.
REFERENCE: Exploration in BC 1996, page C10.

CAPSULE GEOLOGY

The Lloyd-Nordik property is located approximately 57 kilometres

CAPSULE GEOLOGY

northeast of Williams Lake and adjoins the Mount Polley property (093A 008) on the north and east. The occurrence is in the Quesnel Trough, a 30-kilometre wide, northwest trending, Mesozoic volcanic-sedimentary belt of regional extent that is fault bounded to the east by rocks of the Barkerville and Slide Mountain terranes, and to the west by Paleozoic rocks of the Cache Creek Terrane.

The current phase of exploration began in 1993 and focused mainly on a gold-bearing breccia 1.5 kilometres north of the Mount Polley pit location, called the Lloyd 2 zone. Mineralization occurs on the northern margin of the Mount Polley stock, a high-level alkalic intrusion that, locally, has imparted intense potassium feldspar flooding in the Upper Triassic Nicola Group rocks which it cuts.

The Lloyd 2 mineralized breccia zone has a minimum strike length of 250 metres along its northeast trend and appears to dip steeply to the northwest. The mineralized zone is composed of several lenses that appear to coalesce at the north end of the zone and diverge to the south; they are associated with porphyritic dikes and sills. Mineralization is concentrated in intensely potassium feldspar altered volcanic and dioritic to monzonitic intrusive rocks near intrusive contacts. It is open along strike at both ends. The breccia is composed of angular clasts of salmon-coloured potassium feldspar-flooded volcanic and intrusive lithologies healed by a magnetite>>chalcopyrite>pyrite matrix. There is generally a 1:1 relationship between gold and copper grades, but a narrow, high grade gold zone, that averaged 13.45 grams per tonne gold and 0.02 per cent copper over two metres, was intersected during last years drilling and will be tested again early this year (R. Lane, personal communication, 1996).

Preliminary resource estimates for the Lloyd 2 target carried out by Montgomery Consultants Ltd. are as follows (George Cross News Letter No. 60 (March 25), 1996):

Tonnes	Cu (%)	Au (g/t)	Cu cutoff (%)
7,190,000	0.310	0.243	0.10
4,950,000	0.396	0.319	0.15
3,920,000	0.455	0.359	0.20
2,930,000	0.531	0.401	0.25

During 1997, Big Valley Resources Inc. conducted diamond-drilling on the Lloyd 2 deposit and other zones on its Lloyd-Nordik property. The Lloyd 2 zone mineralization consists of pyrite and chalcopyrite in a monzonitic breccia healed with magnetite. Similar mineralization occurs at the Road showing at Mount Polley, immediately to the east. In March 1996 the company reported a preliminary resource estimate for the Lloyd 2 deposit of 7,190,000 tonnes grading 0.31 per cent copper and 0.243 grams per tonne gold (Information Circular 1998-1, page 25). An indicated resource is reported as 2.5 million tonnes grading 0.55 per cent copper and 0.39 grams per tonne gold, at a cutoff grade of 0.20 per cent copper (Exploration in BC 1996, page C10).

BIBLIOGRAPHY

EM EXPL 1996-C10; 1997-30
EMPR ASS RPT 20197, 23064, *23475, *24154
EMPR INF CIRC 1997-1, p. 27; 1998-1, p. 25
EMPR OF 1991-10; 1992-1; 1994-1; 1996-1
GSC MAP 1424A
GCNL *#60(Mar.25), 1996; #28(Feb.10),#55(Mar.19),#74(Apr.17),
#93(May 14),#108(June 5),#133(Jul.11), 1997
N MINER June 24, 1996; May 4, 1998
WWW <http://www.infomine.com/>
Chevron File

DATE CODED: 1996/02/04
DATE REVISED: 1997/05/07

CODED BY: GO
REVISED BY: RL

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093A 161**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANTLER CREEK**, HAZELTINE FLATS

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093A14W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 58 18 N
LONGITUDE: 121 25 45 W
ELEVATION: 1371 Metres

NORTHING: 5870273
EASTING: 605485

LOCATION ACCURACY: Within 500M

COMMENTS: A large trench cut at the historical location of Hazeltine Flats on Antler Creek, about 40 kilometres north of the community of Likely (Assessment Report 24604).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C02 Buried-channel placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Downey Succession	
Quaternary			Postglacial Sediments

LITHOLOGY: Gravel
Alluvium
Chloritic Schist
Phyllite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

In the Antler Creek area placer gold is mostly hosted near or on top of bedrock in postglacial fluvial gravels. Bedrock comprises mid-Paleozoic Downey Succession chloritic schist, marble and phyllite. The auriferous gravels are covered by 1 to 5 metres of barren fine-grained alluvium.

Bulk sampling at Hazeltine Flats (on the east side of Antler Creek) has revealed a probable placer gold reserve of 9158 grams in three zones in shallow postglacial gravels along a small bench. A total of 632 grams of gold was recovered from 666 cubic metres of auriferous gravels at this site.

BIBLIOGRAPHY

EMPR ASS RPT *24604
EMPR BULL 38
EMPR OF 2001-11
GSC MAP 1424A
GSC MEM 421

DATE CODED: 1996/07/09
DATE REVISED: 1996/07/09

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 162**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIP, V.I.P.**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A16W 093A15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 51 04 N
LONGITUDE: 120 30 05 W
ELEVATION: 1800 Metres

NORTHING: 5858633
EASTING: 668245

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of VIP claim group as they were in July 2000 (6 units of VIP 2 and 1 unit of VIP 4).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Arsenopyrite Chalcopyrite Bornite

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I01 Au-quartz veins I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Kaza Unnamed/Unknown Formation

LITHOLOGY: Phyllite
Greywacke
Schist
Argillite
Micaceous Feldspathic Quartzite
Conglomerate
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Cariboo Mountains

TERRANE: Cariboo

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1990

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

3.9000

Grams per tonne

REFERENCE: Assessment Report 21644.

CAPSULE GEOLOGY

The area of the VIP occurrence is underlain by rocks of the Hadrynian Kaza Group comprising phyllite, greywacke, argillite, schist and micaceous feldspathic quartzite. Minor pebble conglomerate and limestone also occur.

Five or six quartz veins ranging from 0.3 to 1 metre are reported to host arsenopyrite and possibly chalcopyrite and bornite. One vein is exposed on surface for 235 metres. The best gold assay obtained from the claims was 3.9 grams per tonne (Assessment Report 21644, Acme Assay Sheet and 1990 Working Map). Another sample yielded 1.5 grams per tonne gold and 111.8 grams per tonne silver (Assessment Report 21644). Erratic high values for lead, zinc, copper and bismuth are also associated with the occurrence.

BIBLIOGRAPHY

EMPR ASS RPT *21644
EMPR OF 1994-7
EMPR BULL 34, pp. 16-17; 38, pp. 23-24; 47, pp. 24-29
GSC MAP 1-1963; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1985/07/24

CODED BY: GSB
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093A 162**

MINFILE NUMBER: **093A 163**

NATIONAL MINERAL INVENTORY:

NAME(S): **UNLIKELY**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A11E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 44 25 N
LONGITUDE: 121 26 12 W
ELEVATION: 815 Metres

NORTHING: 5844523
EASTING: 605535

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite Arsenopyrite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Podiform Disseminated Massive
CLASSIFICATION: Sedimentary Volcanogenic Exhalative Syngenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Cambrian

GROUP

Snowshoe

FORMATION

Harveys Ridge Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Carbonaceous Phyllite
Carbonaceous Siltstone
Meta Mafic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 2001
SAMPLE TYPE: Grab

COMMODITY GRADE
Copper 0.3300 Per cent

REFERENCE: MEM Fieldwork 2001; Paper 2002-1, pages 59-82.

ORE ZONE: SHOWING REPORT ON: N

CATEGORY: Assay/analysis YEAR: 2001
SAMPLE TYPE: Chip

COMMODITY GRADE
Copper 0.1500 Per cent

REFERENCE: MEM Fieldwork 2001; Paper 2002-1, pages 59-82.

CAPSULE GEOLOGY

The Unlikely occurrence is located along the main road on the north shore of Cariboo Lake, approximately 2.25 kilometres southwest of the small community of Keithley Creek. The Unlikely occurs within the Late Proterozoic to Paleozoic Snowshoe Group, a dominantly siliciclastic package of continental derivation that most likely represents the distal western edge of Ancestral North America. This fault-bounded sequence is stratigraphically distinct from other packages around it and as such has been called the Barkerville Subterrane, a subset of the Kootenay Terrane, with which it shares many similarities. East of the Snowshoe Group, across the westerly-verging Pleasant Valley thrust, are rocks of the Kaza, Cariboo and Black Stuart groups, which also contain an abundance of siliciclastics, but with facies which suggest a more proximal continental shelf setting. Many of these units can be correlated with similar stratigraphy within Ancestral North American rocks. These rocks are placed within the Cariboo Subterrane, representing, like the Cassiar Terrane to which it belongs, a displaced piece of Ancestral North America. The west flank of the Snowshoe Group is occupied by the Quesnel Terrane, a composite volcanic-arc sequence dominated by Mesozoic mafic to intermediate volcanic rocks. It is separated from

CAPSULE GEOLOGY

the Snowshoe Group by the easterly-directed Eureka thrust fault along which are slivers of mafic and ultramafic rocks assigned to the Crooked Amphibolite. This latter package has been correlated with rocks of the Slide Mountain Terrane, an assemblage of ocean floor volcanic and sedimentary rocks which structurally straddle the Barkerville and Cariboo terrane lithologies along the Pundata Thrust north of Wells.

The Unlikely showing is hosted by a subdivision of the Snowshoe Group called Harveys Ridge succession. This unit is dominated by dark grey to black carbonaceous phyllites and siltstones, together with dark quartzite and lesser limestone and mafic to intermediate mafic volcanics. This unit is also host to the Frank Creek Cu-Zn-Pb-Ag-Au massive sulphide occurrence which is believed to represent Besshi-style mineralization and which occurs only 6 kilometres to the east.

Host rocks are grey to dark grey or black phyllites and siltstones. Locally, immediately adjacent to the sulphides is a "stripped" sequence of alternating light grey to white and dark grey siltstone from 0.5 to 1 centimetre thick. Green-mica bearing, ankerite altered and silicified? horizons up to several metres thick occur structurally above the showing. Chemical analyses suggests these are highly altered mafic volcanic sequences originally of alkaline composition.

The showing is about 1.5 metres wide at its thickest point and gossanous sediments and sulphide can be traced for approximately 10 to 15 metres. The strike of the sulphide horizon is parallel to schistosity or cleavage presumably of second phase origin. Bedding is tightly folded locally, but is essentially parallel to the main schistosity. The mineralized zone is highly siliceous and appears to be silicified Harveys Ridge lithologies. The southwest part of the mineralized zone contains the highest concentrations of sulphides, with one 1.5 by 3 metre area containing zones over 50 per cent sulphide, and averaging between 20 and 50 per cent. Sulphide content decreases to the northeast and disappears into the "stripped" Harveys Ridge lithology described above.

Sulphides consist of pyrite, pyrrhotite, arsenopyrite and chalcopyrite. Copper content varies from 0.05 to 0.3 per cent and some of the higher copper values are associated with anomalous gold (Fieldwork 2001). Sulphides commonly appear finely disseminated and have a dull lustre, although they are locally recrystallized into coarser masses. Sulphides also form more concentrated horizons or discontinuous lenses parallel to the main schistosity.

BIBLIOGRAPHY

*MEM Fieldwork 2001; Paper 2002-1; pages 59-82
MEM Fieldwork 2000; Paper 2001-1, pages 31-50
MEM OF 2001-11
GSC MEM 421

DATE CODED: 2002/01/11
DATE REVISED: 2002/01/11

CODED BY: FF
REVISED BY: FF

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093A 200**

NATIONAL MINERAL INVENTORY:

NAME(S): **ART**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093A02E 092P15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 00 16 N
LONGITUDE: 120 36 57 W
ELEVATION: 1340 Metres

NORTHING: 5764216
EASTING: 663647

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location is the central corner post shared by the four Art claims, 1 to 4.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite
ASSOCIATED: Specularite Arsenopyrite Quartz
ALTERATION: Chlorite Epidote Saussurite Siderite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Rhyodacite
Porphyritic Augite Andesite Flow
Phyllite
Quartz Diorite
Shale
Andesitic Basaltic Dike
Granodiorite
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Art claims are located about 14 kilometres north of the east end of Canim Lake. Volcanic and sedimentary rocks of the Triassic to Jurassic Nicola Group are mineralized with bornite, chalcopyrite and pyrite in chlorite-epidote-saussurite altered zones.

The western side of the Art property is underlain by porphyritic augite andesite flows interbedded with black phyllite and shale. These are cut by andesitic to basaltic dikes and a quartz dioritic to granodioritic stock. The centre of the claim is underlain by light grey-blue, fine-grained rhyodacite. Most of the mineralization on the property occurs in outcrops of the rhyodacite at the central legal corner post of the four claims. In addition to minor chalcopyrite, bornite and pyrite, traces of arsenopyrite and specularite were observed (Assessment Report 25800). The phyllite also carries rare sulphides and siderite in quartz veins that crosscut bedding.

The Art property was staked by David Ridley, and rock sampling and some mapping was done in 1997. Mandalay Resources Corporation conducted a geological, geophysical and geochemical exploration program on the property in 1998.

BIBLIOGRAPHY

EMPR ASS RPT *25800
EMPR OF 2002-15

DATE CODED: 2001/03/20
DATE REVISED: 2001/04/03

CODED BY: JMR
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 001**

NATIONAL MINERAL INVENTORY: 093B1 Stn1

NAME(S): **LAYERS**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B01W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 13 54 N
LONGITUDE: 122 16 23 W
ELEVATION: 457 Metres

NORTHING: 5787054
EASTING: 549647

LOCATION ACCURACY: Within 1 KM

COMMENTS: On Lot 4727, approximately 2.4 kilometres south of mouth of Whiskey Creek.

COMMODITIES: Building Stone

Aggregate

MINERALS

SIGNIFICANT: Chalcedony

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform

CLASSIFICATION: Sedimentary

SHAPE: Tabular

Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Banded Chert
Argillite
Limestone
Meta Basalt

HOSTROCK COMMENTS: The Cache Creek Group is Carboniferous to Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Layers deposit, in south central British Columbia, is approximately 2.4 kilometres south of the mouth of Whiskey Creek.

The region is underlain by the, generally poorly exposed, Carboniferous to Jurassic Cache Creek Group. The Cache Creek Group is complexly faulted and folded and consists of banded chert, argillite, limestone and chlorite-rich rocks considered to be metabasalt. Chert with interbedded slaty argillite is exposed on the east bank of the Fraser River south of Hargreaves. These rocks are folded about north trending axes and are flat lying or gently dipping.

The building stone produced from the Layers deposit came from chert beds ranging in thickness between 0.6 centimetres and 20.3 centimetres. The chert beds range in color through red, rust, cream, green and dark grey colours. Films and thin interbeds of slaty argillite occur within the chert horizon. During the period 1966 to 1974 a crushing plant produced chips for use as exposed aggregate and stucco dash. No production figures are available.

BIBLIOGRAPHY

EMPR AR *1966-261; 1967-300
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEEVIL, GM**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 30 42 N
LONGITUDE: 122 13 33 W
ELEVATION: 1372 Metres

NORTHING: 5818231
EASTING: 552538

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite
ASSOCIATED: Quartz
ALTERATION: Epidote Malachite
ALTERATION TYPE: Oxidation Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured Sheared
COMMENTS: Mineralization occurred during deformation and metamorphism.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Lower Jurassic	Cache Creek	Undefined Formation	Granite Mountain Pluton
ISOTOPIC AGE: 204 +/- 6 Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Hornblende Cretaceous			Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Quartz Vein
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Spec. Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The Keevil zone is located near the eastern margin of the Stikinia Terrane east of Granite Mountain in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton.

Mineralization in the pluton consists mainly of pyrite, chalcopyrite and molybdenite deposited in stockworks in four mineralizing phases during deformation and metamorphism.

The Keevil zone is located in the eastern portion of the Granite Mountain Pluton. Chalcopyrite, malachite and pyrite occur as disseminations and coatings on joint surfaces in the sheared quartz diorite. Several narrow but strong quartz veins carry molybdenite mineralization. Epidote alteration is widespread.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT *597, *744, *959, *1565, *1587, *1596, 25333, 25542
EMPR GEM 1969-172

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 264
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (See 93B General File - Property Map of the McLeese Lake
Area, 1970)
GSC MAP 12-1959; 1424A; 1538G
CIM SPEC Vol. *15, 1976, p. 195

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 003**

NATIONAL MINERAL INVENTORY: 093B9 Cu2

NAME(S): **GUNN**, HD, HAS,
FEE

MINING DIVISION: Cariboo

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093B09E
BC MAP:
LATITUDE: 52 30 12 N
LONGITUDE: 122 14 02 W
ELEVATION: 1311 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

UTM ZONE: 10 (NAD 83)

NORTHING: 5817299
EASTING: 552002

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite Chlorite
ALTERATION TYPE: Oxidation Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0136 Metres
COMMENTS: Overall length of mineralized band.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Lower Jurassic			Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional
Stikine
PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: GUNN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1968
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Copper 0.2000 Per cent
COMMENTS: Averaged from drill holes #8 and #9 in shear zone.
REFERENCE: Assessment Report 1641.

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Indicated YEAR: 1971
QUANTITY: 861745 Tonnes
COMMODITY GRADE
Copper 0.2800 Per cent
COMMENTS: Drill indicated in 2 zones.
REFERENCE: SMF Jan.17, 1972 - Gunn Mining Ltd., E.P. Sheppard, March 10, 1971.

CAPSULE GEOLOGY

The Gunn prospect is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant

CAPSULE GEOLOGY

rock types in the region belong to the Mississippian to Triassic Cache Creek Group. These consist of metabasalt, limestone and argillaceous metasediments, intruded by the diorite to quartz diorite Granite Mountain pluton. Jurassic sedimentary rocks overlap both the Cache Creek and Quesnellia terranes to the north and east of the pluton. To the west older rocks are largely obscured by plateau basalt of probable Miocene age.

The Granite Mountain Pluton has been regionally metamorphosed (greenschist facies) and deformed along with the enclosing Cache Creek Group. The Cache Creek Group and the margins of the Granite Mountain Pluton record effects of ductile deformation. The main body of the pluton has been cataclastically deformed.

Mineralization in the pluton consists mainly of pyrite, chalcopyrite and molybdenite deposited in stockworks in four mineralizing phases during deformation and metamorphism.

The Gunn prospect is underlain by quartz diorite of the Granite Mountain Pluton in which two zones of mineralization have been detected. Malachite, probably after chalcopyrite, occurs in a shear zone where a stockwork of quartz and quartz-chlorite veins has developed. Two drill holes in this zone averaged 0.2 per cent copper (Assessment Report 1641). The second zone is a band containing malachite and lesser azurite. The zone is parallel to the foliation of the Granite Mountain Pluton over a distance of about 60 meters, and then deflects and extends along a quartz vein for 76 meters. The quartz vein is 7 to 20 centimetres wide and contains molybdenite. Chalcopyrite, chalcocite and pyrite mineralization in the band occurs as disseminations and on talcose slip surfaces.

Drill indicated reserves for the A and B zones in 1971 were 861,745 tonnes grading 0.28 per cent copper (Statement of Material Facts January 17, 1972 - Gunn Mining Ltd., E.P. Sheppard, March 10, 1971).

BIBLIOGRAPHY

- EM EXPL 1998-A1-A15
- EM OF 1999-7
- EMPR AR 1967-121; 1968-151
- EMPR ASS RPT *1641, *1680, 8185, 10548, 12656
- EMPR EXPL 1982-276; 1984-295
- EMPR GEM 1970-205; 1971-139; 1972-336
- EMPR PF (See 93B General File - Property Map of the McLeese Lake Area, 1970; Clipping, unknown source, Aug., 1971; I.P. Profiles, Geochem Surveys, R.E.M. Traverses, Claim Map and Geology Map, Canadian Superior, 1972; Geochemical Survey Pb, unknown date and source)
- EMR MIN BULL MR *181 p.86, 223 B.C. 208
- EMR MP CORPFILE (Gunn Mines Ltd.; United Gunn Resources Ltd.; Gibraltar Mines Limited; Cuisson Lake Mines Limited)
- EMR MP RESFILE (Gunn Zone A and B)
- GSC MAP 12-1959; 1424A; 1538G
- CIM SPEC Vol. 15, 1976, p. 195

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 004**

NATIONAL MINERAL INVENTORY: 093B8 Cu1

NAME(S): **IRON MOUNTAIN, BRENDA, LAST CHANCE,**
IRON MASK, MAYDAY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B08W
BC MAP:
LATITUDE: 52 27 51 N
LONGITUDE: 122 15 30 W
ELEVATION: 1030 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of area containing showings and workings 31 kilometres south of Quesnel (Property File - J.K. Crosby 1956).

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5812925
EASTING: 550387

COMMODITIES: Copper Iron Magnetite Molybdenum

MINERALS

SIGNIFICANT: Pyrite Magnetite Chalcopyrite Molybdenite
ASSOCIATED: Garnet Pyroxene Epidote Quartz
ALTERATION: Garnet Pyroxene Epidote Hematite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Disseminated Vein
CLASSIFICATION: Skarn Replacement Hydrothermal Industrial Min.
TYPE: L04 Porphyry Cu ± Mo ± Au K01 Cu skarn
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 1500 x 0060 x 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Maximum dimension of lenses.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	Granite Mountain Pluton
Lower Jurassic			
ISOTOPIC AGE: 204 +/- 6 Ma			
DATING METHOD: Potassium/Argon			
MATERIAL DATED: Hornblende			
Cretaceous			Sheridan Creek Pluton

LITHOLOGY: Schist
Marble
Granite
Basaltic Tuff
Volcanic Breccia

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Cache Creek Stikine
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE:

CAPSULE GEOLOGY

The Iron Mountain showing is located near the eastern margin of the Stikinia Terrane 31 kilometres south of Quesnel in south central British Columbia. The dominant rock types in the region are meta-basalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. Jurassic sedimentary rocks overlap both the Cache Creek and Quesnellia terranes to the north and east of the plutons. Older rocks are largely obscured by plateau basalt of probable Miocene age to the west.

The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group. The Cache Creek Group and the margins of the Granite Mountain Pluton record effects of ductile deformation. The main body of the pluton has been cataclastically deformed.

The Iron Mountain showing is underlain by thin bedded metamorphosed basaltic tuffs and related rocks ("greenschist"), volcanic breccia and marble of the Cache Creek Group and, in the north, granite. Mineralization consists of magnetite, specular

CAPSULE GEOLOGY

hematite and chalcopyrite with garnet, pyroxene and epidote as contact metasomatic lensoid deposits within marble and schist. The lenses range in size from a few centimetres in width up 1.2 metres and up to 60 metres long and have been traced over a distance of over 1.5 kilometres. The lenses are conformable with the foliation of the enclosing rocks. Chalcopyrite and pyrite occur disseminated throughout the schists and along shears in the intrusive rocks. Pyrite, chalcopyrite and molybdenite are also present in quartz veins.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMR AR 1925-A156; 1956-33; 1957-16; 1966-120; 1967-121
EMPR ASS RPT 1873, 2305, 2382, 3746, 10585
EMPR EXPL 1982-277
EMPR GEM 1969-368; 1972-335
EMPR PF (Crosby, J.K., (1956): *Report on the Iron Mountain Area near McLeese Lake; Geology Map (sketch), 1969; Philp, R.H.D., (1970): Report on the Brenda, Mayday, Maybe, Ted and Tell Groups, Ensbrook Mines Limited, Prospectus; Geochemical Survey Report on At and It claims, Philp, R.H.D., 1970; 93B General File - Property Map of the McLeese Lake Area, 1970; Ensbrook Mines Ltd. Prospectus, 1970)
EMR MP CORPFILE (The Cariboo Gold Quartz Mining Company, Limited; Earlcrest Resources Ltd.; Ballinderry Explorations Ltd.; Falcon Explorations Limited)
GSC MAP 12-1959; 1424A; 1537G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **MANDERFIELD**, COPPER KING, POLLYANNA,
GIBRALTAR

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 31 11 N
LONGITUDE: 122 16 30 W
ELEVATION: 1195 Metres

NORTHING: 5819093
EASTING: 549193

LOCATION ACCURACY: Within 500M

COMMENTS: Approximately 305 metres north of the Pollyanna deposit, possibly part of the present Pollyanna pit.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0006 Metres
COMMENTS: Mineralized quartz vein is 6 metres wide.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Lower Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

Cretaceous

Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

METAMORPHIC TYPE: Regional

Stikine

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Plateau

GRADE: Greenschist

CAPSULE GEOLOGY

The Manderfield showing is located near the eastern margin of the Stikinia Terrane 305 metres north of the Pollyanna deposit (093B 006).

The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton.

The Manderfield showing consists of a six metre wide quartz vein on the west side of a 15 metre wide shear within quartz diorite. Secondary copper minerals coated the vein which contained chalcopyrite. It appears that the location of this vein is now within the Pollyanna pit of the Gibraltar Mine.

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EM OF 1999-7
EMPR AR 1925-A156; 1950-A106
EMPR ASS RPT 10567, 12452, *15945
EMPR EXPL 1984-295; 1987-C261

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 270
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 12-1959; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 006**

NATIONAL MINERAL INVENTORY: 093B9 Cu1

NAME(S): **POLLYANNA (GIBRALTAR)**, POLLYANNA, COPPER KING,
RAINBOW, GG, GIBRALTAR,
POLLYANNA-GM, GM, CONNECTOR,
MCLEESE LAKE, POLLYANNA GIB EAST CONNECTOR, PGEC

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 52 30 55 N
LONGITUDE: 122 15 41 W
ELEVATION: 1228 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5818608
EASTING: 550121

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of pit (Property File 093B 012, Drummond 1971).
See Gibraltar (093B 012) for production. See also Gibraltar West
(093B 007), Gibraltar North (093B 011), Granite Lake (093B 013) and
Sawmill (093B 051).

COMMODITIES: Copper Molybdenum Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Molybdenite Cuprite Bornite
Magnetite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Epidote Malachite Azurite Carbonate
ALTERATION TYPE: Chloritic Epidote Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Lower Jurassic	Cache Creek	Undefined Formation	Granite Mountain Pluton
ISOTOPIC AGE: 204 +/- 6 Ma			
DATING METHOD: Potassium/Argon			
MATERIAL DATED: Hornblende			
Cretaceous			Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary
Trondhjemite
Tonalite

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age
reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional

Stikine
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Plateau

GRADE: Greenschist

INVENTORY

ORE ZONE: PGEC

REPORT ON: Y

CATEGORY: Combined	YEAR: 1998
QUANTITY: 45363514 Tonnes	
COMMODITY	<u>GRADE</u>
Copper	0.2700 Per cent
Molybdenum	0.0100 Per cent

COMMENTS: Proven (39.8 million tonnes) and probable (5.6 million tonnes)
reserves for Pollyanna-Gib East Connector; cutoff 0.16 per cent
copper.

REFERENCE: Exploration in BC 1998, page A10 (from Boliden Limited).

INVENTORY

ORE ZONE: POLLYANNA	REPORT ON: Y
CATEGORY: Combined	YEAR: 1998
QUANTITY: 32894982 Tonnes	
COMMODITY	GRADE
Copper	0.3150 Per cent
Molybdenum	0.0100 Per cent

COMMENTS: Proven (31.1 million tonnes) and probable (1.8 million tonnes) reserves for Pollyanna; cutoff 0.20 per cent copper.
 REFERENCE: Exploration in BC 1998, page A10 (from Boliden Limited).

CAPSULE GEOLOGY

The Pollyanna deposit is located near the eastern margin of the Stikine Terrane west of Granite Mountain in south-central British Columbia. The Stikine Terrane is dominantly oceanic and became amalgamated with the Quesnel Terrane to the east probably during Triassic times. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Late Triassic Granite Mountain pluton and the (?) Cretaceous Sheridan Creek pluton. The Granite Mountain pluton has been dated at 204 +/- 6 Ma by potassium-argon dating of hornblende (CIM Special Volume 15 page 195). Jurassic sedimentary rocks overlap both the Cache Creek and Quesnel terranes to the north and east of the plutons. Older rocks are largely obscured by Plateau Basalt of probable Miocene age, to the west.

The Granite Mountain pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group. The Cache Creek Group and the margins of the Granite Mountain pluton record effects of ductile deformation. The main body of the pluton has been cataclastically deformed.

The Pollyanna deposit is one of the five orebodies that comprise the Gibraltar mine, the others are: Granite Lake (093B 013), Gibraltar West (093B 007), Gibraltar North (093B 011) and Gibraltar East (093B 012). The orebodies are hosted by the Granite Mountain pluton with ore mineralization almost entirely confined to the Mine Phase Tonalite portion of the Granite Mountain pluton. The Mine Phase Tonalite appears to form a thin outer shell about the main body of the pluton and contains approximately 30 per cent quartz, 50 per cent saussuritized plagioclase feldspar and 20 per cent chlorite. Varying degrees and types of alteration are present and readily visible in the Mine Phase Tonalite. Economic sulphide mineralization in the Mine Phase Tonalite is usually associated with sericitization and chloritization. The tonalite has been strongly deformed by shearing and mineralization is strongly associated with this deformation. Mineralization is generally accompanied by alteration and is confined to deformational structures. These structures comprise small and large shear zones, foliation planes, short veins and various dilatant structures.

As a whole, the Gibraltar mineralized system is comprised of numerous structural hosts for economic mineralization ranging from highly mineralized shear zones to complex sets of sheeted shear veins commonly referred to as oriented stockworks. The oriented stockwork is the prevalent structural host within the Pollyanna Mineralized System.

Mineralization consists of pyrite, chalcopyrite, molybdenite, magnetite, bornite and cuprite. Associated alteration minerals are quartz, sericite, chlorite, epidote and carbonate. The Gibraltar deposits all show secondary oxidation and secondary enrichment with the formation of chalcocite as coatings and as replacement of pyrite and chalcopyrite.

Production figures indicate that silver and minor gold mineralization is associated with these orebodies (see Gibraltar East (093B 012) for figures). Total measured recoverable reserves in 1988 for all the orebodies were 183.24 million tonnes, grading 0.32 per cent copper and 0.009 per cent molybdenum (Placer Dome Inc., Annual Report 1988). As of December 31, 1992, mining reserves (proven and probable at cutoff of 0.20 per cent copper) of the Pollyanna were 33,112,250 tonnes of 0.322 per cent copper and about 0.008 per cent molybdenum. Mineral resources were 60,872,100 tonnes of 0.267 per cent copper and about 0.007 per cent molybdenum (CIM Special Volume 46, page 202).

Combined (proven and probable) reserves for Pollyanna are 47.7 million tonnes grading 0.300 per cent copper and 0.009 per cent molybdenum. Combined (proven and probable) leachable ore reserves of the Connector are 1.2 million tonnes, grading 0.372 per cent copper. Total mineable reserves in 1995 for all ore deposits are 179.0 million tonnes grading 0.297 per cent copper and 0.009 per cent

CAPSULE GEOLOGY

molybdenum (Gibraltar Mines Limited, Annual Report 1995).

In 1994, drilling (23 holes, 3150 metres) focused on induced polarization targets on two zones: the Pollyanna-GM zone immediately east of the Pollyanna pit, and the Connector zone between the Pollyanna and Gib-east zones. In 1995, drilling (37 holes, 4961 metres) was carried out on the Pollyanna, GM and Connector zones.

The Pollyanna Mineralized System which trends in an east-southeast direction into the GM claims, contains three major mineralized zones. The first zone, Zone A, has been identified as a high level (i.e. near surface) zone that contains abundant pyrite. Zone A is distinct from the other zones as it is comprised of a steeply dipping (60-70 degrees northeast) system containing variable amounts of chalcopyrite and molybdenite. This steep structure results in a sharp contact between the mineralized material and the non-mineralized material to the north.

The second zone which occurs south of Zone A is Zone B. This zone which is a shallower dipping system (0-20 degrees northeast) contains a relatively high amount of pyrite but usually less than that of Zone A. The primary sulphide assemblage is pyrite-chalcopyrite-molybdenite. Typically, in both Zones A and B, the pyrite acts as near surface blanket grading into a pyrite-chalcopyrite rich assemblage as depth increases.

The southernmost and broadest zone in the Pollyanna Mineralized System is Zone C. It is characterized by a shallow dipping (10-40 degrees southwest) magnetite-bornite-chalcopyrite +/- pyrite-rich assemblage indicative of a low sulphide regime in relation to Zones A and B.

Drillholes have also confirmed the presence of a mineralized zone between the north end of the Gibraltar East Pit and the Pollyanna Pit. The mineralization occurs in Mine Phase Tonalite which appears to grade into Leucocratic Phase and Granite Mountain Phase Trondhemite immediately south of the drillholes. The hostrock is variously altered with quartz, chlorite, sericite, epidote, carbonate and clay. A strong oxide zone was intersected by all drillholes and significant amounts of chrysocolla, malachite and limonite were observed. Although the oxidation is extensive it appears that very little leaching has occurred. Chalcopyrite and pyrite with minor amounts of chalcocite and molybdenite were observed below the oxide zone. All drillholes intersected ore grade mineralization of either leachable or millable material. The drilling supports the concept that a large barren core of trondhemite, surrounded by mineralized tonalite, exists between the various Gibraltar mines pits.

Westmin expects to mine about 30,000 tonnes of ore from the Pollyanna pit in 1997, as part of its staged process of mining on the property (T. Schroeter, personal communication, 1997).

Drilling during 1997 on the Connector zone added approximately 49 million tonnes of mineable sulphide reserves, representing an additional 3.3 years of mine life. Also, approximately 15 million tonnes of oxide reserves were outlined above the Connector zone sulphide ore, and will extend the life of the SX-EW plant by 6 to 7 years.

In mid-January 1999, Boliden began to shut down the mine, with full closure by February 1999. In April 1999, Taseko Mines Limited announced that they will acquire the Gibraltar mine.

Pollyanna Reserves as of December 31, 1998 are:

		Ore (tonnes)	Cu (%)	Mo (%)	Cutoff (%Cu)
Pollyanna	proven	31,101,205	0.317	0.010	0.20
	probable	1,793,777	0.285	0.008	0.20
	combined	32,894,982	0.315	0.010	0.20
PGEC	proven	39,758,018	0.271	0.010	0.16
	(Pollyanna-Gib probable	5,605,496	0.261	0.001	0.16
East Connector)	combined	45,363,514	0.270	0.010	0.16

(Exploration in BC 1998, page A10; from Boliden Limited).

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 1957-14-18; 1966-12; 1967-122
 EMPR ASS RPT 9101, 9173, 12452, 13123, 15569, 15712, *15945, 17050,
 18829, 20435, 23781, 23782, 24067, *24624, 25682, 25793
 EMPR BC METAL MM00010
 EMPR BULL 97
 EMPR EXPL 1984-295; 1987-C261,C262;; 1996-C5-C6; 1997-22; *1998-36,
 A1-A15
 EMPR GEM *1969-162-172; 1970-205; 1971-143; *1973-299-318; 1974-26,
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GSC MAP 12-1959; 1424A
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N MINER Jan.18, 1999
PR REL Taseko Mines Limited, Jan.7, 2003
WWW <http://www.hdgold.com/tkofl.htm>; [http://www.infomine.com/index/Gibraltar Mines Limited, Annual Report 1995](http://www.infomine.com/index/Gibraltar%20Mines%20Limited,%20Annual%20Report%201995)
Humphrey, F. (1968): Geology of the Pollyana Property, unpublished Ph.D. thesis, Stanford University
Simpson, R.Y. (1970): Geology of the Gibraltar - Pollyanna copper deposit; unpublished B.Sc. thesis, University of British Columbia, 43 pp.

DATE CODED: 1985/07/24
DATE REVISED: 1996/06/30

CODED BY: GSB
REVISED BY: TGS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093B 007**

NATIONAL MINERAL INVENTORY: 093B9 Cu1

NAME(S): **GIBRALTAR WEST, SUNSET, ZEPHYR,
PAN HILL, GIB-WEST, MCLEESE LAKE,
GREY**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 52 30 48 N
LONGITUDE: 122 18 21 W
ELEVATION: 936 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5818362
EASTING: 547108

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of pit (Property File 093B 012, Drummond 1971).
See Gibraltar (093B 012) for production. See also Pollyanna (093B
006), Gibraltar North (093B 011), Granite Lake (093B 013) and Sawmill
(093B 051).

COMMODITIES: Copper Molybdenum Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Molybdenite Cuprite Bornite

ASSOCIATED: Magnetite Pyrite
Quartz Chlorite Epidote
ALTERATION: Sericite Epidote Chlorite Azurite Malachite

ALTERATION TYPE: Carbonate Sericitic Chloritic Epidote Oxidation Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Lower Jurassic	Cache Creek	Undefined Formation	Granite Mountain Pluton
ISOTOPIC AGE: 204 +/- 6 Ma			
DATING METHOD: Potassium/Argon			
MATERIAL DATED: Hornblende			
Cretaceous			Sheridan Creek Pluton

LITHOLOGY: Tonalite
Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age
reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional

Stikine
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Plateau
GRADE: Greenschist

INVENTORY

ORE ZONE: GIBRALTAR WEST REPORT ON: Y

CATEGORY: Inferred YEAR: 1992
QUANTITY: 29483500 Tonnes
COMMODITY GRADE
Copper 0.3000 Per cent
Molybdenum 0.0070 Per cent

COMMENTS: Cut off 0.18 per cent copper.
REFERENCE: CIM Special Volume 46, page 202.

CAPSULE GEOLOGY

The Gibraltar West deposit is located near the eastern margin of
the Stikine Terrane west of Granite Mountain in south-central British
Columbia. The Stikine Terrane is dominantly oceanic and became
amalgamated with the Quesnel Terrane to the east probably during

CAPSULE GEOLOGY

Triassic times. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Late Triassic Granite Mountain pluton and the (?) Cretaceous Sheridan Creek pluton. The Granite Mountain pluton has been dated at 204 +/- 6 Ma by potassium-argon dating of hornblende (CIM Special Volume 15 page 195). Jurassic sedimentary rocks overlap both the Cache Creek and Quesnel terranes to the north and east of the plutons. Older rocks are largely obscured by Plateau Basalt of probable Miocene age, to the west. The Granite Mountain pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group. The Cache Creek Group and the margins of the Granite Mountain pluton record effects of ductile deformation. The main body of the pluton has been cataclastically deformed.

The Gibraltar West deposit is one of the five orebodies that comprise the Gibraltar mine, the others are: Granite Lake (093B 013), Pollyanna (093B 006), Gibraltar North (093B 011) and Gibraltar East (093B 012). The orebodies are hosted by the Granite Mountain pluton with ore mineralization almost entirely confined to the Mine Phase Tonalite portion of the Granite Mountain pluton. The Mine Phase Tonalite appears to form a thin outer shell about the main body of the pluton and contains approximately 30 per cent quartz, 50 per cent saussuritized plagioclase feldspar and 20 per cent chlorite. Varying degrees and types of alteration are present and readily visible in the Mine Phase Tonalite. Economic sulphide mineralization in the Mine Phase Tonalite is usually associated with sericitization and chloritization. The tonalite has been strongly deformed by shearing and mineralization is strongly associated with this deformation. Mineralization is generally accompanied by alteration and is confined to deformational structures. These structures comprise small and large shear zones, foliation planes, short veins and various dilatant structures.

Mineralization consists of pyrite, chalcopyrite, molybdenite, magnetite, bornite, and cuprite. Associated alteration minerals are quartz, sericite, chlorite, epidote, and carbonate. The Gibraltar deposits all show secondary oxidation and secondary enrichment with the formation of chalcocite as coatings and as replacement of pyrite and chalcopyrite.

As a whole, the Gibraltar mineralized system is comprised of numerous structural hosts for economic mineralization ranging from highly mineralized shear zones to complex sets of sheeted shear veins commonly referred to as oriented stockworks.

Production figures indicate that silver and minor gold mineralization is associated with these orebodies (see Gibraltar East (093B 012) for figures). Total measured recoverable reserves in 1988 for all the orebodies were 183.24 million tonnes, grading 0.32 per cent copper and 0.009 per cent molybdenum (Placer Dome Inc., Annual Report 1988). As of December 31, 1992, mineral resources of Gibraltar West were 29,483,500 tonnes of 0.300 per cent copper and about 0.007 per cent molybdenum (CIM Special Volume 46, page 202). Total mineable reserves in 1995 for all ore deposits are 179.0 million tonnes grading 0.297 per cent copper and 0.009 per cent molybdenum (Gibraltar Mines Limited, Annual Report 1995).

Diamond drilling in 1994 tested for deep ore grade mineralization along the southwest side of the Gibraltar West Stage 1 Pit. All eight drillholes confirmed the presence of a relatively deep mineralized zone. This zone is thought to be a part of the much larger Gibraltar North - Gibraltar West mineralized system which has been intersected in various places by diamond drilling along a southeast-northwest strike length of about 2.5 kilometres. Drilling results to date suggest that the system increases in size and grade towards the northwest (Assessment Report 24624). Mine Phase Tonalite was intersected throughout all of the drillholes. The host rock is variously altered with quartz, chlorite, sericite, epidote and carbonate. Most of the high grade copper mineralization is found to be associated with either chlorite, quartz-chlorite, quartz-sericite, or quartz-chlorite-sericite alteration. This alteration is generally associated with penetrative deformation, and in most cases, the strength of alteration and the amount of mineralization increased with the intensity of deformation. Chalcopyrite and pyrite were observed in all holes along with minor amounts of molybdenite.

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EMPR AR 1928-C197; 1957-17; 1959-23; 1966-121; 1967-122
EMPR ASS RPT 8185, 8222, 8894, 11577, 15611, 15712, *15796, 15849,
15945, 16285, 17050, 18829, 20435, 23781, 23782, 24067, *24624
EMPR BULL 97

BIBLIOGRAPHY

EMPR EXPL 1980-313; 1983-396; 1987-C260; *1998-A1-A15
EMPR GEM *1969-162-172; 1970-205; 1971-143; *1973-299-318
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EMPR PF (See 093B General File - Property Map of the McLeese Lake Area, 1970; Field Notes and sketches, Sunset Adit, from P. Eastwood's files, c. 1969; Drummond, A.D., (1971): *Geology of Gibraltar Mines Ltd.- A Summary; Drummond, A.D. et al (1972) Gibraltar - Regional Metamorphism, Mineralization, Hydrothermal Alteration and Structural Development; *Placer Dome Annual Report 1988; see 093B 012 for an extensive bibliography on Gibraltar mine)
EMR MP CORPFILE (Gibraltar Mines Ltd.; Major Mines Ltd.; Coast Silver Mines Ltd.; Canex Aerial Exploration Ltd.)
EMR MP RESFILE (Gibraltar West)
GSC MAP 12-1959; 1424A
CIM Special Volume 15, pp. 195-205; *46, pp. 201-213 (Bysouth, G.D., Campbell, K.V., Barker, G.E. and Gagnier, G.K., 1995)
PR REL Taseko Mines Limited, Jan.7, 2003
WWW <http://www.hdgold.com/tkofl.htm>; <http://www.infomine.com/index/>
Gibraltar Mines Limited, Annual Report 1995

DATE CODED: 1985/07/24
DATE REVISED: 1996/06/30

CODED BY: GSB
REVISED BY: TGS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093B 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **CONWAY**, COPPER KING, GG 17,
GG 18, HT 14 FR, GIBRALTAR

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 31 17 N
LONGITUDE: 122 16 43 W
ELEVATION: 1173 Metres

NORTHING: 5819276
EASTING: 548946

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing possibly encompassed by Gibraltar mine workings (093B 012).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Copper staining.
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
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>
Paleozoic-Mesozoic Lower Jurassic	Cache Creek	Undefined Formation	Granite Mountain Pluton
ISOTOPIC AGE: 204 +/- 6 Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Hornblende			
Cretaceous			Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Host rock not specifically mentioned, probably the Granite Mountain Pluton. The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The Conway showing is located near the eastern margin of the Stikinia Terrane near the Gibraltar Mine (093B 012) in south central British Columbia.

The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

This showing consisted of secondary copper minerals and chalcopyrite associated with quartz veining. It is likely that the showing has been obliterated by mining operations of the Gibraltar Mine.

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EM OF 1999-7
EMPR AR 1925-A156; 1950-A106
EMPR ASS RPT 10567, 12452, *15945
EMPR EXPL 1984-295; 1987-C261
GSC MAP 12-1959; 1424A; 1538G
CIM SPEC Vol. 15, 1976, p. 195

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 009**

NATIONAL MINERAL INVENTORY: 093B8 Cu2

NAME(S): **BJ, JP, BARB,
CLAUDE FR, VIV**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B08E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 24 03 N
LONGITUDE: 122 13 27 W
ELEVATION: 1021 Metres

NORTHING: 5805905
EASTING: 552784

LOCATION ACCURACY: Within 5 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Lower Jurassic			Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Quartz Diorite
Meta Basalt
Argillaceous Meta Sediment/Sedimentary
Limestone

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The BJ showing is located near the eastern margin of the Stikinia Terrane near McLeese Lake in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton.

The BJ showing is located south of the Granite Mountain Pluton underlain by a small quartz diorite stock which has intruded the Cache Creek Group. Sporadic mineralization of pyrite and chalcopyrite occurs in a quartz stockwork developed in the stock.

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EMR MP CORPFILE (Midnight Consolidated Mines Ltd.; Mt. Hyland Mines Ltd.)
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **AUSTRALIAN CREEK COAL**, AUSTRALIAN AUSTRALIAN CREEK,
WEST AUSTRALIAN CREEK, EAST AUSTRALIAN CREEK

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

LATITUDE: 52 43 35 N
LONGITUDE: 122 28 05 W
ELEVATION: Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: The latitude and longitude above indicate the approximate centre
(Cariboo Coalfield) of the Australian Creek area.

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5841967
EASTING: 535924

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Oligocene

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A03 Sub-bituminous coal
SHAPE: Irregular
MODIFIER: Folded Faulted
COMMENTS: Beds dip 15 to 25 degrees in east area. Folded into syncline and
possibly anticline. Possibly faulted.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Oligocene	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Coal
Claystone
Sandstone
Conglomerate
Diatomite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Overlap Assemblage	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Post-mineralization
COMMENTS: Suspect Terrane Overlap.	GRADE: Sub-Bituminous

CAPSULE GEOLOGY

The Australian prospect is underlain by Oligocene sediments containing coal measures which were deposited in a basin developed over Paleozoic and Mesozoic rocks of the Intermontane belt during the Tertiary Period. The present distribution of the sediments is mainly confined to the Fraser River valley, where the river has cut down through younger volcanic and sedimentary rocks.

Coal in the Australian Creek area is present in the Lower Fraser River Member (Lower Oligocene) interbedded with claystone, sandstone, and minor conglomerate and diatomite. The coal is sub-bituminous "B" and "C" and contains a number of rock partings and lenses. A coal zone 4.8 metres to 13.2 metres thick was encountered by drilling in the West Australian Creek area. The ratio of coal to total partings varies from 1.0 to 27.50 (average 75 per cent coal, 25 per cent clay partings). Two major coal zones were penetrated in the East Australian Creek area. The zones are 4.2 metres and 21.9 metres thick and also contain numerous clay partings. The coal contains 5.6 per cent to 18.8 per cent moisture, 30.0 per cent to 49.8 per cent volatile matter, 28.4 per cent to 52.2 per cent fixed carbon, 0.6 per cent to 29.4 per cent ash and 1.0 per cent to 1.6 per cent sulphur. The heat value ranges from 15,630 kilojoules per kilogram to 29,215 kilojoules per kilogram.

The structure in the West Australian Creek area consists of a northeast to southwest trending, southwest plunging syncline with dips on the limbs of approximately 10 degrees. Beds dip 15 degrees to 25 degrees northeast in the East Australian Creek area. Exposures on Australian Creek indicate the presence of an anticline with limbs dipping 25 to 45 degrees. A fault zone is postulated to cut through the area.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 281
REPORT: RGEN0100

CAPSULE GEOLOGY

Reserve estimates are included with the Quesnel coal prospect
(093B 036).

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EMPR PF (See 93G General File - Quesnel Area)
GSC P *78-1B; 89-4
GSC MAP 12-1959; 1424A; 1538G
EMPR AR 1924-125-127

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **GIBRALTAR NORTH**, GIB-NORTH, JAN-SUMMIT,
GREY, GIBRALTAR SUMMIT,
GIBRALTAR WEST EXTENSION, MC LEESE LAKE

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:
LATITUDE: 52 31 42 N
LONGITUDE: 122 18 53 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Located 2 kilometres northwest of Gibraltar East (093B 012).
See also Pollyanna (093B 006), Gibraltar West (093B 007) and Sawmill
(093B 051).

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5820024
EASTING: 546489

COMMODITIES: Copper Gold Silver Zinc Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Pyrite Molybdenite
ASSOCIATED: Quartz
ALTERATION: Chlorite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
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>
Paleozoic-Mesozoic Lower Jurassic	Cache Creek	Undefined Formation	Granite Mountain Pluton
ISOTOPIC AGE: 204 +/- 6 Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Hornblende Cretaceous			Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age. Isotopic
age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Plutonic Rocks Cache Creek
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: GIBRALTAR NORTH REPORT ON: Y
CATEGORY: Inferred YEAR: 1992
QUANTITY: 92714300 Tonnes
COMMODITY: Copper GRADE: 0.3650 Per cent
COMMENTS: Cut off of 0.18 per cent copper.
REFERENCE: CIM Special Volume 46, page 202.

CAPSULE GEOLOGY

The Gibraltar-North is located near the eastern margin of the Stikinia Terrane west of Granite Mountain in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.
The Jan-Summit showing consists of a zone of chalcopyrite and molybdenite mineralization hosted in quartz diorite of the Granite Mountain Pluton towards its western margin.

CAPSULE GEOLOGY

Samples from drilling in the central area of the Jan and Summit claim groups in 1991 averaged 3.4 grams per tonne silver and copper assayed up to 0.82 per cent over 93 metres (George Cross News Letter #153, Aug. 9, 1991).

In 1991, the East Stage III pit from Gibraltar mines will be extended to the east end of the Summit claims.

Deep but high-grade ore was discovered in a large shear zone in a new orebody called Gibraltar North. Unlike the other orebodies, this has no significant molybdenite, but has significant zinc and precious metals. The new zone is located 2 kilometres northwest of Gibraltar East (093B 012). Recent drilling extended the strike length of the zone to the northwest as well as to the southeast bringing its total strike extent to about 914 metres. The zone measures 121 to 152 metres wide and 91 to 106 metres in thickness (Northern Miner - October 5, 1992). Indicated reserves are 40 million tonnes grading 0.4 per cent copper (Information Circular 1992-1).

Reserves for the Gib-North deposit stated in 1993 are 45,355,000 tonnes grading 0.4 per cent copper, using a 0.18 per cent copper cutoff, available to a 2.7:1 waste-to-ore stripping ratio (John A. Chapman). As of December 31, 1992 geological resources are estimated at 92,714,300 tonnes of 0.365 per cent copper (CIM Special Volume 46, page 202).

On February 12, 1993, Gibraltar Mines Limited announced that it would not proceed with development of the Gib-North deposit (Property File - Briefing notes from a mine tour on February 12, 1993, Rick Meyers, Kamloops District Geologist).

See 093B 012 for a more detailed geological description of the Gibraltar mine and area.

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EMPR INF CIRC 1992-1, pp. 5,6; 1993-1, p. 5
GSC MAP 12-1959; 1424A; 1538G
CIM Spec. Vol. 15, pp. 195-205; *46, pp. 201-213
GCNL #220, 1969; #153, 1991; #36(Feb.22), 1993
N MINER Oct. 5, 1992
WWW <http://www.hdgold.com/tkofl.htm>
(see 093B 012 for general references on Gibraltar Mine)

DATE CODED: 1985/07/24
DATE REVISED: 1998/05/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 012**

NATIONAL MINERAL INVENTORY: 093B9 Cu1

NAME(S): **GIBRALTAR EAST**, GIBRALTAR, GIBRALTAR MINE,
SUNSET, MCLEESE LAKE, GIB-EAST,
POLLYANNA GIB EAST CONNECTOR, PGEC

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 52 31 05 N
LONGITUDE: 122 17 15 W

UTM ZONE: 10 (NAD 83)

ELEVATION: 1097 Metres

NORTHING: 5818899

EASTING: 548347

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of pit (Property File - Drummond, 1971). See also
Pollyanna (093B 006), Gibraltar West (093B 007), Gibraltar North
(093B 011), Granite Lake (093B 013) and Sawmill (093B 051).

COMMODITIES: Copper Molybdenum Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Molybdenite Cuprite Bornite
ASSOCIATED: Quartz Pyrite Magnetite
ALTERATION: Quartz Sericite Chlorite Epidote Carbonate
ALTERATION TYPE: Sericitic Propylitic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	Granite Mountain Pluton
Lower Jurassic			
ISOTOPIC AGE: 204 Ma +/- 6 Ma			
DATING METHOD: Potassium/Argon			
MATERIAL DATED: Hornblende			
Cretaceous			Sheridan Creek Pluton

LITHOLOGY: Tonalite
Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

Cache Creek
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Plateau

GRADE: Greenschist

INVENTORY

ORE ZONE: GIBRALTAR REPORT ON: Y
CATEGORY: Probable YEAR: 1998
QUANTITY: 13696951 Tonnes
COMMODITY GRADE
Copper 0.2920 Per cent
Molybdenum 0.0090 Per cent
COMMENTS: Total probable reserves as at December 31, 1998, includes Pollyanna
(093B 006), Granite Lake (093B 013) and PGEC (093B 006).
REFERENCE: Exploration in BC 1998, page A10 (from Boliden Limited).

INVENTORY

ORE ZONE: GIBALTAR REPORT ON: Y
 CATEGORY: Proven YEAR: 1998
 QUANTITY: 134989037 Tonnes
 COMMODITY GRADE
 Copper 0.3060 Per cent
 Molybdenum 0.0100 Per cent
 COMMENTS: Total proven reserves at December 31, 1998, includes Pollyanna (093B 006), Granite Lake (093B 013) and PGEC (093B 006).
 REFERENCE: Exploration in BC 1998, page A10 (from Boliden Limited).

ORE ZONE: TOTAL REPORT ON: Y
 CATEGORY: Combined YEAR: 1998
 QUANTITY: 148685989 Tonnes
 COMMODITY GRADE
 Copper 0.3050 Per cent
 Molybdenum 0.0100 Per cent
 COMMENTS: Total proven and probable, includes Pollyanna (093B 006), Granite Lake (093B 013) and PGEC (093B 006).
 REFERENCE: Exploration in BC 1998, page A10 (from Boliden Limited).

CAPSULE GEOLOGY

The Gibraltar East deposit is located near the eastern margin of the Stikine Terrane west of Granite Mountain in south-central British Columbia. The Stikine Terrane is dominantly oceanic and became amalgamated with the Quesnel Terrane to the east probably during Triassic times. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Late Triassic Granite Mountain pluton and the (?)Cretaceous Sheridan Creek pluton. The Granite Mountain pluton has been dated at 204 +/- 6 Ma by potassium-argon dating of hornblende (CIM Special Volume 15 page 195). Jurassic sedimentary rocks overlap both the Cache Creek and Quesnel terranes to the north and east of the plutons. Older rocks are largely obscured by Plateau Basalt of probable Miocene age, to the west.

The Granite Mountain pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group. The Cache Creek Group and the margins of the Granite Mountain pluton record effects of ductile deformation. The main body of the pluton has been cataclastically deformed.

The Gibraltar orebodies lie along the southern and western flanks of Granite Mountain at elevations between 914 and 1231 metres. The Gibraltar East deposit is one of the five orebodies that comprise the Gibraltar mine, the others are: Pollyanna (093B 006), Gibraltar West (093B 007), Gibraltar North (093B 011) and Granite Lake (093B 013), with several small similar occurrences in the area (Sawmill (093B 051)).

The orebodies are hosted by the Granite Mountain pluton with ore mineralization almost entirely confined to the Mine Phase Tonalite portion of the Granite Mountain pluton. The Mine Phase Tonalite appears to form a thin outer shell about the main body of the pluton and contains approximately 30 per cent quartz, 50 per cent saussuritized plagioclase feldspar and 20 per cent chlorite. Varying degrees and types of alteration are present and readily visible in the Mine Phase Tonalite. Economic sulphide mineralization in the Mine Phase Tonalite is usually associated with sericitization and chloritization. The tonalite has been strongly deformed by shearing and mineralization is strongly associated with this deformation. Mineralization is generally accompanied by alteration and is confined to deformational structures. These structures comprise small and large shear zones, foliation planes, short veins and various dilatant structures.

As a whole, the Gibraltar mineralized system is comprised of numerous structural hosts for economic mineralization ranging from highly mineralized shear zones to complex sets of sheeted shear veins commonly referred to as oriented stockworks. The oriented stockwork is the prevalent structural host within the Pollyanna Mineralized System.

In Energy & Mines, Fieldwork 1998, pages A1-A15, the origin of the Gibraltar ores are found to be associated with intensely foliated to schistose rocks which have been labelled mineralized shear zones. The Granite Mountain Batholith is now thought to have been tectonically emplaced into the Cache Creek, rather than having been intruded into it.

Mineralization consists of pyrite, chalcopyrite, molybdenite,

CAPSULE GEOLOGY

magnetite, bornite and cuprite. Associated alteration minerals are quartz, sericite, chlorite, epidote and carbonate. The Gibraltar deposits all show secondary oxidation and secondary enrichment with the formation of chalcocite as coatings and as replacement of pyrite and chalcopyrite.

The Gibraltar mine area has a long history of mineral exploration, beginning around 1917, when Joseph Briand and partners explored copper-bearing quartz veins on the Rainbow group of mineral claims. These original showings are believed to lie about 60 metres west of the current Pollyanna pit. Prospecting in the Granite Mountain area continued on through the 1920s and by 1928, the Sunset shear zone was discovered west of the Rainbow Group on ground held by G.F., H.B., and J.F. Hill. The discovery area is now known to have been the exposed southeast end of the Gibraltar West orebody. The Rainbow showings and the Sunset shear zone provided the focus for further prospecting up to at least the 1960s. In 1949, both showings were held by C.E. Johnson and R.R. Moffat who made a half ton shipment of ore from the Rainbow Group to the Tacoma smelter. By 1956, E. Kinder, T. Matier, and R.L. Clothier had acquired the properties, and in 1957, had completed a 36 metre adit into the Sunset zone. Both properties were later allowed to lapse. In 1962, John Hilton restaked the general area of the Sunset zone, which was later to become the Gibraltar property, and in 1963, Robert Glen relocated the Pollyanna property, including the former Rainbow showings.

The first major company on the scene was Keevil Mines Ltd. who optioned the Pollyanna and Gibraltar properties in 1962, and proceeded to carry out extensive geophysical and geochemical surveys before terminating the options in 1964. Canex Placer Limited and Duval Corporation jointly explored the Pollyanna property in the late 1960s and in 1969 optioned the adjacent Gibraltar property. Canex Placer purchased Duval's interest in 1970, to hold both properties.

Production began at the Gibraltar mine on March 8, 1972 and the official opening was on June 17 of that year. The operating company, Gibraltar Mines Limited, was owned 68.1 per cent by Placer Dome Inc. (formerly Canex Placer Ltd.). In total, four major orebodies have been brought into production on the Gibraltar property; the Pollyanna (093B 006), Gibraltar East (Gib-East) (093B 012), Gibraltar West (Gib-West) (093B 007) and the Granite Lake zone (093B 013).

Reserves at start-up were 326.6 million tonnes grading 0.371 per cent copper and 0.016 per cent molybdenum. These reserves included: Gibraltar East, 136.0 million tonnes; Granite Lake, 108.9 million tonnes; Pollyanna, 73.5 million tonnes; and Gibraltar West, 8.2 million tonnes.

The Sawmill zone (093B 051) was outlined in 1979 about 6 kilometres south of the plant site. In 1980, a 27.2-million tonne extension to the Pollyanna zone was discovered beyond the eastwall of the Stage I pit. The Gibraltar North (093B 011) orebody was discovered in 1990. The mining reserves as of December 31, 1992 were:

	Tonnes	Copper (%)
Pollyanna	33,112,250	.322
Granite Lake	51,074,500	.324
Gibraltar East	63,321,500	.272
TOTAL	147,508,250	.301 (.008% Mo)

These are a combination of proven and probable reserves at cutoff grades of 0.18 per cent copper for Gibraltar East and 0.20 per cent copper for the other ore zones, and at a strip ratio of 1.20:1.

That part of the mineralized inventory deemed uneconomic under current conditions has been classified as a mineral resource. As of December 31, 1992, the Gibraltar mineral resources were:

Gibraltar East	176,810,350	.256
Granite Lake	118,206,200	.305
Gibraltar North	92,714,300	.365
Pollyanna	60,872,100	.267
Sawmill Zone	68,492,450	.244
Gibraltar West	29,483,500	.300
TOTAL	546,578,900	.287 (.007 % Mo)

A 0.20 per cent copper cutoff was used for Pollyanna and Granite Lake, and a 0.18 per cent copper cutoff was used for the other zones. Milling commenced in March 1972. From that date to December 31, 1992, a total of 241,000 000 tonnes of ore averaging 0.360 per cent copper had been milled. Major ore production was from the Pollyanna, Granite Lake and Gibraltar East zones. A small tonnage was mined

CAPSULE GEOLOGY

from Gibraltar West. Neither Gibraltar North nor the Sawmill have been mined.

The average daily mine production was about 37,700 tonnes of ore and 57,500 tonnes of waste rock (Property File - Briefing notes from a mine tour on February 12, 1993, Rick Meyers (Kamloops District Geologist)).

In 1994, recoverable reserves were 54 million tonnes grading 0.38 per cent copper and 0.54 gram per tonne gold (News Release, March 21, 1994, Gibraltar Mines Limited).

Mining and milling resumed in September 1994 after a suspension of operations on December 1, 1993 due to low copper prices. Reserves estimated at January 1, 1995 were 166,259,440 tonnes grading 0.291 per cent copper and 0.009 per cent molybdenum (Information Circular 1996-1, pages 6,7).

Proven and probable reserves of all ore deposits as of January 1, 1996 are 179.0 million tonnes, grading 0.297 per cent copper and 0.009 per cent molybdenum (Gibraltar Mines Limited, Annual Report 1995).

Combined (proven and probable) reserves for Gibraltar East are 49.2 million tonnes, grading 0.281 per cent copper and 0.008 per cent molybdenum (Gibraltar Mines Limited, Annual Report 1995).

In 1996 production was from the Gib East pit, but reserves there were exhausted by early 1998. Subsequent production will be from the Pollyanna stage 4 pit (093B 006) and Granite Lake stage 3 and 4 pit developments (093B 013). The company reported a 12 year mine life, but the estimate excludes reserves at the Gib North and Sawmill zones (R. Lane, personal communication, 1996).

Production from 1972 to 1998 totals 325,696,830 tonnes yielding 100,174,052 grams of silver, 143,368 grams of gold, 876,712,378 kilograms of copper, and 9,036,601 kilograms of molybdenum.

Westmin Resources Ltd. acquired the mine on October 15, 1996. Proven and probable sulphide reserves (December 31, 1996) for the Gibraltar East, Granite Lake and Pollyanna deposits total 142,544,000 tonnes grading 0.303 per cent copper and 0.009 per cent molybdenum. In addition, oxide reserves for the Connector zone and Pollyanna Stage IV pit total 3,039,000 tonnes grading 0.273 per cent copper (T. Schroeter, personal communication, 1997). The Gib North and Sawmill zones are not part of the mineable reserves.

Westmin Resources Ltd. is owned by Boliden Limited. Operations ceased by the end of 1998.

Total mineable sulphide ore reserve for the Gibraltar as of December 31, 1997, is 184.4 million tonnes grading 0.310 per cent copper and 0.010 per cent molybdenum. The total leachable ore reserve is 16.3 million tonnes at an acid-soluble grade of 0.151 per cent copper (Exploration in BC 1997, page 22).

In mid-January 1999, Boliden began to shut down the mine, with full closure by February 1999. In April 1999, Taseko Mines Limited announced that they will acquire the Gibraltar mine.

Gibraltar Mine Reserves as of December 31, 1998 were:

		Ore (tonnes)	Cu (%)	Mo (%)	Cutoff (%Cu)
Pollyanna (093B 006)	proven	31,101,205	0.317	0.010	0.20
	probable	1,793,777	0.285	0.008	0.20
	combined	32,894,982	0.315	0.010	0.20
Granite Lake (093B 013)	proven	64,129,815	0.322	0.009	0.20
	probable	6,297,678	0.321	0.007	0.20
	combined	70,427,493	0.322	0.009	0.20
PGEC (Pollyanna-Gib East Connector) 093B 006)	proven	39,758,018	0.271	0.010	0.16
	probable	5,605,496	0.261	0.001	0.16
	combined	45,363,514	0.270	0.010	0.16
Total Reserves	proven	134,989,037	0.306	0.010	
	probable	13,696,951	0.292	0.009	
	combined	148,685,989	0.305	0.010	

(Exploration in BC 1998, page A10; from Boliden Limited).

Taseko Mines Limited acquired the Gibraltar Mine in 1999.

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 24624, 25170, 25352
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Gibraltar IP Maps, source and date unknown; Summary and
Recommendations, unknown author and date; Drill Logs from holes in
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EMR MP CORPFILE (Gibraltar Mines Ltd.; Major Mines Ltd.; Coast
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EMR MP RESFILE (Gibraltar East)
GSC MAP 12-1959; 1424A; 1538G
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GCNL #48,#81,#108,#110,#131,#139,Sept.17,#226,#230,#231,#243,#255,
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1975; #35,#84,#210, 1976; Apr. 12, 1977; #20,#22,#75,#81,#101,
#153,#154,#185,#203, 1978; #69,#143, 1979; #18,#26,#79,#144,#205,
1980; #15,#147, 1981; #28,#65,#81,#126,#145,#147,#205,#210, 1982;
#22,#80,#142,#206, 1983; #20,#79,#143, 1984; #25,#68,#202,#235,
1985; #18,#66,#142,#215, 1986; #21,#86,#90, 1987; #35(Feb.19),
#153(Aug.9), 1991; #129(July 6),#152(Aug.7),*#171(Sept.3),
*#187(Sept.28),#236(Dec.8), 1992; *#36(Feb.22), 1993;
#35(Feb.19), 1996; #36(Feb.20), 1997; #213(Nov.5), #242(Dec.17),
1998; #81(Apr.28), 1999; #194(Oct.11), 2000
MIN MAG Jul./Aug., 1982
N MINER June 26, Sept.25, Oct.16, Nov.13, Nov.27, 1969; Jan.15,
Nov.12, 1970; Mar.25, 1976; Jan.26, Feb.2, Mar.16, Apr.13, 20, Jul.27,
1978; Feb.15, Mar.15, Apr.19, 26, 1979; Mar.19, 1981; Feb.4, Apr.8,
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Oct.5, 1992; Feb.2, Mar.30, 1998; Jan.18, May 3, 24, Aug.2, 1999;
Oct.16, 2000
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PR REL Boliden Limited, March 12, 1998; Taseko Mines Limited, Apr.26,
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W MINER Nov. 1969; *Vol.45, No.2, No.6, Feb., 1972; Aug. 1976;
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RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 289
REPORT: RGEN0100

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DATE CODED: 1985/07/24
DATE REVISED: 1998/05/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093B 013**

NATIONAL MINERAL INVENTORY: 093B9 Cu1

NAME(S): **GRANITE LAKE (GIBRALTAR)**, GRANITE LAKE, COPPER QUEEN,
CUISSON LAKE, GIBRALTAR, MCLEESE LAKE

STATUS: Past Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093B09W

BC MAP:

LATITUDE: 52 30 20 N

LONGITUDE: 122 15 39 W

ELEVATION: 1219 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of pit (Property File 093B 012 - Drummond, 1971).

See Gibraltar (093B 012) for production. See also Pollyanna (093B

006), Gibraltar West (093B 007), Gibraltar North (093B 011) and

Sawmill (093B 051).

UTM ZONE: 10 (NAD 83)

NORTHING: 5817527

EASTING: 550170

COMMODITIES: Copper Molybdenum Silver

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Molybdenite Cuprite Bornite

Magnetite Pyrite

ASSOCIATED: Quartz Chlorite Epidote Malachite Azurite

ALTERATION: Epidote Chlorite Carbonate Oxidation Propylitic

ALTERATION TYPE: Chloritic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein

CLASSIFICATION: Porphyry Hydrothermal Epigenetic

TYPE: L04 Porphyry Cu ± Mo ± Au

SHAPE: Irregular

MODIFIER: Faulted Sheared

STRIKE/DIP: 090/30S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER

Paleozoic-Mesozoic Cache Creek Undefined Formation

Lower Jurassic Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende Sheridan Creek Pluton

Cretaceous

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau

TERRANE: Plutonic Rocks Cache Creek

METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: GRANITE LAKE REPORT ON: Y

CATEGORY: Combined YEAR: 1995

QUANTITY: 80900000 Tonnes

COMMODITY GRADE

Copper 0.3050 Per cent

Molybdenum 0.0090 Per cent

COMMENTS: Proven and probable reserves for Granite Lake.

REFERENCE: Gibraltar Mines Limited, Annual Report 1995.

INVENTORY

ORE ZONE: GIBALTAR REPORT ON: N

CATEGORY: Combined YEAR: 1995

QUANTITY: 179000000 Tonnes

COMMODITY	GRADE	
Copper	0.2970	Per cent
Molybdenum	0.0090	Per cent

COMMENTS: Total combined (proven and probable) reserves for Gibraltar East (093B 012), Pollyanna (093B 006), and Granite Lake.

REFERENCE: Gibraltar Mines Limited, Annual Report 1995.

CAPSULE GEOLOGY

The Granite Lake orebody is located near the eastern margin of the Stikine Terrane west of Granite Mountain in south-central British Columbia. The Stikine Terrane is dominantly oceanic and became amalgamated with the Quesnel Terrane to the east probably during Triassic times. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Late Triassic Granite Mountain pluton and the (?) Cretaceous Sheridan Creek pluton. The Granite Mountain pluton has been dated at 204 +/- 6 Ma by potassium-argon dating of hornblende (CIM Special Volume 15 page 195). Jurassic sedimentary rocks overlap both the Cache Creek and Quesnel terranes to the north and east of the plutons. Older rocks are largely obscured by Plateau Basalt of probable Miocene age, to the west. The Granite Mountain pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group. The Cache Creek Group and the margins of the Granite Mountain pluton record effects of ductile deformation. The main body of the pluton has been cataclastically deformed.

The Granite Lake deposit is one of the five orebodies that comprise the Gibraltar mine, the others are: Gibraltar West (093B 007), Pollyanna (093B 006), Gibraltar North (093B 011) and Gibraltar East (093B 012). The orebodies are hosted by the Granite Mountain pluton with ore mineralization almost entirely confined to the Mine Phase Tonalite portion of the Granite Mountain pluton. The Mine Phase Tonalite appears to form a thin outer shell about the main body of the pluton and contains approximately 30 per cent quartz, 50 per cent saussuritized plagioclase feldspar and 20 per cent chlorite. Varying degrees and types of alteration are present and readily visible in the Mine Phase Tonalite. Economic sulphide mineralization in the Mine Phase Tonalite is usually associated with sericitization and chloritization. The tonalite has been strongly deformed by shearing and mineralization is strongly associated with this deformation. Mineralization is generally accompanied by alteration and is confined to deformational structures. These structures comprise small and large shear zones, foliation planes, short veins and various dilatant structures.

The Granite Lake orebody is mainly hosted by the Mine Phase Tonalite, but the Granite Mountain Phase extends upward beneath the footwall in some places. The orebody exhibits several large offsets caused by block faulting. Pyrite, in a thick "blanket", overlies the main orebody which splits into two bodies towards the east. Concentrated adjacent to and inside the "blanket" are narrow zones of pod-like ore, mainly chalcopyrite, magnetite and minor bornite, hosted by bands of sericitic shearing. The main ore zone strikes 090 degrees and dips 30 degrees south.

Mineralization consists of pyrite, chalcopyrite, molybdenite, magnetite, bornite and cuprite. Associated alteration minerals are quartz, sericite, chlorite, epidote and carbonate. The Gibraltar deposits all show secondary oxidation and secondary enrichment with the formation of chalcocite as coatings and as replacement of pyrite and chalcopyrite.

As a whole, the Gibraltar mineralized system is comprised of numerous structural hosts for economic mineralization ranging from highly mineralized shear zones to complex sets of sheeted shear veins commonly referred to as oriented stockworks.

Production figures indicate that silver and minor gold mineralization is associated with these orebodies (see Gibraltar East (093B 012) for figures). Total measured recoverable reserves in 1988 for all the orebodies were 183.24 million tonnes, grading 0.32 per cent copper and 0.009 per cent molybdenum (Placer Dome Inc., Annual Report 1988). Total mineable reserves in 1995 for all ore deposits are 179.0 million tonnes grading 0.297 per cent copper and 0.009 per cent molybdenum (Gibraltar Mines Limited, Annual Report 1995). As of December 31, 1992, mining reserves (proven and probable at cutoff of 0.20 per cent copper) of the Granite Lake were 51,074,500 tonnes of

CAPSULE GEOLOGY

0.324 per cent copper and 0.008 per cent molybdenum. Mineral resources were 118,206,200 tonnes of 0.305 per cent copper and 0.009 per cent molybdenum (CIM Special Volume 46, page 202).

Combined (proven and probable) reserves for Granite Lake are 80.9 million tonnes, grading 0.305 per cent copper and 0.009 per cent molybdenum (Gibraltar Mines Limited, Annual Report 1995).

Granite Lake Reserves as of December 31, 1998 are:

		Ore (tonnes)	Cu (%)	Mo (%)	Cutoff (%Cu)
Granite Lake	proven	64,129,815	0.322	0.009	0.20
	probable	6,297,678	0.321	0.007	0.20
	combined	70,427,493	0.322	0.009	0.20

(Exploration in BC 1998, page A10; from Boliden Limited).

In mid-January 1999, Boliden began to shut down the mine, with full closure by February 1999. In April 1999, Taseko Mines Limited announced that they will acquire the Gibraltar mine.

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EMPR BC METAL MM00010
EMPR BULL 97
EMPR EXPL 1982-276; 1984-296; 1986-C320; 1987-C262; 1996-C6; *1998-A1-A15
EMPR GEM *1969-162-172; 1970-205; 1971-143; *1973-299-318; 1974-26, 241
EMPR PF (See 093B General File - Property Map of the McLeese Lake Area, 1970; Drummond, A.D., 1971: *Geology of Gibraltar Mines Ltd., A Summary; Drummond, A.D. et al (1972) Gibraltar - Regional Metamorphism, Mineralization, Hydrothermal Alteration and Structural Development; *Placer Dome Annual Report 1988; see 093B 012 for an extensive bibliography on Gibraltar mine)
EMR MP CORPFILE (Gibraltar Mines Ltd.; Major Mines Ltd.; Coast Silver Mines Ltd.; Canex Aerial Exploration Ltd.)
EMR MP RESFILE (Granite Lake)
GSC MAP 12-1959; 1424A; 1538G
CIM Special Volume 15, pp. 195-205; *46, pp. 201-213 (Bysouth, G.D., Campbell, K.V., Barker, G.E. and Gagnier, G.K., 1995)
GCNL #243, 1969
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EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1996/06/30

CODED BY: GSB
REVISED BY: TGS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093B 014**

NATIONAL MINERAL INVENTORY: 093B9 Cu4

NAME(S): **MM**, BIT, BREN

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 33 06 N
LONGITUDE: 122 16 35 W
ELEVATION: 1097 Metres

NORTHING: 5822645
EASTING: 549063

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Lower Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

Cretaceous

Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The MM showing is located near the eastern margin of the Stikinia Terrane northwest of Granite Mountain in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?) Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The MM showing is located near the northern margin of the Granite Mountain Pluton and comprises three pyrite-chalcopyrite zones within quartz diorite.

BIBLIOGRAPHY

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EM OF 1999-7
EMPR ASS RPT 1796, 2736, 6794, 9388
EMPR EXPL 1978-E194
EMPR GEM 1969-368; 1970-203
EMPR PF (Drill Sections, Aug., 1971)
EMR MP CORPFILE (Remar Resources Ltd.)
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 015**

NATIONAL MINERAL INVENTORY: 093B9 Cu5

NAME(S): **G.H.**, G, H

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 30 18 N
LONGITUDE: 122 19 30 W
ELEVATION: 914 Metres

NORTHING: 5817422
EASTING: 545816

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of claim block, 1 kilometre southwest of Indian Reserve 12.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Granodiorite
Meta Volcanic
Limestone

HOSTROCK COMMENTS: Host is considered to be Granite Mountain Pluton. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The G.H. showing is located near the eastern margin of the Stikinia Terrane 1 kilometre southwest of Reserve 12 in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Pennsylvanian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?) Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The G.H. showing occurs within granodiorite which outcrops at the northern end of Cuisson Lake and is considered to be part of the Granite Mountain Pluton. The intruded rocks are limestone and metavolcanics of the Cache Creek Group. Chalcopyrite and molybdenite occur as disseminations in the granodiorite.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR AR 1959-144; 1967-287; 1968-283
EMPR ASS RPT 903, 1150
EMPR GEM 1970-204
EMPR PF (See 093B General File - Property Map of the McLeese Lake Area, 1970)
EMR MP CORPFILE (Consolidated Coast Silver Mines Ltd.)
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 016**

NATIONAL MINERAL INVENTORY: 093B8 Cu3

NAME(S): **ACADIAN**, BARNEY, COPPER KING

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 30 06 N
LONGITUDE: 122 09 35 W
ELEVATION: Metres

NORTHING: 5817169
EASTING: 557038

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Acadian 1-40 and Barney 1-22 claims.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Porphyry Disseminated
TYPE: L04 Porphyry Cu ± Mo ± Au Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Lower Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

LITHOLOGY: Quartz Muscovite Schist
Granodiorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195. Probable Granite Mountain.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Acadian showing is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The limited outcrop in the area indicates that the showing is underlain by quartz muscovite schist of the Cache Creek Group, intruded by granodiorite which is probably related to the Granite Mountain Pluton. Chalcopyrite and pyrite occur in quartz veins cross-cutting the schist, in quartz-rich zones parallel to the foliation of the schist, and as disseminations in the granodiorite.

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EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT 2440, 2848
EMPR GEM 1970-206
EMPR PF (See 93B General File - Property Map of the McLeese Lake Area, 1970)
EMR MP CORPFILE (Citex Mines Ltd.)

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 296
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 017**

NATIONAL MINERAL INVENTORY: 093B9 Cu6

NAME(S): **GR**, TGV, COPPER KING

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 30 06 N
LONGITUDE: 122 10 41 W
ELEVATION: Metres

NORTHING: 5817155
EASTING: 555794

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately midway between Gr 2 and Gr 10.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Lower Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

Cretaceous

Sheridan Creek Pluton

LITHOLOGY: Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The GR showing is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The GR showing is located immediately to the west of the Acadian showing (093B 016) and is underlain by volcanic rocks of the Cache Creek Group and intrusive rocks related to the Granite Mountain Pluton. Chalcopyrite, pyrite and molybdenite mineralization is hosted in both the volcanic and intrusive rocks.

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EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT 3080, 25682, 25793
EMPR GEM 1971-138; 1973-297
EMPR PF (See 93B General File - Property Map of the McLeese Lake Area, 1970)
EMR MP CORPFILE (Newvan Resources Ltd)
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUESNEL CANYON**

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093B16W

BC MAP:

LATITUDE: 52 59 37 N

LONGITUDE: 122 21 16 W

ELEVATION: 518 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location of bulk sampling on the lower bench of Placer Lease 15320, 10 metres above Quesnel River, 9.5 kilometres east of the town of Quesnel and 4.5 kilometres north-northeast from Dragon Lake (Assessment Report 16736).

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5871755

EASTING: 543330

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic
Tertiary

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Glacial/Fluvial Gravels

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

Overlap Assemblage

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Variable thicknesses of Tertiary glacial outwash silt, sand and gravel display poorly sorted, interbedded and crossbedded features and are exposed along the Quesnel River.

Located within placer lease 15320 of the Quesnel Canyon property are coarse cobble gravels overlying an undulating volcanic bedrock of the Upper Triassic Nicola Group. This discontinuous "lower bench" of gravels is 10 metres above Quesnel River and gives way to pebble gravels and silt inland from the river. This first tier bench roughly parallels the current river, is 100 to 150 metres inland and is elevated 8 to 15 metres above the lower bench. It is typically comprised of silt overlying interbedded pebble to cobble size gravels.

Test pits and bulk sampling of the lower bench have resulted in indicated reserves of 61,785 cubic metres grading 0.48 grams gold per cubic metre and inferred reserves of 36,000 cubic metres grading 0.38 grams gold per cubic metre (Assessment Report 16736). The stripping ratio varies from 1:1 to 0.5:1.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR ASS RPT *16736

EMPR EXPL 1988, p. C152; 1989, p. 147-169

EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473

GSC MAP 12-1959; 1424A

WWW <http://www.infomine.com/>

DATE CODED: 1989/08/30
DATE REVISED: / /

CODED BY: GO
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093B 019**

NATIONAL MINERAL INVENTORY: 093B8 Cu4

NAME(S): **BARB**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 23 21 N
LONGITUDE: 122 16 01 W
ELEVATION: 701 Metres

NORTHING: 5804577
EASTING: 549887

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Barb claim group.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Igneous-contact Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Lower Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

Cretaceous

Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary
Felsic Intrusive

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Barb showing is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The Barb showing consists of weak pyrite and chalcopyrite mineralization within both the Cache Creek Group rocks and felsic intrusives. The intrusive rocks are probably part of the Sheridan Creek pluton.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT *3049, *3149, *3369
EMPR GEM 1969-175; 1971-140
EMPR PF (See 93B General File - Property Map of the McLeese Lake Area, 1970)
EMR MP CORPFILE (Groundstar Resources Limited; Gibbex Mines Ltd.; GBX Mines Limited)
GSC MAP 12-1959; 1424A; 1537G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 019**

MINFILE NUMBER: **093B 020**

NATIONAL MINERAL INVENTORY: 093B9 Cu7

NAME(S): **AXEL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 32 00 N
LONGITUDE: 122 20 59 W
ELEVATION: 853 Metres

NORTHING: 5820558
EASTING: 544109

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 9975, approximate centre of claim block.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Skarn
TYPE: L04 Porphyry Cu ± Mo ± Au K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Lower Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

Cretaceous

Sheridan Creek Pluton

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Axel showing is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The Axel showing consists of disseminated pyrite and chalcopyrite mineralization within quartz diorite. The quartz diorite, probably related to the Granite Mountain Pluton, has been intruded into the Cache Creek Group volcanic rocks. At the contact between the volcanics and quartz diorite minor cupriferous skarn has formed.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR AR 1968-283
EMPR ASS RPT 1613, 2149, *3528
EMPR GEM 1969-174; 1971-144; 1972-337; 1973-298
EMR MP CORPFILE (Wharf Resources Ltd.; ISO Explorations Ltd.)
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 021**

NATIONAL MINERAL INVENTORY: 093B16 Cu2

NAME(S): **KATE** NORANDA KATE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 59 38 N
LONGITUDE: 122 21 46 W
ELEVATION: Metres

NORTHING: 5871781
EASTING: 542770

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of best showing.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Molybdenite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Diorite
Monzonite
Syenite
Felsic Dike
Quartz Biotite Feldspar Dike
Quartz Porphyry Dike
Basalt
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Kate showing is located in the Central Quesnel Belt of the Quesnellia terrane, underlain by the dominantly volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. In this region the Nicola Group consists of a lower sedimentary succession overlain by green and grey basalt, in turn overlain by maroon basalt and breccias characterized by the presence of felsic clasts. The contact with the Omineca Belt to the east is a thrust fault and the Nicola Group is in fault contact with the Cache Creek Group to the west. Middle Jurassic sedimentary rocks overlie both the Cache Creek Group and the Nicola Group along parts of this western contact.

The showing is underlain partly by lower Nicola Group sedimentary rocks and partly by basalt. These rocks are intruded by a complex of felsic dikes and irregular masses consisting of diorite, monzonite and syenite probably of Lower to Middle Jurassic age. Present also are quartz-biotite-feldspar dikes and quartz porphyry dikes which, because of the quartz content, are unlikely to be related to the alkaline intrusions. The intrusions are comagmatic with Nicola volcanic rocks, but are more likely related to a large Cretaceous batholith which outcrops along the Quesnel River to the south of the property.

Chalcopyrite occurs as fracture fillings, as disseminated grains and blebs and as near massive patches up to several centimetres across. Pyrite, minor bornite and molybdenite have also been reported.

BIBLIOGRAPHY

EMPR ASS RPT 4208, *4545, *4914
EMPR GEM 1973-318
EMPR MAP 1989

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 302
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; 93G General File - Quesnel
Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 022**

NATIONAL MINERAL INVENTORY: 093B16 Au1

NAME(S): **AINSWORTH**, SARDINE FLATS, QUESNEL RIVER PLACER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B16E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 10 N
LONGITUDE: 122 13 05 W
ELEVATION: 549 Metres

NORTHING: 5854326
EASTING: 552675

LOCATION ACCURACY: Within 1 KM

COMMENTS: Downstream from Quesnel Forks.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: The Omineca Terrane is considered to be the source of the placer gold.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Placer mining operations along the Quesnel River have, up to 1945, recorded a production of 477 kilograms of gold. Much of this production has come from dredging operations but a significant amount of gold has been won from Tertiary benches with occur up to several tens of metres above the present river level.

Although the Quesnel River passes largely through volcanic and sedimentary rocks of the Nicola Group. It is considered that most of the placer gold has been derived from the Omineca terrane to the east rather than from the Nicola group.

The Quesnel River placer deposit, mainly on a low bench adjacent to the river, is typical of placer mining operations along the Quesnel River.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

- EMPR GEM 1973-525
- EMPR ASS RPT 17483, 17484
- EMPR AR 1880-424; 1882-356; 1883-402; 1887-256; 1890-362; 1894-725, 732; 1895-655-659; 1896-508,510; 1898-976,981,982; 1899-609; 1901-954; 1903-65; 1904-48; 1905-59; 1909-48; 1911-52; 1913-62; 1920-99; 1922-124; 1929-203; *1930-167-170; 1934-C33; 1939-108; 1940-95; 1941-89; 1945-126; 1946-199; 1947-194; 1948-178; 1949-229-230,243; 1950-200; 1954-171; 1960-124; 1962-141
- EMPR BULL 28, pp. 49,51
- EMPR PF (*Turnbull, J.M., (1933), Report of Ainsworth Placer Leases; Correspondence from J.M. Turnbull to W.I. Reid, 1933; See 93B General File - 16 Area; Fraser, D.D., (1935): Placer Tests, Sardine Flat, Quesnel river, Cariboo, British Columbia; Placer Leases 1949; See 93G General File - Quesnel Area)
- EMPR FIELDWORK 1988, pp. 167-181; 1990, pp. 331-356; 1992, pp. 463-473
- EMPR EXPL 1989, pp. 147-169

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOT 906, MICROSIL, JIG,
CROWNITE, DIATOMITE, QUARRY**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B15E
BC MAP:
LATITUDE: 52 57 37 N
LONGITUDE: 122 32 19 W
ELEVATION: 701 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Western half of Lot 906.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5867951
EASTING: 530992

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
ASSOCIATED: Clay
COMMENTS: Also silt and volcanic ash.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary
TYPE: F06
Massive
Industrial Min.
Lacustrine diatomite

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Tertiary

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Diatomite
Tuff
Conglomerate
Sandstone
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: MICROSIL

REPORT ON: Y

CATEGORY: Combined
QUANTITY: 750000 Tonnes
COMMODITY: Diatomite
GRADE: 100.0000
YEAR: 1991
Per cent

COMMENTS: Proven and probable reserves of diatomaceous earth.
REFERENCE: Open File 1992-1.

CAPSULE GEOLOGY

The Microsil deposit, adjacent to the town of Quesnel, occurs in a horizon of diatomaceous earth from which past production is recorded. The mine briefly opened again in 1983. The diatomite was processed into granular domestic absorbent product by calcining. No production figures are available.

The area is underlain by Tertiary volcanic and sedimentary rocks which overlie Paleozoic and Mesozoic rocks of the Cache Creek Complex (Group) and Nicola Group. These Tertiary rocks range in age from Paleocene to Pliocene but are dominated by plateau basalts of Miocene age and an underlying sedimentary succession including tuffs, conglomerate, sandstone and shale.

The diatomite occurs in beds up to about 31 metres thick with variable amounts of clay, silt and volcanic ash. Clay partings also occur within the diatomite.

Proven and probable reserves for the Microsil deposit are 750,000 tonnes of diatomaceous earth (Open File 1992-1).

BIBLIOGRAPHY

EMPR AR 1927-C171; 1947-A209; *1959-156; 1965-262; 1966-271; 1967-303,
315, 1968-299
EMPR ASS RPT *210
EMPR EXPL 1982-19

BIBLIOGRAPHY

EMPR GEM 1969-389; 1970-497; 1971-461; 1973-545; 1974-378
EMPR INF CIRC 1986-1, p. 68; 1987-1, p. 48
EMPR MAP 65 (1989)
EMPR MINING 1975-1980 Vol.I, pp. 43,44; 1981-1985; 1988, p. 83
EMPR OF 1992-1; 1992-9
EMPR PF (Specification sheet for diatomite and pozzolan; Article in
Western Miner, December, 1969; Several 1960's reports on the
Quesnel area diatomites by J.D. Godfrey (in Big Bend, 093G 039))
GSC MAP 1424A
GSC MEM 118, pp. 76,79
CANMET IR 691 (1928), p. 45
W MINER *Dec. 1969, p. 24

DATE CODED: 1986/03/28
DATE REVISED: 1989/01/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 024**

NATIONAL MINERAL INVENTORY: 093B1 Asb1

NAME(S): **DRD**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B01E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 05 17 N
LONGITUDE: 122 01 28 W
ELEVATION: Metres

NORTHING: 5771281
EASTING: 566840

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Pennsylvan.-Permian	Cache Creek	Undefined Formation	

LITHOLOGY: Serpentinized Dunite
Peridotite
Serpentinized Schist
Meta Basalt
Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The DRD showing is underlain by rocks of the Mississippian to Triassic Cache Creek Group which, in the vicinity of Williams Lake, is dominated by marine sedimentary rocks and metabasalt. Within this assemblage is an ultramafic body composed of serpentized dunite and peridotite. Chrysotile asbestos occurs within more competent masses of serpentized dunite and within more strongly deformed ultramafics, now serpentinite schist. Trenching has indicated that the extent of asbestos-bearing rocks is limited and that the asbestos is of too low a grade to constitute ore.

BIBLIOGRAPHY

EMPR ASS RPT *392
EMPR AR 1961-139; 1962-133
EMPR OF 1995-25
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 025**

NATIONAL MINERAL INVENTORY: 093B16 Ag1

NAME(S): **LYNDA**, BI, PHANTOM

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 53 36 N
LONGITUDE: 122 09 31 W
ELEVATION: 1006 Metres

NORTHING: 5860736
EASTING: 556604

LOCATION ACCURACY: Within 500M

COMMENTS: Location of Lynda showing.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Tetrahedrite Chalcocite Chalcopyrite Magnetite
ASSOCIATED: Calcite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated Vein
CLASSIFICATION: Hydrothermal
TYPE: E04 Sediment-hosted Cu
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Limestone
Basalt
Basic Volcanic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The property occurs within the Central Quesnel Belt of the Quesnellia terrane, underlain dominantly by volcanic and sedimentary rocks of the Upper Triassic-Lower Jurassic Nicola Group. In the region the Nicola Group consists of a lower sedimentary succession overlain by green and grey basalt, in turn overlain by maroon basalt and breccias characterized by the presence of felsic clasts. The contact with the Omineca Belt to the east is a thrust while to the west rocks of the Nicola Group are in fault contact with the Cache Creek Group. Middle Jurassic sedimentary rocks overlie both Cache Creek Group rocks and rocks of the Nicola Group along parts of this western contact.

Immediately beneath breccias containing felsic clasts and overlying maroon basalt is a limestone unit which occurs discontinuously along the Central Quesnel Belt. This unit marks the top of the Triassic assemblage in the region, the overlying rocks being of Lower Jurassic age. The limestone commonly hosts minor amounts of copper mineralization. The BI and Lynda claims are underlain by this limestone unit as well as the underlying maroon basalt unit. The limestone contains minor, finely disseminated tetrahedrite and chalcocite along thin bedding planes as well as malachite on weathered surfaces. The basalts immediately to the west also contain minor amounts of copper mineralization. These rocks are cut by a fault zone with associated calcite veinlets containing argentiferous tetrahedrite and minor malachite.

BIBLIOGRAPHY

EMPR ASS RPT 628, 629, *639, *11458, 12040
EMPR EXPL 1983-399,401
EMPR AR 1965-140
EMPR OF MAP 1989 - Swift River Geology
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; 93G General File - Quesnel)

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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BIBLIOGRAPHY

Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **JAN, SB, BP**
BRON, COPPER KING

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09E
BC MAP:
LATITUDE: 52 30 09 N
LONGITUDE: 122 11 49 W
ELEVATION: 1128 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claim block.

NORTHING: 5817233
EASTING: 554510

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Porphyry
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>
Paleozoic-Mesozoic Lower Jurassic	Cache Creek	Undefined Formation	Granite Mountain Pluton
ISOTOPIC AGE: 204 +/- 6 Ma			
DATING METHOD: Potassium/Argon			
MATERIAL DATED: Hornblende			

LITHOLOGY: Quartz Diorite
Schist
Volcanic

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference; CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP: Pre-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The Jan showing is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

Located immediately to the west of the GR showing (093B 017), the Jan showing is underlain by volcanic rocks of the Cache Creek Group and intrusive rocks of Granite Mountain type. Chalcopyrite and molybdenite occur within quartz diorite associated with chloritic and sericitic alteration zones.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT 1641, 1680, 2425, 7438, 10548
EMPR EXPL 1982-276
EMPR GEM 1971-139
EMPR PF (See 093B General File - Property Map of the McLeese Lake Area, 1970)
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 027**

NATIONAL MINERAL INVENTORY: 093B16 Pb1

NAME(S): **AB, XL, ANO**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 56 08 N
LONGITUDE: 122 11 05 W
ELEVATION: Metres

NORTHING: 5865413
EASTING: 554795

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claim block.

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Pyrite Galena Tetrahedrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Sediment/Sedimentary
Basaltic Volcanic
Felsic Breccia

HOSTROCK COMMENTS: Host rock not specifically identified but area largely underlain by Nicola Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The AB showing is located within the Central Quesnel Belt of the Quesnellia Terrane, underlain dominantly by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. In this region the Nicola Group consists of a lower sedimentary succession overlain by green and grey basalt, in turn overlain by maroon basalt and breccias characterized by the presence of felsic clasts. The contact with the Omineca Belt to the east is a thrust fault and to the west rocks of the Nicola Group are in fault contact with the Cache Creek Group. Middle Jurassic sedimentary rocks overlie both the Cache Creek Group and the Nicola Group along parts of the western contact.

Little geological information is available in this largely overburden covered area. However, recent mapping suggests that the showing is underlain by sedimentary rocks and basaltic volcanics of the lower part of the Nicola Group stratigraphy. Ubiquitous pyrite and minor galena and tetrahedrite are reported at this locality.

BIBLIOGRAPHY

EMPR AR 1967-124
EMPR OF MAP 1989 - Swift River
EMPR EXPL 1982-278
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; Report on And-Ab-X1 Claims, Coast Silver Mines Ltd. "AB" Group, 1967; See 93G General File - Quesnel Area)
EMPR ASS RPT 11179
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **HA**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 27 54 N
LONGITUDE: 122 18 35 W
ELEVATION: Metres

NORTHING: 5812983
EASTING: 546895

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately 4.8 kilometres north of McLeese Lake.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite

COMMENTS: Assumed minerals.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Jurassic

ISOTOPIC AGE: 204 +/- 7 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

Miocene

Granite Mountain Pluton

Unnamed/Unknown Informal

LITHOLOGY: Basalt
Quartz Diorite
Meta Basalt
Argillaceous Meta Sediment/Sedimentary
Limestone

HOSTROCK COMMENTS: Host rock not specifically identified.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The HA showing is located 4.8 kilometres north of McLeese Lake near the eastern margin of the Stikinia Terrane.

The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Pennsylvanian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The HA showing occurs in an area largely underlain by Miocene plateau basalt. The copper and molybdenum mineralization suggests that part of the Granite Mountain Pluton also underlies the area. No other geological information is available.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR AR 1968-152
EMPR PF (See 093B General File - Property Map of the McLeese Lake Area, 1970)
GSC MAP 12-1959; 1424A; 1537G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 029**

NATIONAL MINERAL INVENTORY: 093B16 Pb2

NAME(S): **COUSIN JACK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 53 41 N
LONGITUDE: 122 20 21 W
ELEVATION: 1046 Metres

NORTHING: 5860764
EASTING: 544456

LOCATION ACCURACY: Within 5 KM

COMMENTS: On Dragon Mountain (Minister of Mines Annual Report 1934-C29).

COMMODITIES: Lead Silver Gold

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0150 x 0006 Metres STRIKE/DIP: 068/
COMMENTS: Mineralized zone is about 6 metres wide and 150 metres long striking 68 degrees. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Nicola	Undefined Formation	
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Sediment/Sedimentary
Volcanic
Basalt
Breccia

HOSTROCK COMMENTS: Intercalated sedimentary and volcanic rocks. Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1934
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 143.9800 Grams per tonne
Gold 1.3700 Grams per tonne
Lead 9.0000 Per cent
COMMENTS: Sample from one well mineralized stringer in open cuts and pits.
REFERENCE: Minister of Mines Annual Report 1934, page C29.

CAPSULE GEOLOGY

The Cousin Jack showing is located within the Central Quesnel Belt of the Quesnellia Terrane. The area is underlain dominantly by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. In this region the Nicola Group consists of a lower sedimentary succession overlain by green and grey basalt, in turn overlain by maroon basalt and breccias characterized by the presence of felsic clasts. The contact with the Omineca Belt to the east is a thrust fault and to the west the Nicola Group is in fault contact with the Mississippian to Triassic Cache Creek Group. Middle Jurassic sedimentary rocks overlie both the Cache Creek Group and the Nicola Group along parts of this western contact.

The showing occurs near the western margin of the Quesnellia Terrane. Middle Jurassic sedimentary rocks also occur in the area and an inlier of older rocks, assumed to belong to the Cache Creek Group, has been recognized near Dragon Mountain.

CAPSULE GEOLOGY

Mineralization consists of galena and pyrite in quartz stringers within a sheared and oxidized zone cutting sedimentary and volcanic rocks. This zone, about 6 metres wide and 150 metres long, strikes at 068 degrees, conformable to the main faulting direction within the Central Quesnel Belt.

Open cuts and pits within the shear zone expose well mineralized stringers about 15 centimetres wide. A sample from one of these assayed 1.37 grams per tonne gold, 143.98 grams per tonne silver and 9 per cent lead (Minister of Mines Annual Report 1934 p. C29).

BIBLIOGRAPHY

EMPR AR *1934-C29
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File -
Quesnel Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 030**

NATIONAL MINERAL INVENTORY: 093B1 Ni1

NAME(S): **NI**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B01E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 05 56 N
LONGITUDE: 122 02 59 W
ELEVATION: 853 Metres

NORTHING: 5772463
EASTING: 565093

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Nickel Chromium

MINERALS

SIGNIFICANT: Millerite Mariposite
ASSOCIATED: Ankerite Quartz
ALTERATION: Ankerite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Breccia Vein
CLASSIFICATION: Replacement Epigenetic Hydrothermal Industrial Min.
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0130 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Breccia zone is up to 130 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Cache Creek Undefined Formation

LITHOLOGY: Breccia
Mafic Meta Volcanic
Argillaceous Meta Sediment/Sedimentary
Ultramafic
Serpentinized Peridotite

HOSTROCK COMMENTS: Host rock not identified but mapping indicates area largely underlain by the Mississippian to Triassic Cache Creek Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Cache Creek

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1956
SAMPLE TYPE: Grab
COMMODITY GRADE
Chromium 0.2700 Per cent
Nickel 0.2300 Per cent

COMMENTS: A selected sample.
REFERENCE: Minister of Mines Annual Report 1956-34.

CAPSULE GEOLOGY

The area is underlain by poorly exposed rocks of the Mississippian to Triassic Cache Creek Group which, in this region, consists mainly of mafic metavolcanic rocks, argillaceous metasediments and ultramafic bodies, now sheared and altered. To the southeast, serpentinized peridotite is exposed, the trend of these exposures suggests that the ultramafic body continues to the northwest under the NI showing.

Mineralization consists of minute grains of millerite within a west-trending breccia zone in which the rocks have been almost completely replaced by ankeritic carbonate. This zone, up to 130 metres wide, is cut by narrow veinlets of chalcedonic quartz containing small flakes of mariposite in some areas.

A selected grab sample in 1956 assayed 0.23 per cent nickel and 0.27 percent chromium (Annual Report 1956-34).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 316
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1956-34
GSC MAP 12-1959; 1424A
EMR MP RESFILE MR-NI-301.00 (BC)

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 031**

NATIONAL MINERAL INVENTORY:

NAME(S): **EM**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B01E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 05 56 N
LONGITUDE: 122 00 46 W
ELEVATION: Metres

NORTHING: 5772497
EASTING: 567623

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of drilling.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ALTERATION: Chlorite Sericite K-Feldspar
ALTERATION TYPE: Chloritic Sericitic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Mesozoic	Cache Creek	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Basalt

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The region is underlain by Paleozoic rocks of the Cache Creek Group, largely covered by a veneer of Miocene basalt. A window in this basalt has exposed a small (?) Mesozoic granodiorite stock which may be similar to the Lower Jurassic Granite Mountain Pluton to the north of Williams Lake.

The EM showing is underlain by this granodiorite which has been traced over a distance of about 3.2 kilometres in a north-south direction. Sporadic disseminated chalcopyrite and bornite occur within the stock along with fairly pervasive chloritic and sericitic alteration and lesser potassic alteration.

BIBLIOGRAPHY

EMPR ASS RPT 5380A, 5926
EMPR GEM 1974-241; 1976-E138
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 032**

NATIONAL MINERAL INVENTORY: 093B15 Mn1

NAME(S): **BLUESTONE CREEK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B15W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 59 19 N
LONGITUDE: 122 48 19 W
ELEVATION: Metres

NORTHING: 5871021
EASTING: 513071

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location from Geological Survey of Canada, Map 12-1959.

COMMODITIES: Manganese

MINERALS

SIGNIFICANT: Psilomelane
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: J03 Mn veins and replacements

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Chert
Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The Bluestone Creek manganese showing occurs in sedimentary rocks of the Mississippian to Triassic Cache Creek Group. The area is largely obscured by younger sedimentary rocks and by Pleistocene glacial and fluvioglacial deposits.

The occurrence consists of psilomelane which occurs as fracture fillings within chert.

BIBLIOGRAPHY

GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **NARCOSLI**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 42 03 N
LONGITUDE: 122 31 40 W
ELEVATION: Metres

NORTHING: 5839096
EASTING: 531910

LOCATION ACCURACY: Within 500M
COMMENTS: On Lot 1617.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: B06 Fireclay E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Clay
Sandstone
Shale
Conglomerate
Tuff
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane Overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Narcosli showing occurs within an area underlain by Tertiary sedimentary and volcanic rocks resting on older deformed rocks of the Cache Creek Group. The sedimentary rocks consist of sandstone, shale and conglomerate with interbedded tuff horizons, probably of Oligocene age, overlain by Miocene basalt flows. Outcrop is limited away from the incision of the Fraser River due to a cover of Pleistocene till.

The Narcosli showing is a surficial clay deposit, light brown in colour and with cone 2.5, suitable for common brick and tile manufacture.

BIBLIOGRAPHY

GSC MAP 12-1959; 1424A
EMPR BULL 30, p. 53

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 034**

NATIONAL MINERAL INVENTORY:

NAME(S): **AUSTRALIAN CREEK SHALE** AUSTRALIAN CREEK

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 43 21 N
LONGITUDE: 122 25 58 W
ELEVATION: Metres

NORTHING: 5841553
EASTING: 538310

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Shale Clay

MINERALS

SIGNIFICANT: Shale Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Syngenetic Industrial Min. B06 Fireclay
TYPE: R02 Expanding shale
E07 Sedimentary kaolin
DIMENSION: 18 Metres
COMMENTS: 18 metre high bank of cone 5 clay.

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	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Shale
Clay
Sandstone
Conglomerate
Tuff
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane Overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Australian Creek showing occurs within an area underlain by Tertiary sedimentary and volcanic rocks resting on older deformed rocks of the Cache Creek Group. The sedimentary rocks consist of sandstone, shale and conglomerate with interbedded tuff horizons, probably of Oligocene age, overlain by Miocene basalt flows. Outcrop is limited away from the incision of the Fraser River due to a cover of Pleistocene till.

The showing consists of a 1.5 metre thickness of thin bedded brown shale which occurs above a coal seam of the Oligocene Fraser River coal measures (refer to the Australian Creek Coal showing 093B 010). Also outcropping in the area is an 18 metre high bank of light grey, noncalcareous clay of cone 5.

BIBLIOGRAPHY

EMPR AR 1957-80
EMPR BULL 30, p. 59
EMPR PF (See 93G General File - Quesnel Area)
GSC MEM 118, p. 73
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **WILLIAMS LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B01E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 05 30 N
LONGITUDE: 122 10 35 W
ELEVATION: Metres

NORTHING: 5771554
EASTING: 556425

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: B06 Fireclay

Industrial Min.

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Clay
Argillite

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The area is underlain by poorly exposed rocks of the Mississippian to Triassic Cache Creek Group which, in the region, consists mainly of mafic metavolcanic rocks, argillaceous metasediments and ultramafic bodies, now sheared and altered. Overlying the Cache Creek Group are Miocene plateau basalt and Pleistocene till.

The showing consists of a residual clay deposit from altered argillite in road cuts. The clay is of cone 19 and although it burns white, it lacks plasticity and, therefore, is of doubtful ceramic value.

BIBLIOGRAPHY

EMPR BULL 30, p. 59
EMPR PF (Test of Clay sample - Williams Lake area, 1922)
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUESNEL COAL**

MINING DIVISION: Cariboo

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093B16W

BC MAP:

LATITUDE: 52 47 25 N

LONGITUDE: 122 27 30 W

ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5849079

EASTING: 536527

LOCATION ACCURACY: Within 1 KM

COMMENTS: The latitude and longitude above indicate the approximate (Cariboo Coalfield) centre of the Quesnel Coal Basin.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal

MINERALIZATION AGE: Oligocene

DEPOSIT

CHARACTER: Stratiform

CLASSIFICATION: Sedimentary

TYPE: A03 Sub-bituminous coal

SHAPE: Irregular

MODIFIER: Folded Faulted

COMMENTS: Dips generally less than 35 degrees. A number of NE-SW trending, SW plunging folds and WNW-ESE trending folds. A SW plunging anticline at Australian Cr. and a syncline at Dodd's Ranch. Several faults present.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Oligocene

Unnamed/Unknown Group

Unnamed/Unknown Formation

LITHOLOGY: Coal
Claystone
Sandstone
Conglomerate
Diatomite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Overlap Assemblage

METAMORPHIC TYPE: Regional

COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Sub-Bituminous

INVENTORY

ORE ZONE: B

REPORT ON: Y

CATEGORY: Measured

YEAR: 1980

QUANTITY: 50020740 Tonnes

COMMODITY

GRADE

Coal

100.0000 Per cent

COMMENTS: Based on coal seam extending to 80 metres depth, sub-bituminous.

REFERENCE: Coal Assessment Report 36.

ORE ZONE: A

REPORT ON: Y

CATEGORY: Measured

YEAR: 1980

QUANTITY: 20984040 Tonnes

COMMODITY

GRADE

Coal

100.0000 Per cent

COMMENTS: Based on coal seam extending to 80 metres depth, sub-bituminous.

REFERENCE: Coal Assessment Report 36.

CAPSULE GEOLOGY

A number of coal zones containing sub-bituminous "B" and "C" rank coal are present in the lower portion of the Fraser River Member of Lower Oligocene Age. The member is greater than 360 metres in thickness and consists of interbedded claystone, sandstone, conglomerate coal and diatomite. Coal seams up to 21.9 metres thick are present in various parts of the Lower Fraser River Unit. The seams contain many claystone partings and both the coal seams and claystone bands are lenticular over short distances. Up to

CAPSULE GEOLOGY

3 seams are present (e.g. Alexandria Ferry 093B 037) and range from 1.07 metres to 21.9 metres in thickness but are generally less than approximately 3 metres thick. The intervals between the seams vary from 0.46 metres to 141.7 metres.

The coal occurrences are in four main areas: the Red Cliff (093B 055), West Australian Creek and East Australian Creek (093B 010) and Alexandria Ferry (093B 037), all south of Quesnel; in addition to two thick coal seams which outcrop west of Prince George.

The coal contains 3.4 per cent to 45.8 per cent moisture, 23.4 per cent to 52.0 per cent volatile matter, 18.5 per cent to 57.2 per cent fixed carbon, 13.7 per cent to 30.2 per cent ash and 0.23 per cent to 0.6 per cent sulphur.

Resource estimates based on the main coal seams to a depth of 80 metres are 20,984,040 tonnes and 50,020,740 tonnes for areas A and B, west of and including the Australian Creek area, respectively (see Coal Assessment Report #36 for examples). These estimates are based on 1.05 to 1.00 parting to coal ratios, 25 per cent ash in the coal, 50 per cent ash in the partings and flat lying seams.

The strata dips generally less than 35 degrees and commonly less than 20 degrees and are folded into a number of northeast to southwest trending, southwest plunging and west-northwest to east-southeast trending anticlines and synclines. An anticline is present at Australian Creek and a syncline at Dodd's Ranch.

BIBLIOGRAPHY

EMPR COAL ASS RPT 23, 25, 27, 29, 30, 31, 32, 33, 34, 35, *36
GSC P *78-1B, pp. 59-64; 89-4
GSC OF 599
GSC MAP 12-1959; 1424A
EMPR AR 1924-A125-127
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File - Quesnel Area)

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALEXANDRIA FERRY**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 45 N
LONGITUDE: 122 27 05 W
ELEVATION: Metres

NORTHING: 5831161
EASTING: 537132

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Oligocene

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A03 Sub-bituminous coal
SHAPE: Irregular
DIMENSION: 0003 Metres STRIKE/DIP: 090/15S
COMMENTS: The seams dip approximately 15 degrees south in the area. In 4.7 metre outcrop there is 3.5 metres of coal.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Oligocene	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Coal
Claystone
Sandstone
Conglomerate
Diatomite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP: Post-mineralization
GRADE: Sub-Bituminous

CAPSULE GEOLOGY

Several thin coal seams and one major coal zone with 3.5 metres of coal in a 4.7 metre thick sequence outcrops south of the old Alexandria Ferry. The coal is sub-bituminous "B" and "C" in rank and contains 3.4 per cent to 6.9 per cent moisture, 38.2 per cent to 39.7 per cent volatile matter, 36.8 per cent to 39.7 per cent fixed carbon, and 13.7 per cent to 21.0 per cent ash. The seams dip approximately 15 degrees south. Much of the coal bearing strata has been eroded to the east of the outcrop by a deeply incised preglacial channel.

BIBLIOGRAPHY

EMPR COAL ASS RPT *36
GSC P *78-1B; 89-4
GSC MAP 12-1959; 1424A; 1538G
EMPR AR 1924-A125-127

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **MILE 380.5**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 56 00 N
LONGITUDE: 122 29 05 W
ELEVATION: Metres

NORTHING: 5864979
EASTING: 534634

LOCATION ACCURACY: Within 1 KM

COMMENTS: Mile 380.5 on railway, 5.6 kilometres south of Quesnel.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: B06 Fireclay

Industrial Min.

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

This showing is located at mile 380.5 on the railway, 5.6 kilometres south of Quesnel. It consists of an exposure of light grey, non-calcareous, cone 16, brown burning clay.

BIBLIOGRAPHY

EMPR AR 1957-80
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File - Quesnel Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **BAKER CK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 57 00 N
LONGITUDE: 122 33 05 W
ELEVATION: Metres

NORTHING: 5866803
EASTING: 530141

LOCATION ACCURACY: Within 1 KM

COMMENTS: South bank of Baker Creek, 4.8 kilometres above highway bridge.

COMMODITIES: Shale

MINERALS

SIGNIFICANT: Shale
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: B06 Fireclay

Industrial Min.

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Shale
Sandstone
Conglomerate
Tuff
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Quesnel area is underlain by Tertiary sedimentary and volcanic rocks which rest unconformably on rocks of the Cache Creek Group. The Tertiary rocks comprise a lower assemblage of sandstone, shale and conglomerate with interbedded tuffs probably of Oligocene age, overlain by Miocene plateau basalt.

The Baker Creek showing is located on the south bank of the creek, 4.8 kilometres above the highway bridge. The showing comprises soft white shale with cone 15.5, suitable for brick manufacture if close firing clay was added. This deposit is probably the result of weathering of Oligocene shale.

BIBLIOGRAPHY

EMR TECH BULL (1964) 54, pp. 55,63,65
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHIMNEY CREEK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B01W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 03 48 N
LONGITUDE: 122 16 29 W
ELEVATION: 244 Metres

NORTHING: 5768331
EASTING: 549720

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on Fraser River just north of Chimney Creek as described in the Industrial Minerals File.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Pennsylvan.-Permian

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
COMMENTS: Deposit folded into a north trending anticline.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Limestone

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Massive grey limestone of the Mississippian to Triassic Cache Creek Group forms large bluffs along both sides of the Fraser River, just north of its confluence with Chimney Creek, 12.5 kilometres southwest of the town of Williams Lake. The limestone is warped into a north trending fold that follows the Fraser River.

BIBLIOGRAPHY

EMPR IND MIN FILE (McCammon, J.W. , 1973, Limestone Occurrences in B.C. page 22 (in Ministry Library))
GSC MAP 12-1959, 1424A

DATE CODED: 1989/08/10
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093B 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALEXIS CREEK (L.561)**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093B03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 05 30 N
LONGITUDE: 123 29 05 W
ELEVATION: 762 Metres

NORTHING: 5771345
EASTING: 466792

LOCATION ACCURACY: Within 500M

COMMENTS: Three kilometres west of the town of Alexis Creek along the Chilcotin River.

COMMODITIES: Hydromagnesite

MINERALS

SIGNIFICANT: Hydromagnesite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Residual Evaporite Industrial Min.
TYPE: F09 Playa and Alkaline Lake Evaporites

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Hydromagnesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Chilcotin Plateau

INVENTORY

ORE ZONE: ALEXIS CREEK

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 900 Tonnes
COMMODITY

YEAR: 1986

GRADE
84.0000 Per cent

REFERENCE: Open File 1987-13, page 67.

CAPSULE GEOLOGY

The Alexis Creek showing consists of approximately 900 tonnes of indicated reserves of hydromagnesite. The showing is located on Lot 561 which is about three kilometres west of the town of Alexis Creek along the Chilcotin River. The material reportedly contains 84 per cent Mg(HCO₃)₂ (hydromagnesite), 0.2 per cent Al₂O₃ (aluminum oxide) plus Fe₂O₃ (iron oxide) and 13 per cent insolubles.

BIBLIOGRAPHY

EMPR BULL 4, p. 114
EMPR FIELDWORK 2000, pp. 327-336
EMPR OF 1987-13, p. 67
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 042**

NATIONAL MINERAL INVENTORY: 093B10 Dtm2

NAME(S): **BUCK RIDGE** LEPETICH

STATUS: Developed Prospect

Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093B10E

BC MAP:

LATITUDE: 52 43 36 N

LONGITUDE: 122 30 58 W

ELEVATION: 634 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate center of Lot 1616 (Ministry of Mines Annual Report 1959 p. 157).

UTM ZONE: 10 (NAD 83)

NORTHING: 5841975

EASTING: 532679

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite

MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Stratiform

CLASSIFICATION: Sedimentary Industrial Min.

TYPE: F06 Lacustrine diatomite

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Unnamed/Unknown Informal

LITHOLOGY: Diatomite

Clay

Tuff

Conglomerate

Sandstone

Shale

Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Overlap Assemblage

COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Buck Ridge deposit is located in the vicinity of the Buck Ridge post office on the west side of the Fraser River, 27 kilometres south of Quesnel.

In the Quesnel region Tertiary volcanic and sedimentary rocks overlie Paleozoic and Mesozoic rocks of the Cache Creek and Nicola Groups. These Tertiary rocks range in age from Paleocene to Pliocene but are dominated by plateau basalts of Miocene age and an underlying sedimentary succession including tuffs, conglomerate, sandstone and shale. Included in this sedimentary assemblage is a horizon of diatomaceous earth from which past production is recorded.

The area has been disrupted by faulting and the diatomite occurs as rather small disconnected blocks at various elevations. It is likely that the diatomite was originally laid down at the same elevation in lakes formed by obstructions in the Tertiary Fraser River. The diatomite, believed to be lower Upper Miocene in age, overlies older Tertiary clays, sands and gravels. The diatomite consists almost exclusively of various sizes of Melosira granulata diatoms, usually very small, with variable amounts of clay, silt and volcanic ash.

The Buck Ridge showing encompasses a number of separate but relatively closely spaced diatomite showings over a distance of about 6 kilometres along the west bank of the Fraser River. The diatomite is creamy white to buff with the main variable in composition being the amount of silt and ash present. Scattered thin layers of clay occur as interbeds.

The best known occurrence is on the Lepetich farm at the southeast corner of Lot 1616 and the mid-western side of Lot 8011. A test shipment of four truck loads of diatomite was taken from this location (Minister of Mines Annual Report 1960 p. 139). A sample from this vicinity (Lot 8011) analyzed 74.37 per cent SiO₂, 6.45 per cent Al₂O₃, 2.65 per cent Fe₂O₃, 0.71 per cent CaO, 1.30 per cent MgO and 13.26 per cent H₂O (Minister of Mines Annual Report 1959 p. 166).

MINFILE NUMBER: **093B 042**

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 330
REPORT: RGEN0100

CAPSULE GEOLOGY

The silica content of other diatomite exposures were generally lower, ranging from 58.28 to 76.86 per cent (Minister of Mines Annual Report 1959 p. 166).

BIBLIOGRAPHY

EMPR AR *1947-A210; *1959-163-166; 1960-139
EMPR PF (See 93G General File - Quesnel Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1991/08/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOT 385**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B16W
BC MAP:
LATITUDE: 52 59 20 N
LONGITUDE: 122 29 45 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Lot 385, west bank of Quesnel River.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5871153
EASTING: 533843

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: B06 Fireclay

Industrial Min.

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Clay
Carbonaceous Clay
Siltstone
Coal

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Lot 385 deposit is located adjacent to the town of Quesnel, on the west bank of the Quesnel River. The deposit has previously been worked for the manufacture of brick but no production figures are available.

The area is underlain by sedimentary rocks of probable Oligocene age which were deposited on Pennsylvanian to Triassic rocks of the Cache Creek Group. The Tertiary deposits are mainly of freshwater derivation and include coal measures of the Fraser River Formation (093B 10, 37, and 36).

The deposit consists of a 5 metre thick bed of grey clay overlain by a metre of carbonaceous clay and a further 1.2 metres of silt and clay. The deposit has been worked in the past for the manufacture of bricks.

BIBLIOGRAPHY

EMPR BULL 30, p. 53
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File - Quesnel Area)
GSC MAP 12-1959; 1424A
GSC MEM 118, p. 73

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 044**

NATIONAL MINERAL INVENTORY: 093B10 Dtm1

NAME(S): **QUESNEL DIATOMITE (L.6148)**, ALEXANDRIA WEST (L.304)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B10E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 40 42 N
LONGITUDE: 122 32 05 W
ELEVATION: Metres

NORTHING: 5836590
EASTING: 531456

LOCATION ACCURACY: Within 500M

COMMENTS: Lots 6148 and 304, near Quesnel and Narcosli creeks.

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: F06 Lacustrine diatomite

DIMENSION: 0015 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Diatomite horizons are up to 15 metres thick.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Diatomite
Tuff
Conglomerate
Sandstone
Shale
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

In the Quesnel region Tertiary volcanic and sedimentary rocks overlie Paleozoic and Mesozoic rocks of the Cache Creek and Nicola groups. These Tertiary rocks range in age from Paleocene to Pliocene but are dominated by plateau basalts of Miocene age and an underlying sedimentary succession including tuffs, conglomerate, sandstone and shale. Included in this sedimentary assemblage is a horizon of diatomaceous earth from which past production is recorded near Quesnel and Narcosli creeks (093B 042).

The showing consists of deposits of diatomite which, in places, are up to 15 metres thick.

BIBLIOGRAPHY

EMPR AR 1947-A209; 1959-156
CANMET RPT (1928) 691, p. 45
GSC MEM 118, p. 76
GSC MAP 12-1959; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 045**

NATIONAL MINERAL INVENTORY: 093B1 Ni2

NAME(S): **WILLIAMS**, CARIBOO NICKEL

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B01E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 07 15 N
LONGITUDE: 122 02 05 W
ELEVATION: 632 Metres

NORTHING: 5774917
EASTING: 566088

LOCATION ACCURACY: Within 1 KM

COMMENTS: Just north of highway, approximately 6.4 kilometres east of town.

COMMODITIES: Nickel Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite

COMMENTS: Nickel mineral has not been identified.

ALTERATION: Calcite Ankerite

ALTERATION TYPE: Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork

CLASSIFICATION: Replacement Magmatic

SHAPE: Irregular

MODIFIER: Sheared

COMMENTS: Strikes northeast dips northwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Limestone
Serpentinite
Mafic Meta Volcanic
Argillaceous Meta Sediment/Sedimentary
Ultramafic

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1936

SAMPLE TYPE: Grab

COMMODITY	GRADE
Nickel	0.2300 Per cent

COMMENTS: Sample of serpentinite overlying limestone. A sample from shear zone assayed 0.15 per cent nickel.

REFERENCE: Minister of Mines, Annual Report 1935, page C32.

CAPSULE GEOLOGY

The area is underlain by poorly exposed rocks of the Cache Creek which, in the Williams Lake region, consists mainly of mafic metavolcanic rocks, argillaceous metasediments and ultramafic bodies, now sheared and altered. The property is located adjacent to the eastern end of Williams Lake 6.4 kilometres east of town and is underlain by the Mississippian to Triassic Cache Creek Group which, to the west and east, are covered by Tertiary volcanic rocks and sediments. Pleistocene till covers much of the area to the north. In this area serpentinite is in shear contact with underlying limestone. This shear zone strikes to the northeast and dips to the northwest. Within the shear zone is ankerite, calcite and minor pyrrhotite and chalcopyrite and a green mineral of low nickel content (?mariposite). A sample from the shear zone assayed 0.15 per cent nickel while the overlying serpentinite assayed 0.23 per cent nickel (Annual Report 1935 p. C32).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 334
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1935-C32
EMR MP RESFILE MR-NI-301.00 (BC)
GSC MAP 12-1959; 1424A

DATE CODED: 1986/03/26
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **MANDY**, BLACK BEAR, COPPER QUEEN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 45 14 N
LONGITUDE: 122 04 18 W
ELEVATION: 1128 Metres

NORTHING: 5845297
EASTING: 562654

LOCATION ACCURACY: Within 500M

COMMENTS: 35 kilometres southeast of Quesnel (Assessment Report 15130).

COMMODITIES: Silver Copper Gold Antimony Zinc

MINERALS

SIGNIFICANT: Tetrahedrite Chalcopyrite Pyrite

ASSOCIATED: Quartz Ankerite

ALTERATION: Silica Epidote Chlorite Biotite Malachite

ALTERATION TYPE: Azurite

ALTERATION TYPE: Silicific'n

Propylitic

Biotite

Carbonate

Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Igneous-contact

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Cretaceous

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Porphyritic Basalt
Volcanic Breccia
Greenstone
Diorite
Quartz Monzonite
Porphyritic Granite Dike
Granodiorite
Argillite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	1686.5800	Grams per tonne
Gold	2.6000	Grams per tonne
Copper	13.5400	Per cent
Antimony	7.4900	Per cent

COMMENTS: Sample 2828, grab sample of tetrahedrite mineralization.

REFERENCE: Assessment Report 14816.

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	435.1000	Grams per tonne
Gold	0.6500	Grams per tonne
Copper	3.3400	Per cent
Zinc	0.4500	Per cent

COMMENTS: Sample #6289 across 1.5 metres of a quartz ankerite vein in sheared porphyritic basalt.

REFERENCE: Assessment Report 15130.

CAPSULE GEOLOGY

The region is underlain by sedimentary and volcanic rocks of the

CAPSULE GEOLOGY

Upper Triassic to Lower Jurassic Nicola Group of the Central Quesnel belt. The Nicola Group has been intruded by felsic alkalic stocks of Lower Jurassic age and, along the east side of the Quesnel River, by a calc-alkalic pluton of probable Cretaceous age. This pluton consists of quartz monzonite with dioritic and granodioritic phases cut by fine grained granite and porphyritic granite dikes. Hydrothermal alteration of the pluton has occurred, evidenced by the presence of epidote, chlorite, quartz, biotite and carbonate along with quartz and quartz-ankerite veining. In some places these veins contain tetrahedrite, chalcopyrite, pyrite, malachite and azurite. Quartz-ankerite veins also occur within the country rock intruded by the pluton. In the vicinity of the showing, rocks of the Nicola Group are very poorly exposed, being mainly covered by a thick accumulation of glacial gravels. A chip sample taken in 1986 across 1.5 metres of a quartz-ankerite vein in sheared porphyritic basalt yielded 3.3 per cent copper, 0.02 per cent lead, 0.45 per cent zinc, 435 grams per tonne silver and 0.65 grams per tonne gold (Assessment Report 15130). Recent mapping indicates that the property is underlain almost entirely by rocks of the plutonic complex. Therefore, it is not certain whether the basalt sampled was that of the Nicola Group, the overlying Miocene plateau basalt, or a pendant within the pluton.

BIBLIOGRAPHY

EMPR AR 1921-114; 1928-196
EMPR ASS RPT 13640, *14816, *15130
EMPR OF MAP 1989 - Swift River
EMPR EXPL 1986-C319,C321
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File - Quesnel Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1986/03/28
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **BURNT SHALE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B16W
BC MAP:
LATITUDE: 52 57 43 N
LONGITUDE: 122 29 18 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of Lot 222.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5868160
EASTING: 534368

COMMODITIES: Shale

MINERALS

SIGNIFICANT: Shale
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Shale

HOSTROCK COMMENTS: The rocks underlying the showing are probably Oligocene in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Burnt Shale deposit occurs within an area underlain by Tertiary sedimentary rocks which have been deposited on the Cache Creek Terrane.

The Tertiary stratigraphy near Quesnel is poorly exposed but it is likely that the rocks underlying the property are Oligocene in age.

The occurrence is referred to as a "burnt" shale and is thought to have originally been a clay or shale which has been baked. Quarried in the past, the material is hard, vitreous to porcelaneous, and with a range of colours of red, pink, buff, yellow, blue and black. No production figures are available.

BIBLIOGRAPHY

EMPR AR 1965-262; 1966-271; 1967-315
EMPR BULL 3, p. 16
EMPR GEM 1970-497; 1974-378
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File - Quesnel Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1986/03/28
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **DIAMOND**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 38 12 N
LONGITUDE: 122 31 51 W
ELEVATION: Metres

NORTHING: 5831957
EASTING: 531750

LOCATION ACCURACY: Within 500M
COMMENTS: Just west of Lot 5019

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: F06 Lacustrine diatomite

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Unnamed/Unknown Informal

LITHOLOGY: Diatomite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

In the Quesnel region, Tertiary volcanic and sedimentary rocks overlie Paleozoic and Mesozoic rocks of the Cache Creek and Nicola groups. These Tertiary rocks range in age from Paleocene to Pliocene but are dominated by plateau basalts of Miocene age and an underlying sedimentary succession including tuffs, conglomerate, sandstone and shale. Included in this sedimentary assemblage is a horizon of diatomaceous earth from which past production is recorded near Quesnel and Narcosli creeks.

The Diamond showing covers a number of exposures of diatomite but all are badly broken up and contain considerable amounts of clay.

BIBLIOGRAPHY

EMPR AR 1959-165
GSC MAP 12-1959; 1424A

DATE CODED: 1986/04/02
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 049**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEBSTER (L.8686)**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 43 01 N
LONGITUDE: 122 37 28 W
ELEVATION: Metres

NORTHING: 5840850
EASTING: 525368

LOCATION ACCURACY: Within 500M

COMMENTS: West edge of Lot 8686 on west side of Webster Lake.

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: F06 Lacustrine diatomite

DIMENSION: 0034 x 0001

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Diatomite exposed for 34 metres in length and 1 metre in depth.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Tertiary

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Unnamed/Unknown Informal

LITHOLOGY: Diatomite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

In the Quesnel region Tertiary volcanic and sedimentary rocks overlie Paleozoic and Mesozoic rocks of the Cache Creek and Nicola groups. These Tertiary rocks range in age from Paleocene to Pliocene but are dominated by plateau basalts of Miocene age and an underlying sedimentary succession including tuffs, conglomerate, sandstone and shale. Included in this sedimentary assemblage is a horizon of diatomaceous earth from which past production is recorded.

The Webster showing consists of crushed diatomite exposed over a distance of 34 metres along a road cut. The depth of the exposed diatomite is about one metre.

BIBLIOGRAPHY

EMPR AR 1959-165
GSC MAP 12-1959; 1424A

DATE CODED: 1986/04/02
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **McLEESE** GRANITE MOUNTAIN

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B08E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 27 21 N
LONGITUDE: 122 14 11 W
ELEVATION: 978 Metres

NORTHING: 5812013
EASTING: 551888

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of showings on McLeese 5 claim.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite Chlorite Epidote Sericite
ALTERATION TYPE: Oxidation Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated Breccia
CLASSIFICATION: Hydrothermal Epigenetic Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Sheared Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Lower Jurassic			Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Hornblende

LITHOLOGY: Diorite
Chlorite Sericite Schist
Breccia
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Volume Vol. 5.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The McLeese showing is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

In the area of the showings chlorite-sericite schist of the Cache Creek group is in contact with fine grained diorite of the Granite Mountain Pluton. In the southern part of the area mineralization consists of chalcopyrite, malachite, azurite and minor pyrite in quartz lenses along a few shallowly dipping shears in both Cache Creek Group and intrusive rocks. In the northern part, chalcopyrite, malachite and minor pyrite occur as disseminations along the foliation of the diorite and as fracture fillings in intensely chloritized, epidotized and sericitized diorite.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 341
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (See 093B General File - Property Map of the McLeese Lake Area, 1970; *Meyer, W., (1971): Report on McLeese, Tor, and Bob Claims, for Sheridan Copper Mines Ltd.; *Meyer, W., (1971): Progress Report on Geochemical Survey, McLeese Claims for Sheridan Copper Mines Ltd.; Sampling and Assay Record, Drill Logs, Western Geological Services, 1971; Meyer, W., (1971): Progress Report on McLeese Lake Property)
GSC MAP 12-1959; 1424A; 1537G

DATE CODED: 1986/04/03
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **SAWMILL**, COLE, GIBRALTAR

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093B08W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 28 05 N
LONGITUDE: 122 16 24 W
ELEVATION: 960 Metres

NORTHING: 5813347
EASTING: 549364

LOCATION ACCURACY: Within 500M

COMMENTS: Located 5 kilometres south of Gibraltar East pit (093B 012). See also Pollyanna (093B 006), Gibraltar West (093B 007), Gibraltar North (093B 011) and Granite Lake (093B 013).

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite Bornite
ASSOCIATED: Quartz Carbonate Magnetite
ALTERATION: Chlorite Epidote Sericite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Lower Jurassic			Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Diorite
Quartz Porphyry
Meta Andesite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

Cache Creek

RELATIONSHIP: Pre-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: SAWMILL

REPORT ON: Y

CATEGORY: Inferred
QUANTITY: 68492450 Tonnes

YEAR: 1992

COMMODITY: Copper
GRADE: 0.2440 Per cent

COMMENTS: Cutoff of 0.18 per cent copper.
REFERENCE: CIM Special Volume 46, page 202.

CAPSULE GEOLOGY

The Sawmill zone is located near the eastern margin of the Stikinia Terrane in south central British Columbia, 5 kilometres south of Gibraltar East (093B 012). The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

The mineralization consists of chalcopyrite, molybdenite and pyrite in quartz-carbonate veinlets parallel to foliation

CAPSULE GEOLOGY

planes of the Granite Mountain diorite. Associated alteration is sericitic and chloritic and, in some cases, epidote alteration. Drilling also encountered mineralization within meta-andesite and an intrusive quartz porphyry. While chalcopyrite mineralization is fairly persistent, molybdenite distribution is more erratic. The Sawmill zone was outlined in 1979. As of December 31, 1992 geological resources were estimated at 68,492,450 tonnes of 0.244 per cent copper (CIM Special Volume 46, page 202).

In 1986, from drillhole 86-22 between 91.4 and 154.5 metres, sampling resulted in values of 0.22 per cent copper and 0.13 per cent Molybdenum sulphate (Assessment Report 15798).

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT *7387, *8120, *8326, *10283, *10585, 15712, *15798
EMPR EXPL 1979-210; 1980-313; 1982-276; 1987-C258; 1996-C6
EMPR PF (See 093B General File - Property Map of the McLeese Lake Area, 1970)
GSC MAP 12-1959; 1424A; 1537G
CIM Spec. Vol. *46, pp. 201-213
WWW <http://www.hdgold.com/tkof1.htm>

DATE CODED: 1986/04/08
DATE REVISED: 1998/05/06

CODED BY: GRF
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 052**

NATIONAL MINERAL INVENTORY: 093B9 Cu3

NAME(S): **GRANITE MOUNTAIN**, MAD, BM,
GM

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 32 00 N
LONGITUDE: 122 13 05 W
ELEVATION: 1120 Metres

NORTHING: 5820647
EASTING: 553040

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Lower Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Granite Mountain Pluton

ISOTOPIC AGE: 204 +/- 6 Ma

DATING METHOD: Potassium/Argon
MATERIAL DATED: Hornblende

LITHOLOGY: Quartz Diorite
Meta Basalt
Limestone
Argillaceous Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Isotopic age reference: CIM Special Vol. 15 p. 195.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Mad showing is located near the eastern margin of the Stikinia Terrane in south central British Columbia. The dominant rock types in the region are metabasalt, limestone and argillaceous metasediments of the Mississippian to Triassic Cache Creek Group. These are intruded by the dioritic to quartz dioritic Granite Mountain Pluton and the (?)Cretaceous Sheridan Creek Pluton. The Granite Mountain Pluton has been affected by regional metamorphism (greenschist facies) and deformation along with the enclosing Cache Creek Group.

Mineralization of the showing consists of scattered pyrite, chalcopyrite, malachite and molybdenite within shear zones and northwest striking quartz veins in quartz diorite of the Granite Mountain Pluton.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT *597, *4506
EMPR GEM 1973-298
EMR MP CORPFILE (Exeter Mines Limited)
GSC MAP 12-1959; 1424A; 1538G

DATE CODED: 1986/04/07
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 052**

MINFILE NUMBER: **093B 053**

NATIONAL MINERAL INVENTORY: 093B16 Mo1

NAME(S): **NYLAND LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 46 33 N
LONGITUDE: 122 00 44 W
ELEVATION: Metres

NORTHING: 5847792
EASTING: 566632

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Cretaceous

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Quartz Monzonite
Sediment/Sedimentary
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group of the Central Quesnel belt. The Nicola Group has been intruded by felsic alkalic stocks of Lower Jurassic age and, along the east side of the Quesnel River, by a calc-alkalic pluton of probable Cretaceous age. This pluton consists of quartz monzonite with dioritic and granodioritic phases cut by fine grained granite and porphyritic granite dikes. Hydrothermal alteration of the pluton has occurred evidenced by the presence of epidote, chlorite, quartz, biotite and carbonate along with quartz and quartz-ankerite veining.

The Nyland Lake showing consists of molybdenite in quartz stringers hosted by granodiorite or quartz monzonite. The location of the showing, however, is not certain in that the given coordinates place the occurrence on the east shore of Nyland Lake, an area in which there is no outcrop at all. The showing is more likely to be that given on Energy, Mines and Petroleum Resources Open File Map, 1989, Swift River.

BIBLIOGRAPHY

EMR MP CORPFILE (Bow River Resources Ltd.)
EMPR OF MAP 1989 - Swift River
EMPR EXPL 1983-400; 1985-C279; 1987-C264
EMPR ASS RPT 11240, 12741, 13640, 16372
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File - Quesnel Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1986/04/08
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOB**

MINING DIVISION: Cariboo

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093B13E
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 54 50 N
 LONGITUDE: 123 37 40 W
 ELEVATION: 1100 Metres

NORTHING: 5862876
 EASTING: 457786

LOCATION ACCURACY: Within 500M
 COMMENTS:

COMMODITIES: Gold Silver Arsenic Antimony Mercury

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Stibnite Galena
 ASSOCIATED: Quartz
 ALTERATION: Hematite Limonite Silica K-Feldspar Clay
 Chlorite Carbonate
 ALTERATION TYPE: Oxidation Silicific'n Potassic Propylitic Carbonate
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
 CLASSIFICATION: Epigenetic Hydrothermal Industrial Min.
 TYPE: E03 Carbonate-hosted disseminated Au-Ag
 SHAPE: Irregular
 MODIFIER: Fractured
 DIMENSION: 1000 x 0500 Metres STRIKE/DIP: TREND/PLUNGE:
 COMMENTS: Area of alteration on Bob 2 claim.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous	Skeena	Undefined Formation	

LITHOLOGY: Conglomerate
 Sandstone
 Argillite
 Basalt
 Quartz Feldspar Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Chilcotin Plateau
 TERRANE: Overlap Assemblage
 COMMENTS: Suspect Terrane overlap.

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1986
SAMPLE TYPE: Drill Core	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	3.4300 Grams per tonne
Arsenic	0.0078 Per cent
Gold	2.6700 Grams per tonne
Mercury	0.0001 Per cent
Antimony	0.0013 Per cent
COMMENTS: Sample #23120 (DDH86-13), over 3 metres.	
REFERENCE: Assessment Report 15660.	

CAPSULE GEOLOGY

The region is underlain mainly by sedimentary rocks of Lower Cretaceous and Lower Tertiary ages and overlain by Miocene plateau basalt. Cretaceous rocks consist of conglomerate, sandstone and some interbedded argillite. Lower Tertiary rocks are generally volcanic and volcanoclastic with some epiclastic derivatives. Plateau basalt is ubiquitous throughout the region.
 The Cretaceous sedimentary rocks are considered to be correlative with the Skeena Group sediments which are of similar type and composition.
 The Bob showing is underlain by Lower Cretaceous sedimentary rocks, covered in part by basalts, and cut by quartz-feldspar porphyry dikes and sills. The sedimentary rocks dip 015 degrees to

CAPSULE GEOLOGY

the southwest and are cut by north-northeast and west-northwest striking fracture systems with steep dips. Alteration on the Bob 2 claim occurs over an area of 1000 by 500 meters and includes silica, feldspar, clay, chlorite, carbonate, pyrite, hematite, limonite and minor arsenopyrite, stibnite and galena. Gold mineralization with associated silver and mercury values occurs within this zone.

BIBLIOGRAPHY

EMPR ASS RPT *12125, *12744, *13478, *13998, *15660, 17145
EMPR EXPL 1983-398; 1984-297; 1985-C277; 1986-A52; 1987-A54,C262
GSC MAP 12-1959; 1424A
WWW [http://www.infomine.com/index/properties/BOB_\(MICH_AND_FP\).html](http://www.infomine.com/index/properties/BOB_(MICH_AND_FP).html)

DATE CODED: 1986/03/01
DATE REVISED: 1989/01/27

CODED BY: AFW
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **RED CLIFF**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093B15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 57 28 N
LONGITUDE: 122 30 45 W
ELEVATION: Metres

NORTHING: 5867685
EASTING: 532748

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Oligocene

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A03 Sub-bituminous coal
SHAPE: Irregular
MODIFIER: Folded
COMMENTS: Approximately 1 kilometre south of Quesnel the strata dip 5 degrees north. This area is separated from more northerly intersections (dips of 16 degrees SW) by an E-W trending syncline.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Oligocene	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Coal
Claystone
Sandstone
Conglomerate
Diatomite

HOSTROCK COMMENTS: Coal seam in Lower Fraser River Member.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Cariboo Plateau
RELATIONSHIP: Post-mineralization
GRADE: Sub-Bituminous

INVENTORY

ORE ZONE: SAMPLE
CATEGORY: Assay/analysis
SAMPLE TYPE: Channel
COMMODITY: Coal
COMMENTS: 60 per cent sub-bituminous "B" to "C" over 18 to 30 metres thickness.
REFERENCE: Coal Assessment Report 36.

REPORT ON: N
YEAR: 1980
GRADE: 60.0000 Per cent

CAPSULE GEOLOGY

The Red Cliff showing occurs within an area underlain by Tertiary sedimentary and volcanic rocks resting on older deformed rocks of the Cache Creek Group. The sedimentary rocks consist of sandstone, shale and conglomerate with interbedded tuff horizons, probably of Oligocene age, overlain by Miocene basalt flows. Away from the incision of the Fraser River outcropping bedrock is limited, being largely covered by a mantle of Pleistocene till.

The Oligocene sedimentary rocks of the Fraser River valley include the Fraser River Member, a succession of freshwater sediments containing coal measures. Approximately 1 kilometre south of Quesnel a coal seam of sub-bituminous "B" to "C" rank occurs in the Lower Fraser River Member. The seam, which dips to the north at 5 degrees, averages 60 per cent coal by volume over a thickness of 18 to 30 metres.

Further to the north a coal seam 2 to 6 metres thick has been intersected in drilling. The strata in this area dip at 16 degrees southwest, indicating that the coal measures are folded into a broad

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REPORT: RGEN0100

CAPSULE GEOLOGY

syncline about an east-west axis.

BIBLIOGRAPHY

EMPR COAL ASS RPT 36
GSC P 78-1B; 89-4
GSC MAP 12-1959, 1424A
EMPR AR 1924-125-127
EMPR PF (See 93G General File - Quesnel Area)

DATE CODED: 1986/05/30
DATE REVISED: 1989/01/27

CODED BY: EVFK
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALEXIS LAKE (L.2833)**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093B06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 15 11 N
LONGITUDE: 123 29 37 W
ELEVATION: 1060 Metres

NORTHING: 5789299
EASTING: 466305

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Hydromagnesite

MINERALS

SIGNIFICANT: Hydromagnesite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Residual Evaporite Industrial Min.
TYPE: F09 Playa and Alkaline Lake Evaporites

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Hydromagnesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Chilcotin Plateau

INVENTORY

ORE ZONE: ALEXIS LAKE
REPORT ON: Y
CATEGORY: Unclassified
QUANTITY: 1800 Tonnes
COMMODITY: Hydromagnesite
GRADE: 80.0000 Per cent
YEAR: 1986
COMMENTS: Method of reserve calculation unknown.
REFERENCE: Open File 1987-13, page 67.

CAPSULE GEOLOGY

The Alexis Lake showing consists of about 1,800 tonnes of hydro-magnesite containing 80 percent $Mg(HCO_3)_2$, 1 per cent $Al_2O_3 + Fe_2O_3$ and 9.2 per cent insoluble. Although no geological information is available from this showing, the deposit is likely to be a residual precipitate.

BIBLIOGRAPHY

EMPR BULL 4, p. 114
EMPR FIELDWORK 2000, pp. 327-336
GSC MAP 12-1959; 1424A

DATE CODED: 1986/10/22
DATE REVISED: 1989/01/27

CODED BY: BG
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **TARN, AND, ALSO**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B16E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 46 50 N
LONGITUDE: 122 08 24 W
ELEVATION: 777 Metres

NORTHING: 5848206
EASTING: 558007

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Silver Gold Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Molybdenite Pyrrhotite Pyrite
ALTERATION TYPE: Skarn Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn Hydrothermal Igneous-contact Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Sheared Fractured

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Cretaceous

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Skarn
Biotite Diorite
Biotite Hornblende Diorite
Lamprophyre Dike
Volcanic
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Cariboo Plateau

RELATIONSHIP: Syn-mineralization GRADE: Hornfels

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 15.7000 Grams per tonne
Gold 1.2000 Grams per tonne
Copper 2.4400 Per cent
Molybdenum 0.0030 Per cent

COMMENTS: Sample from trench across 0.30 metres, 0.01 per cent zinc and less than 0.01 percent lead.

REFERENCE: Assessment Report 9891 .

CAPSULE GEOLOGY

The showing is located within the Central Quesnel Belt of the Quesnellia Terrane. The region is underlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks intruded by Lower Jurassic alkalic stocks and a calc-alkalic pluton of probable Cretaceous age. Within this Cretaceous stock, rafts and faulted blocks of Upper Triassic sedimentary and volcanic rocks are preserved.

The Tarn showing is underlain by one of these fault blocks, intruded by biotite diorite, biotite-hornblende diorite and some lamprophyre dikes. The country rocks have been silicified and hornfelsed by diorite intrusion.

Mineralization consists of copper, molybdenum, silver and gold within the contact aureoles and disseminated pyrite and pyrrhotite with minor chalcopyrite, chalcocite and molybdenite within both the country rocks and the dioritic intrusions. Minor skarn-type altera-

CAPSULE GEOLOGY

tion is associated with fractures containing coarsely crystalline chalcopyrite and rosettes of molybdenite. A 30 centimetre sample across a contact skarn zone yielded 2.44 per cent copper, 0.003 per cent molybdenum, less than 0.01 per cent lead, 0.01 per cent zinc, 1.2 grams per tonne gold and 15.7 grams per tonne silver (Assessment Report 9891).

BIBLIOGRAPHY

EMPR ASS RPT *9891
EMPR FIELDWORK 1988, pp. 167-181
EMPR PF (See 93B General File - 16 Area; See 93G General File -
Quesnel Area)
GSC MAP 12-1959; 1424A

DATE CODED: 1987/01/22
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUD 7**, GREEN

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 29 30 N
LONGITUDE: 122 15 35 W
ELEVATION: 1158 Metres

NORTHING: 5815983
EASTING: 550261

LOCATION ACCURACY: Within 500M

COMMENTS: Part of the Green Group claims of Gibraltar mines; located on Granite Mountain on the mine haul road, 2.8 kilometres south of the plant site.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Molybdenite Pyrite Specularite

Magnetite

ASSOCIATED: Quartz Carbonate

ALTERATION: Chlorite Sericite

Epidote

Carbonate

Quartz

ALTERATION TYPE: Propylitic

Sericitic

Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork

Vein

Disseminated

CLASSIFICATION: Porphyry

TYPE: L04 Porphyry Cu ± Mo ± Au

K01 Cu skarn

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION:

STRIKE/DIP: 360/40W

TREND/PLUNGE:

COMMENTS: Attitude of fault.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

Triassic-Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY:

Quartz Diorite

Meta Andesite

Tuff

Breccia

Limestone

Rhyolite

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Cariboo Plateau

TERRANE: Cache Creek

METAMORPHIC TYPE: Contact

RELATIONSHIP: Syn-mineralization

GRADE:

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Copper

0.2800

Per cent

Molybdenum

0.0100

Per cent

REFERENCE: Assessment Report 15797.

CAPSULE GEOLOGY

A Jurassic to Triassic quartz diorite stock probably related to the Granite Mountain Pluton intrudes the Mississippian to Triassic Cache Creek Group andesitic to rhyolitic flows, tuffs, breccias, and limestones. The meta-andesites host disseminated pyrite, specularite, and minor magnetite. The Cache Creek rocks have undergone sericitic and propylitic alteration hosting abundant chlorite, epidote, sericite, quartz, carbonate, and pyrite.

In the 1986 drilling, a 21 metre thickness of limestone was encountered between the faulted contact of the Cache Creek and quartz diorite intrusive. In the vicinity of the fault there is extensive skarning and brecciation. The fault strikes northerly across the

CAPSULE GEOLOGY

Cuissou Valley and dips 40 degrees west.

The quartz diorite hosts disseminated chalcopyrite, bornite, and minor molybdenite as well as chalcopyrite in quartz-carbonate veinlets. In 1986, drilling intersected mineralization consisting of 0.28 per cent copper and 0.01 per cent molybdenite.

The Granite Mountain pluton has undergone pervasive saussurite-chlorite alteration. Four economic zones have been recognized and are in various stages of development.

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT *15797
EMPR PF (See 93B General File - Property Map of the McLeese Lake Area, 1970)
GSC MAP 12-1959; 1424A; 1537G

DATE CODED: 1987/09/01
DATE REVISED: 1989/08/10

CODED BY: LLC
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUESNEL**, CLAYBURN INDUSTRIES

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093B15E 093B10E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 45 05 N
LONGITUDE: 122 32 05 W
ELEVATION: 725 Metres

NORTHING: 5844717
EASTING: 531404

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 12194, 3 kilometres west of the Fraser River and about 26 kilometres south of Quesnel (Personal Communication - B. Warner, Clayburn Industries).

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Diatomite
Basalt
Tuff
Conglomerate
Sandstone
Shale
Silt
Ash
Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

In the Quesnel region, Tertiary volcanic and sedimentary rocks overlie Paleozoic and Mesozoic rocks of the Cache Creek Complex and Nicola Group. These Tertiary rocks range in age from Paleocene to Pliocene but are dominated by plateau basalts of Miocene age and an underlying sedimentary succession including tuffs, conglomerate, sandstone and shale. Included in this sedimentary assemblage is a horizon of diatomaceous earth from which past production is recorded.

At the Quesnel occurrence, diatomite is mined from Lot 12194 (B. Warner, Clayburn Industries, personal communication, 1993). The diatomite is creamy white to buff with the main variable in composition being the amount of silt and ash present. Scattered thin layers of clay may occur as interbeds.

Production at this site began in the 1970s, but production statistics are available beginning in 1987.

BIBLIOGRAPHY

EM EXPL 1996-A13
EMPR INF CIRC 1996-1, p. 10; 1997-1, p. 12; 1998-1, p. 13
EMPR OF 1994-1
EMPR PF (see 093G General File - Quesnel area)
GSC MAP 12-1959; 1424A

DATE CODED: 1993/11/01
DATE REVISED: 1993/11/01

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **NAZKO, KLARA, NAZCO,**
CANADA PUMICE, NAZKO LAVA QUARRY

STATUS: Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093B13E

UTM ZONE: 10 (NAD 83)

BC MAP:

LATITUDE: 52 56 26 N

LONGITUDE: 123 44 01 W

ELEVATION: 1150 Metres

NORTHING: 5865910

EASTING: 450700

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry or stripped area, 3 kilometres east of Fishpot Lake and about 10 west of the village of Nazko.

COMMODITIES: Aggregate

Pumice

MINERALS

SIGNIFICANT: Unknown

COMMENTS: Cinder cone material/lava rock (scoria).

MINERALIZATION AGE: Recent

DEPOSIT

CHARACTER: Massive

Unconsolidated

CLASSIFICATION: Volcanogenic

Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Recent

Unnamed/Unknown Group

Unnamed/Unknown Formation

LITHOLOGY: Scoria

Lava

Tephra

Tuff Breccia

Olivine Basalt

Lava Rock

Volcanic

Volcanic Rock

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Chilcotin Plateau

INVENTORY

ORE ZONE: NAZKO

REPORT ON: Y

CATEGORY: Combined

YEAR: 1998

QUANTITY: 44974000 Tonnes

COMMODITY

GRADE

Aggregate

100.0000

Per cent

COMMENTS: Volcanic deposit material (ash, cinder and lava). Includes 29,265,000 tonnes of proven, 8,848,000 tonnes of probable and 6,811,000 tonnes of inferred.

REFERENCE: GCNL #91 (May 12), 1998.

CAPSULE GEOLOGY

Recent cinder cone material/lava rock is quarried/stripped, crushed, screened, washed and stockpiled. The product is marketed for use as light-weight aggregate, anti-skid highway sand, and barbecue rock. It can also be used in landscaping and other ornamental aggregate applications, including golf course sand traps. The stripped area or quarry is located about 10 kilometres west of the village of Nazko. The estimated yearly extraction is about 2500 cubic metres for an estimated pit life of 25 years (Industrial Mineral File - Notice of Work).

Canada Pumice Corporation continued to develop a market for scoria from the Nazko cinder cone. Bulk sampling (2900 tonnes) was conducted, and an application has been made for a Mine Development Certificate for a 100,000 tonne per year operation (Information Circular 1996-1, page 20).

The deposit is in a 200-metre high volcanic cinder cone. In production since 1991, the deposit has a 20-million tonne reserve of ash, cinder and lava. Canada Pumice is developing new markets for the black and red porous cinder with a variety of trademarked

CAPSULE GEOLOGY

products: "TephraGro growing medium for hothouses"; AntiSlip winter traction material; and "LavaKing", red sand for sports and recreation facilities. Canada Pumice is increasing yearly production from 10,000 to 50,000 cubic metres. They also plan to develop "TephraLite", a specialized construction aggregate.

Reserves of volcanic deposits (tephra, tuff breccia and basalts) total 44,974,000 including 29,265,000 tonnes of proven, 8,898,000 tonnes of probable and 6,811,000 tonnes of inferred (GCNL #91 (May 12), 1998). Total reserves of tephra are 4,899,000 tonnes and tuff breccia and basalts are 40,075,000 tonnes (GCNL #98 (May 22), 1998).

Canada Pumice Corporation produces red and black volcanic cinder. In 1997, the company shipped 11,900 cubic yards. The products are used for landscaping, baseball diamonds and sport tracks, and growing and filtration media.

In 1999, a small shipment was sent to Ontario for testing as a water filtration media.

BIBLIOGRAPHY

- EMPR EXPL 1995-44; 1996-A14; 1997-23
EMPR INF CIRC 1993-13, p.20; 1994-1, p.21; 1994-19, p. 16; 1995-1, p. 16; 1995-9, p. 20; 1996-1, p. 20; 1997-1, p. 13; 1998-1, p. 15; 2000-1, pp. 8,11-12
EMPR OF 1994-1
EMPR PF (G. Salazar S. (1987): Engineering Report on the Nazko Lava Rock Project; Environmental Assessment Office Website (Oct. 1999): Mining: Nazko Quarry Project, Oct. 23, 1998, 9 p.)
GSC MAP 12-1959; 1424A
GCNL #91 (May 12), #98 (May 22), 1998
WWW <http://www.eao.gov.bc.ca/project/mining/nazkolav/home.htm>
Focus on Industrial Minerals, Vol. 3, Issue 1

DATE CODED: 1993/12/01
DATE REVISED: 1993/12/01

CODED BY: GO
REVISED BY: GO

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093B 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **BYSOUTH**, COPPER ACE NORTH, GIBRALTAR

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 37 00 N
LONGITUDE: 122 18 10 W
ELEVATION: 1040 Metres

NORTHING: 5829857
EASTING: 547204

LOCATION ACCURACY: Within 500M
COMMENTS: Location from Chris Ash.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Malachite Azurite
ALTERATION: Quartz Sericite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Breccia
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Granite Mountain Pluton

LITHOLOGY: Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Discovered in 1998 by United Gunn Resources, the Bysouth showing, on the Copper Ace North Grid, is 10.5 kilometres north of the Gibraltar mine (093B 012). Mineralization consists of medium to coarse-grained disseminated chalcopyrite and pyrite with malachite and azurite in a silica-rich breccia zone. Host rocks are chlorite-sericite altered quartz diorite, of the late Triassic-early Jurassic Granite Mountain Batholith. The breccia zone is up to 125 metres wide and has been traced by magnetic and IP surveys, along strike to the northwest for some 1325 metres. The structure remains open to the northwest and southeast. Rock grab samples from outcrop of the mineralized quartz breccia contain up to 7.2% copper (Exploration in BC 1998, page A10).

BIBLIOGRAPHY

EM EXPL 1998-8,44,A10
EM OF 1999-7
EMPR ASS RPT 25796
GCNL #213(Nov.5), 1998

DATE CODED: 1999/05/25
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **RICK**, COPPER ACE SOUTH, GIBRALTAR

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 32 30 N
LONGITUDE: 122 18 50 W
ELEVATION: 500 Metres

NORTHING: 5821508
EASTING: 546531

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of Copper Ace South grid.

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Granite Mountain Pluton

LITHOLOGY: Quartz Diorite
Chlorite Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Cache Creek PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Discovered in 1998 by United Gunn Resources, the Rick showing, on the Copper Ace South grid, is about 4 kilometres northwest of the Gibraltar mine (093B 012). Disseminated and fracture-controlled copper and sphalerite mineralization occur in altered mine phase quartz diorite (chlorite-sericite schist) of the late Triassic-early Jurassic Granite Mountain Batholith. Assay values up to 1.5 per cent copper and 1.1 per cent zinc are common throughout the area (Exploration in BC 1998, page A10).

BIBLIOGRAPHY

EM EXPL 1998-8,44,A10
EM OF 1999-7
EMPR ASS RPT 10010, 25794
GCNL #213(Nov.5), 1998

DATE CODED: 1999/05/25
DATE REVISED: 1999/06/24

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093B 063**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHRIS**, COPPER KING, GIBRALTAR,
CK

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093B09E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 33 25 N
LONGITUDE: 122 12 53 W
ELEVATION: 1200 Metres

NORTHING: 5823276
EASTING: 553238

LOCATION ACCURACY: Within 1 KM
COMMENTS: Location from GCNL #213 (November 5), 1998.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
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>
Lower Jurassic			Granite Mountain Pluton

LITHOLOGY: Quartz Diorite
Chlorite Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Cariboo Plateau

Cache Creek

CAPSULE GEOLOGY

Discovered in 1998 by United Gunn Resources, the Chris showing, on the Copper King property is about 6.5 kilometres northeast of the Gibraltar mine (093B 012). Disseminated and fracture-controlled quartz diorite (chlorite-sericite schist) of the late Triassic-early Jurassic Granite Mountain Batholith. Assay values of 0.23 per cent copper occur in a 150 by 45 metre area (GCNL #213 (November 5, 1998)).

BIBLIOGRAPHY

EM EXPL 1998-A1-A15
EM OF 1999-7
EMPR ASS RPT 25682, 25793
GCNL #213(Nov.5), 1998

DATE CODED: 1999/06/09
DATE REVISED: 1999/07/28

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 001**

NATIONAL MINERAL INVENTORY: 093C3 Cu1

NAME(S): **CQ, KF, MJ,
DK, C, COPPER QUEEN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 00 46 N
LONGITUDE: 125 23 46 W
ELEVATION: 1524 Metres

NORTHING: 5765170
EASTING: 335564

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of Breccia #1.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Epidote Sericite Clay
ALTERATION TYPE: Propylitic Chloritic Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Breccia
CLASSIFICATION: Hydrothermal Porphyry Diatreme
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Breccia
Diorite
Quartz Monzonite
Quartz Feldspar Porphyry
Volcanic
Granodiorite Dike

HOSTROCK COMMENTS: Mineralization is hosted by diatreme breccias. Volcanic rocks probably belong to Jurassic Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Pacific Ranges

CAPSULE GEOLOGY

The region is underlain to the west by the Coast Crystalline belt and to the east by Mesozoic and Tertiary volcanic and sedimentary rocks. A hybrid zone along the eastern margin of the Coast Crystalline Belt contains elements of both terranes. In this zone Mesozoic rocks have been incorporated into the plutons and are overlain by Tertiary volcanic rocks. The degree of metamorphism and deformation of the Intermontane Belt supracrustal rocks increases towards the Coast Crystalline Belt.

The showing occurs within the Hybrid zone where volcanic rocks, probably part of the Jurassic Hazelton Group, have been intruded and metasomatized by diorite, quartz monzonite and quartz feldspar porphyry. This assemblage is intruded by dikes of varying compositions ranging from leucogranite to intermediate to mafic dikes.

At least five diatreme breccia zones have been recognized in the area and have associated chalcopyrite, bornite, pyrite and minor molybdenite. Detailed work on one of the diatremes indicates that most of the sulphide mineralization is associated with late quartz veining. Alteration accompanying sulphide mineralization ranges from propylitic (chloritic) to local phyllic and argillic assemblages.

BIBLIOGRAPHY

EMPR ASS RPT 4209, *11596
EMPR GEM 1969-162; 1970-202; 1971-144; 1973-319
EMPR EXPL 1982-279
GSC MAP 1424A; 1202A; 10-1957

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 362
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL #245

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 002**

NATIONAL MINERAL INVENTORY: 093C6 Mo1

NAME(S): **MM**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 23 12 N
LONGITUDE: 125 28 30 W
ELEVATION: 1067 Metres

NORTHING: 5806928
EASTING: 331571

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Quartz Monzonite
Alaskite
Aplite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The region is underlain to the west by the Coast Crystalline belt and to the east by Mesozoic and Tertiary volcanic and sedimentary rocks. A hybrid zone along the eastern margin of the Coast Crystalline Belt contains elements of both terranes. In this zone Mesozoic rocks have been incorporated into the plutons and are overlain by Tertiary volcanic rocks. The degree of metamorphism and deformation of the Intermontane Belt supracrustal rocks increases towards the Coast Crystalline Belt.

The MM showing is underlain by quartz monzonite, alaskite and aplite of the Coast Crystalline Complex. Molybdenite and chalcopyrite occur as disseminations along joint and fracture planes cutting the intrusive rocks.

BIBLIOGRAPHY

EMPR GEM 1969-74,368; 1970-103
EMPR AR 1968-72
EMPR ASS RPT 1848
EMPR PF (Claim Map 29A MM group)
GSC MAP 1424A; 1202A; 10-1957

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 003**

NATIONAL MINERAL INVENTORY: 093C4 Cu2

NAME(S): **LONESOME LAKE EAST**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C04E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 10 49 N
LONGITUDE: 125 40 59 W
ELEVATION: Metres

NORTHING: 5784483
EASTING: 316564

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence on Geological Survey of Canada Maps 1202A and 10-1957.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Copper minerals not indicated - assume chalcopyrite.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Gneissic Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Pacific Ranges

CAPSULE GEOLOGY

The region is underlain to the west by the Coast Crystalline belt and to the east by Mesozoic and Tertiary volcanic and sedimentary rocks. A hybrid zone along the eastern margin of the Coast Crystalline Belt contains elements of both terranes. In this zone Mesozoic rocks have been incorporated into the plutons and are overlain by Tertiary volcanic rocks. The degree of metamorphism and deformation of the Intermontane Belt supracrustal rocks increases towards the Coast Crystalline Belt.

The Lonesome Lake East showing comprises minor amounts of copper, presumably as chalcopyrite, within foliated granodiorite of the Coast Crystalline Complex. Other than its location, marked on GSC Map 1202A, nothing is known about this copper occurrence.

BIBLIOGRAPHY

GSC MAP 10-1957; 1202A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **C, DK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 00 45 N
LONGITUDE: 125 22 08 W
ELEVATION: 1524 Metres

NORTHING: 5765078
EASTING: 337431

LOCATION ACCURACY: Within 500M
COMMENTS: Area of drilling in 1973.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Magnetite
ALTERATION: Chlorite Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Breccia
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Mesozoic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Breccia
Diorite
Quartz Monzonite

HOSTROCK COMMENTS: Volcanic rocks probably belong to Jurassic Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Pacific Ranges

CAPSULE GEOLOGY

The region is underlain to the west by the Coast Crystalline belt and to the east by Mesozoic and Tertiary volcanic and sedimentary rocks. A hybrid zone along the eastern margin of the Coast Crystalline Belt contains elements of both terranes. In this zone Mesozoic rocks have been incorporated into the plutons and are overlain by Tertiary volcanic rocks. The degree of metamorphism and deformation of the Intermontane Belt supracrustal rocks increases towards the Coast Crystalline Belt.

The showing occurs within the Hybrid zone where volcanic rocks, probably part of the Jurassic Hazelton Group, have been intruded and metasomatized by diorite and quartz monzonite. Breccia pipes containing sulphides are present in the area.

Drilling has encountered mainly quartz diorite with minor disseminated chalcopyrite, pyrrhotite, pyrite and magnetite.

BIBLIOGRAPHY

EMPR ASS RPT 4209, *5163
EMPR GEM 1973-319
GSC MAP 1424A; 1202A; 10-1957

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 005**

NATIONAL MINERAL INVENTORY: 093C4 Cu3

NAME(S): **ADA**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 09 06 N
LONGITUDE: 125 37 00 W
ELEVATION: Metres

NORTHING: 5781136
EASTING: 320987

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Gneissic Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Pacific Ranges

CAPSULE GEOLOGY

The region is underlain to the west by the Coast Crystalline belt and to the east by Mesozoic and Tertiary volcanic and sedimentary rocks. A hybrid zone along the eastern margin of the Coast Crystalline Belt contains elements of both terranes. In this zone Mesozoic rocks have been incorporated into the plutons and are overlain by Tertiary volcanic rocks. The degree of metamorphism and deformation of the Intermontane Belt supracrustal rocks increases towards the Coast Crystalline Belt.

The Ada showing consists of minor amounts of copper, as disseminated chalcopyrite and bornite, within foliated granodiorite of the Coast Crystalline Belt.

BIBLIOGRAPHY

GSC MAP 1424A; 1202A; 10-1957
EMPR GEM 1969-74,159

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 006**

NATIONAL MINERAL INVENTORY: 093C12 Cu1

NAME(S): **TUSULKO RIVER**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C12W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 38 19 N
LONGITUDE: 125 51 22 W
ELEVATION: Metres

NORTHING: 5835900
EASTING: 306750

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence on Geological Survey of Canada Maps 1202A and 10-1957.

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Copper minerals not indicated but assume chalcopyrite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Endako	Undefined Formation	

LITHOLOGY: Andesite
Dacite
Tuff
Breccia

HOSTROCK COMMENTS: Endako Group is Oligocene to Miocene in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The Tusulko River mineral occurrence is located within intermediate to felsic volcanic rocks. These rocks probably represent eroded remnants of mid to late Tertiary stratovolcanoes developed over Mesozoic rocks of both the Coast Plutonic Complex and the Intermontane Belt. The Tertiary volcanics have been tilted and faulted, exposing older, underlying rocks in places. Late Tertiary Miocene plateau basalts have obscured much of the earlier Tertiary volcanic stratigraphy. The Geological Survey of Canada has placed these earlier volcanic rocks in the Oligocene to Miocene Endako Group. The lithologies comprise andesite, dacite, tuff and breccia.

The mineral occurrence of the Tusulko River area is shown on GSC Map 1202A as consisting of copper, silver and gold. It occurs adjacent to a north-striking fault cutting the volcanic rocks but the relationship of the fault with the mineralization is not known. The constituent minerals of the showing have not been reported.

BIBLIOGRAPHY

GSC MAP 10-1957; 1202A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 007**

NATIONAL MINERAL INVENTORY: 093C13 Zn1

NAME(S): **TWEEDSMUIR PARK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C13W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 50 13 N
LONGITUDE: 125 57 33 W
ELEVATION: Metres

NORTHING: 5858236
EASTING: 300686

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence on Geological Survey of Canada Maps 1202A and 10-1957.

COMMODITIES: Silver Zinc

MINERALS

SIGNIFICANT: Sphalerite
COMMENTS: Minerals not indicated but assume zinc mineral is sphalerite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

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	
Tertiary	Endako	Undefined Formation	
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Tuff
Volcanic Breccia
Sediment/Sedimentary
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The regional geology comprises volcanic rocks of the Lower Jurassic Hazelton Group overlain by Tertiary volcanic rocks of the Endako Group and Miocene plateau basalt. These supracrustal assemblages have been intruded by intermediate to felsic plutons of the Coast Plutonic Belt on the western side of the Intermontane Belt. The degree of deformation of Jurassic rocks increases towards the western side of the Intermontane Belt. Most of the Hazelton Group has been subjected to nonpenetrative deformation but towards the west deformation becomes more intense and penetrative.

The Tweedsmuir Park showing consists of silver and zinc mineralization within Hazelton Group tuff and volcanic breccia adjacent to a small granodioritic stock. Other than the record of its locality on Geological Survey of Canada Map 1202A, nothing more is known about this occurrence.

BIBLIOGRAPHY

EMPR FIELDWORK 1992, pp. 475-481
GSC MAP 10-1957; 1202A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 008**

NATIONAL MINERAL INVENTORY: 093C4 Cu1

NAME(S): **PANORAMA RIDGE EAST**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C04W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 13 44 N
LONGITUDE: 125 49 22 W
ELEVATION: Metres

NORTHING: 5790251
EASTING: 307224

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence on Geological Survey of Canada Maps 1202A and 10-1957.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Minerals not indicated but assume chalcopyrite is present.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Granitic Gneiss
Amphibolite
Schist
Migmatite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Pacific Ranges

CAPSULE GEOLOGY

The region is underlain to the west by the Coast Crystalline belt and to the east by Mesozoic and Tertiary volcanic and sedimentary rocks. A hybrid zone along the eastern margin of the Coast Crystalline Belt contains elements of both terranes. In this zone Mesozoic rocks have been incorporated into the plutons and are overlain by Tertiary volcanic rocks. The degree of metamorphism and deformation of the Intermontane Belt supracrustal rocks increases towards the Coast Crystalline Belt.

The Panorama Ridge East showing consists of copper and silver mineralization within a foliated complex of granitic gneiss, amphibolites, schists and migmatites incorporated in the Coast Crystalline Belt. Other than its location shown on Geological Survey of Canada Map 1202A, nothing is known of this occurrence.

BIBLIOGRAPHY

GSC MAP 10-1957; 1202A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **CA**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C02E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 03 56 N
LONGITUDE: 124 35 11 W
ELEVATION: Metres

NORTHING: 5769517
EASTING: 391256

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of showings.

COMMODITIES: Copper

MINERALS

SIGNIFICANT:	Chalcopyrite	Malachite	Pyrite				
ALTERATION:	Chlorite	Epidote	Silica	Malachite			
ALTERATION TYPE:	Chloritic	Epidote	Silicific'n		Oxidation		Propylitic
MINERALIZATION AGE:	Unknown						

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Tertiary
Unknown

GROUP

Hazelton
Ootsa Lake

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Diorite
Granodiorite
Porphyry Dike
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The CA showing is located within the Intermontane Belt underlain by volcanic rocks of the Jurassic Hazelton Group and Tertiary volcanics of the Ootsa Lake and Endako Groups, overlain by Miocene plateau basalt. Intruding the Mesozoic volcanic and related sedimentary rocks of the Hazelton Group are small complexes of foliated granodiorite and diorite, often showing complex mixed relationships with intrusive and supracrustal rocks. Younger undeformed quartz porphyry dikes, possibly related to the overlying Ootsa Lake Group cut these older rocks.

The CA showing is underlain by medium grained diorite which is intensely fractured. These rocks are pervasively chloritized with local intense epidote and silica alteration. Mineralization consists of chalcopyrite and pyrite with malachite along fractures within the diorite.

BIBLIOGRAPHY

EMPR PF (*Dick, L.A. (1973): Report of Geological, Geochemical and Ground Magnetic Surveys for the CA Claims)
EMPR ASS RPT 5282, *5283
EMPR GEM 1974-242
GSC MAP 1424A; 1202A; 10-1957

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANAHIM PEAK**, TSITSUTL PEAK

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C13E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 45 30 N
LONGITUDE: 125 38 06 W
ELEVATION: Metres

NORTHING: 5848644
EASTING: 322195

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Volcanogenic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Ootsa Lake	Undefined Formation	

LITHOLOGY: Obsidian
Rhyolite
Dacite
Basalt
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Anahim Peak perlite showing occurs in an area underlain by Tertiary volcanic rocks of the Ootsa Lake Group and Miocene basalt. The Ootsa Lake Group consists mainly of rhyolite and dacite with minor amounts of basalt and andesite. Epiclastic sedimentary rocks also occur within the group.

Although little information is available on this perlite occurrence, it is assumed that the perlite has formed from obsidian of the Ootsa Lake Group.

BIBLIOGRAPHY

EMPR FIELDWORK 1992, pp. 475-481
GSC AR 1876-1877, p. 79
GSC MAP 1424A; 1202A; 10-1957

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHILI, PUNT, PUNT 1-6**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C08E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 18 32 N
LONGITUDE: 124 01 39 W
ELEVATION: 1177 Metres

NORTHING: 5795892
EASTING: 429949

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of trenching near Chilcotin Lake.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz Chalcedony
ALTERATION: Silica Epidote Malachite Azurite Limonite
ALTERATION TYPE: Silicific'n Epidote Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 90 Metres STRIKE/DIP:
COMMENTS: The northeast trending Chili zone has an inferred length of 90 metres.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE Middle Jurassic GROUP Hazelton FORMATION Undefined Formation IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Lapilli Tuff
Conglomerate
Mafic Breccia
Intermediate Breccia
Feldspar Porphyry Dike
Quartz Feldspar Porphyry Dike
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Chilcotin Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 19.1000 Grams per tonne
Silver 574.5000 Grams per tonne
COMMENTS: Sample from vuggy quartz-veined conglomerate.
REFERENCE: Assessment Report 19230, sample CV-139-15.

CAPSULE GEOLOGY

The Chili showing is located near Chilcotin Lake about 160 kilometres west of Williams Lake.
In 1982 and 1983, Newmont performed soil geochemical surveys, mapping and trenching. In 1986, Newmont carried out geophysical surveys. The claims were re-staked as the Punt claims by Northair in 1988 and 1989. In 1989, Northair conducted mapping, prospecting, biogeochemical sampling, trenching and geophysical surveys.
The area is underlain by the Hazelton Group which has been largely covered by Lower Tertiary volcanic rocks of the Ootsa Lake Group, Miocene plateau basalt and Pleistocene glacial sediments. Intruding the Hazelton Group are several complexes of diorite, granodiorite and migmatitic rocks.
The showing is underlain by mafic to intermediate autobrecciated and nonbrecciated hornblende-pyroxene lavas of the Hazelton Group, intruded by feldspar and quartz-feldspar porphyry dikes. The

CAPSULE GEOLOGY

volcanic rocks have been subdivided into an unaltered phase, an epidotized phase and a quartz-altered phase. Chalcedonic quartz stringers occur in, and parallel to, shear zones within the silicic altered phase of the volcanics.

Mineralization consists of argentiferous and auriferous chalcopyrite in low temperature banded quartz veins and the chalcedonic stringers. Secondary malachite and azurite are also present in these quartz veins. Minor pyrite and chalcopyrite occur within the porphyry dikes. The shear zones strike between 50 and 100 degrees with an 80 degree north to vertical dip.

There are three zones of interest: the Chili zone, the Rose zone (on the Punt claim) and the untested Birthday zone (on the Punt 6 claim).

The Chili zone is a northeast trending set of quartz veins (up to 1 metre wide) and stockworks (up to 4.5 metres wide). These crosscut conglomerate, siltstone and lapilli tuffs. A sample of vuggy quartz-veined conglomerate assayed 19.1 grams per tonne gold and 574.5 grams per tonne silver (Sample CV-139-15, Assessment Report 19230). This zone has an inferred length of about 90 metres.

The Rose zone, also northeast trending, consists of intensely silicified and quartz veined tuffs. The highest sample from subcrop was 0.96 grams per tonne gold and 24 grams per tonne silver (Assessment Report 19230). The Rose zone is 140 metres long and 10 metres wide.

The Birthday zone is about 3 kilometres southwest of the Chili zone and projects toward it along strike. This zone consists of intensely silicified clay and potassically altered volcaniclastic and possibly sedimentary rocks. Several anomalous sites in the Birthday zone have a northeast alignment similar to the Chili zone.

BIBLIOGRAPHY

EMPR ASS RPT *11685, 15162, 19230
EMPR EXPL 1983-401; 1986-C323; 2002-13-28
EMPR FIELDWORK 1992, pp. 483-490
GSC MAP 1424A; 1202A; 10-1957
GCNL #102, 1989

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 012**

NATIONAL MINERAL INVENTORY: 093C5 Mo1

NAME(S): **TEL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C05E
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 17 35 N
LONGITUDE: 125 38 25 W
ELEVATION: Metres

NORTHING: 5796917
EASTING: 319945

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate area of 1970 drilling.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Felsic Intrusive
Biotite Granite
Quartz Diorite
Granodiorite
Quartz Monzonite
Magnetite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The region is underlain to the west by the Coast Crystalline belt and to the east by Mesozoic and Tertiary volcanic and sedimentary rocks. A hybrid zone along the eastern margin of the Coast Crystalline Belt contains elements of both terranes. In this zone Mesozoic rocks have been incorporated into the plutons and are overlain by Tertiary volcanic rocks. The degree of metamorphism and deformation of the Intermontane Belt supracrustal rocks increases towards the Coast Crystalline Belt.

The Tel showing occurs near the eastern margin of the Coast Plutonic Complex where biotite granite, quartz diorite, granodiorite and quartz monzonite along with older foliated and migmatitic equivalents, have been intruded into volcanic and sedimentary rocks of probable Lower Jurassic age. Underlain mainly by felsic intrusive rocks, the Tel showing consists of molybdenite mineralization.

BIBLIOGRAPHY

EMPR ASS RPT *1955, *1958
EMPR GEM 1969-74; 1970-103
EMPR PF (Claim Map Tel Claims)
GSC MAP 1424A; 1202A; 10-1957

DATE CODED: 1986/04/16
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 013**

NATIONAL MINERAL INVENTORY: 093C9 Cu1

NAME(S): **CHILCOTIN RIVER WEST**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C09W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 31 16 N
LONGITUDE: 124 24 45 W
ELEVATION: Metres

NORTHING: 5819938
EASTING: 404164

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence on Geological Survey Map 10-1957.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Minerals not indicated but assume chalcopyrite is present.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Cretaceous	Ootsa Lake	Undefined Formation	
Lower Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Felsic Volcanic
Granodiorite
Diorite
Quartz Porphyry Dike
Volcanic
Sediment/Sedimentary

HOSTROCK COMMENTS: Area is also underlain by Tertiary Endako Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The Chilcotin River West showing is located within the Intermontane Belt underlain by volcanic rocks of the Jurassic Hazelton Group and Tertiary volcanics of the Ootsa Lake and Endako Groups, overlain by Miocene plateau basalt. Intruding the Mesozoic volcanic and related sedimentary rocks of the Hazelton Group are small complexes of foliated granodiorite and diorite, often showing complex mixed relationships with intrusive and supracrustal rocks. Younger undeformed quartz porphyry dikes, possibly related to the overlying Ootsa Lake Group cut these older rocks.

The Chilcotin River West showing consists of copper mineralization within the Upper Cretaceous to Lower Tertiary Ootsa Lake Group intermediate to felsic volcanic and related rocks.

BIBLIOGRAPHY

EMPR FIELDWORK 1992, pp. 491-498
GSC MAP 10-1957; 1424A; 1202A

DATE CODED: 1986/04/10
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 014**

NATIONAL MINERAL INVENTORY: 093C9 Cu2

NAME(S): **CHILCOTIN RIVER EAST**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093C09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 30 47 N
LONGITUDE: 124 20 52 W
ELEVATION: Metres

NORTHING: 5818958
EASTING: 408538

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence on Geological Survey Map 10-1957.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Minerals not indicated but assume chalcopyrite is present.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Cretaceous-Tertiary
Lower Jurassic

GROUP

Ootsa Lake
Hazelton

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Felsic Volcanic
Granodiorite
Diorite
Quartz Porphyry Dike
Volcanic
Sediment/Sedimentary

HOSTROCK COMMENTS: Area is underlain by Tertiary Endako Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The Chilcotin River East showing is located within the Intermontane Belt underlain by volcanic rocks of the Jurassic Hazelton Group and Tertiary volcanics of the Ootsa Lake and Endako Groups, overlain by Miocene plateau basalt. Intruding the Mesozoic volcanic and related sedimentary rocks of the Hazelton Group are small complexes of foliated granodiorite and diorite, often showing complex mixed relationships with intrusive and supracrustal rocks. Younger undeformed quartz porphyry dikes, possibly related to the overlying Ootsa Lake Group cut these older rocks.

The Chilcotin River East showing consists of copper mineralization within the Upper Cretaceous to Lower Tertiary Ootsa Lake Group intermediate to felsic volcanic and related rocks.

BIBLIOGRAPHY

EMPR FIELDWORK 1992, pp. 491-498
GSC MAP 10-1957; 1424A; 1202A

DATE CODED: 1986/04/10
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **BAEZ**, OBOY, CAMP,
RIDGE

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093C16E 093C16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 52 45 26 N
LONGITUDE: 124 13 26 W
ELEVATION: 1475 Metres

NORTHING: 5845966
EASTING: 417406

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond-drill hole collar (DDH-5) 8 kilometres south-southwest from the summit of Toil Mountain, on a ridge at the head of Clisbako River (Assessment Report 16962).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Chalcedony Pyrite K-Feldspar Sericite
ALTERATION: Quartz Chalcedony K-Feldspar Sericite Chlorite
ALTERATION TYPE: Silicific'n Potassic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Epithermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Tertiary
GROUP: Ootsa Lake
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesite Flow
Andesite Flow Breccia
Andesite Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Chilcotin Plateau

INVENTORY

ORE ZONE: CAMP

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1987

COMMODITY	GRADE	
Silver	6.2000	Grams per tonne
Gold	0.3200	Grams per tonne

COMMENTS: A 2.0 metre core sample.
REFERENCE: Assessment Report 16962.

CAPSULE GEOLOGY

The Oboy occurrence area is underlain by bleached, flat-lying Lower Tertiary Ootsa Lake Group andesite flows, flow breccias and minor tuffs. The rocks are fractured in a predominant north and north-northeast direction with a minor fracture pattern striking east.

The Camp zone as defined by drilling is a broad north-northeast trending zone of pervasively bleached, pyritic, potassium feldspar flooded andesitic flows and flow breccias. Weathering and oxidation extends, on average, to a depth of 35 metres. Within the bleached area are more restricted steeply dipping zones of quartz-pyrite veining, brecciation and pervasive quartz-sericite alteration which are associated with anomalous arsenic, silver and gold values. Silicification occurs most commonly as numerous, vuggy quartz-pyrite druses. Chlorite and calcite occur as fracture-fillings. Highest values in a 2.0 metre drill core sample are 6.2 grams per tonne silver, 0.32 grams per tonne gold and 995 parts per million arsenic (Assessment Report 16962). The Camp zone has been tested by drilling for 300 metres along strike and to a maximum depth of 60 metres.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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CAPSULE GEOLOGY

The Ridge zone covers a small, 50 by 50 metre area at the west edge of the property. Anomalous silver values occur in a quartz stockwork. Rock chip sampling returned a value of 2.5 grams per tonne silver (Assessment Report 15298).

BIBLIOGRAPHY

EMPR ASS RPT 15298, *16962, 23272, 23630, 23803, 23804, 24612
EMPR FIELDWORK 1992, pp. 475-481, 491-498
EMPR EXPL 1986-C323,C324; 1988-A39,C152
GSC MAP 10-1957; 1202A; 1424A

DATE CODED: 1989/08/31
DATE REVISED: 1996/01/03

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093C 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **CLISBAKO**, NORTH, DISCOVERY,
CENTRAL, RUBY

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093C09E
BC MAP:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)

LATITUDE: 52 43 08 N
LONGITUDE: 124 02 47 W
ELEVATION: 1295 Metres

NORTHING: 5841514
EASTING: 429322

LOCATION ACCURACY: Within 500M

COMMENTS: North zone, 500 metres south of an unnamed lake, along a tributary creek to the lake, 105 kilometres west-southwest of Quesnel and approximately 40 kilometres southwest of Nazko (Assessment Report 20864).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite Marcasite Arsenopyrite Pyrargyrite

ASSOCIATED: Quartz Carbonate

COMMENTS: Rare carbonate.

ALTERATION: Silica Quartz Clay

ALTERATION TYPE: Silicific'n Argillic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Breccia

CLASSIFICATION: Epithermal

TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Eocene

Ootsa Lake

Undefined Formation

LITHOLOGY: Andesitic Tuff
Rhyolitic Ash Flow Tuff
Dacitic Tuff
Andesitic Basaltic Flow
Tuffaceous Siltstone
Mudstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Chilcotin Plateau

INVENTORY

ORE ZONE: NORTH

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1990

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

1.0700

Grams per tonne

REFERENCE: Assessment Report 20864.

ORE ZONE: DISCOVERY

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1990

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

97.7000

Grams per tonne

REFERENCE: Assessment Report 20864.

CAPSULE GEOLOGY

The Clisbako property is predominantly underlain by a well-differentiated sequence of subaerial, basaltic to rhyolitic tuffs, flows and volcanic breccias of probable Eocene age (Ootsa Lake Group equivalent). Remnants of a younger (Oligocene(?)) rhyolitic ash-flow tuff unconformably overlie the Eocene volcanics in the east-central part of the property and cover a more extensive area immediately south of the property. Flat-lying, red, scoriaceous and black vesicular basaltic flows of Oligocene and Miocene age underlie a relatively broad, flat region extending north and east of the

CAPSULE GEOLOGY

property. Extensive normal (extensional) faulting has affected the Eocene volcanics resulting in an array of variably tilted blocks.

At least three major hydrothermally altered zones, a number of weaker alteration zones, and extensive areas of quartz float occur within the eastern half of the property. The alteration zones are epithermal in nature and characterized by widespread bleaching and argillic alteration accompanied by a pervasive, moderate to strong stockwork of quartz veinlets and microveinlets. Extensive zones of multistage, intense veining, silicification and brecciation are developed. Very fine-grained pyrite, marcasite and arsenopyrite locally are present in amounts up to 5 per cent. Two hot spring (tufa) deposits are also located on the property.

The three main alteration zones on the Clisbako property are referred to as the North zone, Central zone and South zone. The Central zone is 500 metres south-southeast of the North zone, and the South zone is 2000 metres south of the North zone. The North and South zones have an apparent true width of 350 to 400 metres; the Central zone is at least 150 metres wide. Two smaller zones referred to as the Trail zone and Discovery zone occur along the projected strike of the South zone, approximately 400 and 1200 metres respectively, to the northeast. Two broad, weaker alteration zones occur along the projected strike of the North zone, centred approximately 1500 and 2000 metres respectively to the southwest.

On the property, outcrop is sparse and is confined to main gullies and incised drainages; eight lithological units have been mapped. Units 1 to 6 are faulted and variably tilted Eocene volcanics which are unconformably overlain by flat-lying to gently dipping, rhyolitic ash-flow tuffs (unit 8) with a local basal, densely welded, dacitic tuff member (unit 7). Unit 8 overlies lacustrine-type sediments (unit 6). Unit 1 consists of platy, light to medium green, fine-grained andesitic tuffs. The unit appears to be the main host in the Discovery zone, Trail zone, South zone and possibly the North zone. Unit 2 consists of interbedded dark grey dacitic tuff, green andesitic tuff and laminated maroon/purple/green tuff and/or tuffaceous siltstone. Unit 3 is a white to grey, dense, rhyolitic ash-flow tuff with a very finely laminated siliceous matrix; the unit is the principal host in the Central zone. Intensely altered varieties of this unit may also be present in the North zone. Unit 4 comprises medium to dark green, fine-grained, andesitic to basaltic flows. Unit 5 is basaltic in composition, fine grained, dark grey-green flow unit, which may be a member of Unit 4. Unit 6 consists of grey to brown mudstone/siltstone with abundant carbonized plant fossils and appears to be overlain by flat-lying ash-flow tuffs of unit 8. Unit 7 comprises grey, dacitic tuff and is interpreted to be a tightly welded basal member of unit 8. Unit 8 is interpreted to unconformably overlie units 1 to 5 and consists of flat-lying, white to cream-coloured, platy felsic crystal tuffs.

The alteration zones appear to have developed along complex, steeply dipping, north to northeast trending fault structures. Internally, the alteration zones are complex; many appear to be controlled by a series of closely-spaced, subparallel faults rather than a single major structure. The main alteration zones appear to have a long history of development, characterized by episodic periods of strong, resurgent, hydrothermal activity which resulted in several stages of fracturing, brecciation, veining and silicification. Some phases of quartz veining and silicification are sulphide-poor and others are sulphide-rich; pyrite is the main sulphide present, but generally is extremely fine grained and difficult to recognize. Marcasite, arsenopyrite and pyrrargyrite have also been identified. In general, better gold-silver values occur in quartz veins which show some banding or in silicified sections which display several stages of brecciation. Carbonate minerals are rare, but coarse bladed carbonate replaced by quartz has been noted in a number of locations.

In most zones, argillic alteration accompanied veining and silicification but as silicification advanced, previously argillic altered units became silicified.

In the North zone, rock geochemical values average more than 0.3 grams per tonne gold ranging to a high of 1.07 grams per tonne; silver values are in the 5 to 10 gram per tonne range. In the Central or "Ruby" zone, silver values up to 97.7 grams per tonne have been obtained; gold assayed up to 1.09 grams per tonne. Pyrrargyrite was observed in two outcrops in the Central zone (Assessment Report 20864).

BIBLIOGRAPHY

- EM EXPL 1998-B-2
- EMPR ASS RPT *20864
- EMPR FIELDWORK 1992, pp. 491-498

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 381
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR T. Schroeter, Monthly Report, June 1994
GSC MAP 10-1957; 1202A
PR REL Bard Ventures Ltd., Nov.21, 2002
WWW <http://www.infomine.com/>

DATE CODED: 1992/01/13
DATE REVISED: 1999/06/03

CODED BY: GO
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **RUSS**, SWALLOP, ROSS ?

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D10W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 40 35 N
LONGITUDE: 126 49 19 W
ELEVATION: 1600 Metres

NORTHING: 5838499
EASTING: 647251

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location from plot on Geological Survey of Canada Map 1327A.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Magnetite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Granodiorite
Diorite

HOSTROCK COMMENTS: Intrusives related to batholith of probable Triassic age.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The region is mainly underlain by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre-to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

The Russ showing occurs in an area underlain by foliated quartz diorite, diorite and granodiorite related to a batholith of possibly Triassic age. Mineralization consists of molybdenite, chalcopyrite, pyrite and magnetite in quartz veins. No other geological information is available.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1965-89
GSC MAP 9-1966, 1327A; 1424A
GSC MEM 372, p. 106
GSC P 66-25, p. 13

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 002**

NATIONAL MINERAL INVENTORY: 093D16 Cu1

NAME(S): **BOOM**, WILF

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D16W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 59 36 N
LONGITUDE: 126 27 30 W
ELEVATION: Metres

NORTHING: 5874551
EASTING: 670583

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Boom 1-82 claims.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Porphyry Igneous-contact Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Andesite
Hornfels
Quartz Diorite
Quartz Monzonite
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Nechako Plateau

TERRANE: Stikine

METAMORPHIC TYPE: Contact

RELATIONSHIP: Syn-mineralization

GRADE: Hornfels

CAPSULE GEOLOGY

The region is underlain mainly by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre-to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

The Boom showing consists of pyrite, chalcopyrite and molybdenite mineralization associated with quartz veins and fractures within hornfelsed Hazelton Group andesitic rocks. Mineralization also occurs in quartz diorite and quartz monzonite which has intruded the volcanic rocks.

The Boom 1-118 and Wilf 1-18 claims were held in 1968 by Kerr Addison Mines Limited. Work included geological mapping, a ground magnetometer survey, soil sampling, and six diamond drill holes totaling 1245 metres. In 1969 an induced polarization survey was conducted. In 1970, three diamond drill holes totaling 166 metres were drilled.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1968-150
EMPR GEM 1969-161; 1970-202
EMR MP CORPFILE (Kerr Addison Mines Limited)
GSC MAP 1327A; 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
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PAGE: 384
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BIBLIOGRAPHY

GSC MEM 372

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/06

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **MALACHITE CLIFF**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 28 26 N
LONGITUDE: 126 23 36 W
ELEVATION: 1065 Metres

NORTHING: 5816942
EASTING: 677038

LOCATION ACCURACY: Within 500M

COMMENTS: Location from EMPR Fieldwork 1997 map, near the confluence of the Noosegulch and Bella Coola rivers.

COMMODITIES: Copper Silver Molybdenum

MINERALS

SIGNIFICANT: Malachite Pyrite Chalcopryite

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal

COMMENTS: At the occurrence, the plutonic rocks are cut by a subvertical set of narrow shear fractures and joints that trend north.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Middle Jurassic

Tseapseahoolz Creek Pluton

LITHOLOGY: Leucocratic Granodiorite
Greenstone
Andesite Dike
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: ROCK

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1997

SAMPLE TYPE: Grab

COMMODITY

GRADE

Copper	0.0530	Per cent
Silver	1.1000	Grams per tonne
Molybdenum	0.0032	Per cent

COMMENTS: Grab samples of float taken at base of cliff below inaccessible malachite stained occurrence.

REFERENCE: EMPR Fieldwork 1997, pp. 20-24.

CAPSULE GEOLOGY

In 1997, whilst flying by helicopter during work on the Nifty prospect (093D 006), Gerry Ray of the Geological Survey noted malachite staining on some cliffs high on the western slopes of the Noosegulch River valley. This previously unreported copper occurrence has been named the 'Malachite Cliff' occurrence. A field traverse down to the occurrence from the overlying ridge-top passed over massive, coarse grained pinkish grey, leucocratic and equigranular granodiorites of the Tseapseahoolz Creek pluton. These rocks are generally unaltered and contain between 4 and 6 percent mafic minerals comprising coarse biotite with minor hornblende. In the vicinity of the occurrence, the pluton locally contains abundant xenoliths and large screens of hornfelsed metasediments and greenstone. The pluton is also cut by numerous dikes of fine-grained andesite which are generally less than 1 metre wide.

At the occurrence, there is an estimated 30 to 40 metre high cliff of leucocratic granodiorite. The plutonic rocks are cut by a subvertical set of narrow shear fractures and joints that trend north, subparallel to the cliff-face. These fractures have controlled some narrow (5 centimetre to 1 metre) dikes of greenstone that show no chilled margins or thermal haloes. The source of the

CAPSULE GEOLOGY

malachite staining occurs approximately 20 metres up the cliff face, and is inaccessible. However, malachite-stained float at the base of the cliff comprises granodiorite cut by thin (< 1 centimetre) shear fractures filled with euhedral quartz, minor pyrite and traces of chalcopyrite. Two grab samples of granodiorite with quartz-sulphide veinlets gave maximum assays of 0.053 per cent copper, 1.1 grams per tonne silver, 0.0032 per cent molybdenum and 0.01 gram per tonne gold. Mineralization at the Malachite Cliff occurrence is probably related to a northerly-striking fault set, and it may be similar in origin to the Bella Coola Chief copper occurrence (093D 009) situated about 13 kilometres to the northwest. It probably has little economic potential, but suggests that the north trending faults visible in air photographs along the Noosegulch valley have a potential for hosting copper-bearing veins.

BIBLIOGRAPHY

EMPR FIELDWORK *1997, pp. 20-1 - 20-28; 2001, pp. 119-134; 2002,
pp. 65-75
GSC MAP 1327A, 1424A

DATE CODED: 1999/07/16
DATE REVISED: 1999/09/15

CODED BY: JMR
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **DEAN CHANNEL**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093D11E
BC MAP:
LATITUDE: 52 40 09 N
LONGITUDE: 127 01 19 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Plot on Geological Survey of Canada Map 1327A.

Open Pit

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 5837305
EASTING: 633754

COMMODITIES: Iron Magnetite

MINERALS

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

DEPOSIT

CHARACTER: Podiform Stratabound Massive
CLASSIFICATION: Skarn Replacement Industrial Min.
TYPE: K03 Fe skarn
SHAPE: Irregular
MODIFIER: Sheared
COMMENTS: Oval shaped - 85 metres long, 30 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

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

LITHOLOGY: Chlorite Schist
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Contact
PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The region is underlain mainly by rocks of the Paleozoic to Tertiary Coast Plutonic Complex. These predominantly crystalline rocks exhibit a variety of fabrics ranging from pre to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane, are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

The Dean Channel occurrence is a magnetite skarn deposit hosted in chlorite schist within sheared diorite. Magnetite has been found in an oval area of about 85 by 30 metres with associated epidote and garnet. The magnetite ranges in style from fine-grained, almost pure, masses to being streaked and banded with quartz. In places only partial replacement of the country rock by magnetite has occurred. The chlorite schist is cut by lenses and veins of quartz.

Past production is recorded as being 1088 tonnes of magnetite, shipped in 1919 (Minister of Mines Annual Report 1919, page N86).

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EMPR AR 1919-N86
EMPR OF 1988-28, pp. 102-103
GSC EC GEOL 3, v. 1, pp. 51-54
GSC MAP 9-1966; 1327A; 1424A
GSC MEM 372
GSC P 66-25, p. 13
GSC SUM RPT 1921, Part A, p. 40A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 004**

MINFILE NUMBER: **093D 005**

NATIONAL MINERAL INVENTORY: 093D15 Cu1

NAME(S): **CC**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D15E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 58 27 N
LONGITUDE: 126 34 57 W
ELEVATION: Metres

NORTHING: 5872131
EASTING: 662323

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location from National Mineral Inventory card 93D15 Cu1.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Specularite Bornite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: D03 Volcanic redbed Cu L04 Porphyry Cu ± Mo ± Au
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	
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Andesite
Basalt
Felsic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The region is underlain mainly by the Paleozoic to Tertiary Coast Plutonic complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre-to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

The CC showing consists of chalcopyrite, pyrite and specularite with minor bornite in fractures cutting andesitic and basaltic rocks of the Hazelton Group. This mineralization may be related to felsic intrusions which occur a short distance to the east of the showing.

The CC 1-6 claims were held in 1968 by Kerr Addison Mines. Work included geological mapping, a self-potential survey, and trenching. The claims were cancelled prior to January 1974.

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EMPR AR 1968-150
GSC MAP 1327A
GSC MEM 372

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/24

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 389
REPORT: RGEN0100

MINFILE NUMBER: **093D 006**

NATIONAL MINERAL INVENTORY: 093D9 Pb1

NAME(S): **NIFTY, THUNDER, THUNDERBIRD,
BARITE, THUNDER MOUNTAIN, T-BIRD**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093D09W
BC MAP:
LATITUDE: 52 34 52 N
LONGITUDE: 126 25 02 W
ELEVATION: 1100 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Underground
MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5828808
EASTING: 674989

COMMODITIES: Silver Copper Gold Zinc Barite
 Lead

MINERALS

SIGNIFICANT: Sphalerite Galena Barite Tetrahedrite Chalcopyrite
 Pyrite Tennantite Polybasite
ASSOCIATED: Jasper
ALTERATION: Malachite Sericite Clay Chlorite Epidote
 Manganite Pyrite Silicate
ALTERATION TYPE: Argillic Sericitic Oxidation Albitic
MINERALIZATION AGE: Middle Jurassic

DEPOSIT

CHARACTER: Massive Stratiform Stockwork Disseminated
CLASSIFICATION: Volcanogenic Syngenetic Exhalative Industrial Min.
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular
MODIFIER: Sheared
COMMENTS: Dips 40 - 60 degrees to the NE.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Hazelton Unnamed/Unknown Formation Coast Plutonic Complex
Upper Triassic

LITHOLOGY: Felsic Lava
Basalt
Andesite
Felsic Tuff
Black Slate
Argillite
Greywacke
Diorite
Granodiorite
Ortho Gneiss

HOSTROCK COMMENTS: A Middle Jurassic age for the volcanic host rocks is supported by Jurassic marine fossils at Compass Lake, 4 km northwest of the Nifty.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Kitimat Ranges
TERRANE: Stikine

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 0.7000 Grams per tonne
Gold 0.2000 Grams per tonne
Barite 0.2000 Per cent
Copper 0.0100 Per cent
Zinc 0.0100 Per cent
COMMENTS: Drillhole 81-2 from 291 to 293 metres. Less than 0.01 per cent lead.
REFERENCE: Assessment Report 10409.

CAPSULE GEOLOGY

Much of the following is an excerpt from the 1998 report by Gerry Ray of the B.C. Geological Survey Branch (EMPR Fieldwork 1997).
The Nifty Zn-Pb-Ag-Ba prospect is located in the headwaters of

MINFILE NUMBER: **093D 006**

CAPSULE GEOLOGY

the Noosegulch River valley, approximately 23 kilometres northeast of Hagensborg in west-central British Columbia. The area lies within the Stikine Terrane of the Coast Belt and is mostly underlain by various packages of mafic to felsic volcanic, volcanoclastic and sedimentary rocks. Many of these packages are of uncertain age and they are intruded by, and form roof pendants within, plutons of the Coast Belt. The volcanic rocks host several mineral occurrences, of which the Nifty prospect is the most important and best explored. Other occurrences in the area include the Jamtart (093D 023), Bella Coola Chief (093D 009), Malachite Cliff (093D 003) and Keen (093D 007) occurrences.

The character and chemistry of the Nifty mineralization and its hostrocks suggest it represents a volcanogenic disseminated sulphide or xhalite deposit, although an epigenetic origin has been also suggested (Assessment Report 23031).

The area is underlain by varied packages of volcanic and lesser sedimentary rocks that generally form north to northwesterly trending pendants within intrusions of the Coast Plutonic Complex. The stratigraphic and structural relationships of these packages to one another are poorly understood and their ages range from Cenozoic to Triassic or older. The volcanic rocks are mostly of basaltic-andesitic composition but those hosting the Nifty prospect are distinct in containing some felsic lavas and tuffs. The sedimentary rocks include small, generally highly deformed units of black slate, argillite and greywackes. Some greywackes in the northeastern part of the Bella Coola mapsheet contain fossils of middle Jurassic age (GSC Memoirs 324 and 372).

The roof pendant country rocks are intruded by, and in some instances thermally overprinted by, numerous plutons and small stocks of the Coast Plutonic Complex. These are largely of diorite-granodiorite composition and vary from massive rocks to intensely foliated orthogneisses. There is a westerly increase in both the regional metamorphic grade and structural deformation across the district. Consequently, in the southwestern part of the area, the country rocks and some of the older intrusions have been converted to schists and gneisses. North to north-westerly trending horizons of strongly foliated rock are interpreted to be ductile shear zones.

The Nifty, Nifty 1-5 and Thunder claims were first staked and explored in 1929-1930 (EMPR Annual Report 1930, pages A55, A61) after prospectors (W.C. Merkel) working for Consolidated Mining Smelting Company (now Cominco Limited) were attracted to the extensively rust-stained cliffs on the east side of the Noosegulch River. Trenching revealed a zone of sphalerite-galena-barite mineralization and, subsequently, a 9 metre long adit was driven beneath this zone.

Baer (GSC Memoir 372) geologically mapped the region in at a scale of 1:250,000 and considered the volcanic rocks hosting the Nifty prospect to be part of the Middle Jurassic Hazelton Group, as defined by Tipper (GSC Memoir 324). However, Glen Woodsworth of the Geological Survey of Canada, in a talk presented in 1980, suggested that the rocks belong to the Early Cretaceous Gambier Group, host of the Britannia volcanogenic massive sulphide deposit in southwestern British Columbia. This latter correlation was accepted by many company geologists who subsequently explored the area. However, U-Pb dating (Ray, EMPR Fieldwork 1997) demonstrates a pre-164 Ma (Middle Jurassic) age for the rocks hosting the Nifty prospect; this age is supported by the recent discovery of Jurassic marine fossils in the vicinity of Compass Lake, approximately 4 kilometres northeast of the Nifty prospect.

The Nifty stratiform base metal sulphide prospect found in the Noosgulch River Valley, is now thought to be Bathonian in age. Sediments and bimodal volcanism of this age are poorly known and more restricted in the area the previous assignment.

In the late 1970's, Pan Ocean Oil Ltd. mapped and soil sampled an extensive area around the Nifty prospect and the immediate vicinity of the prospect was mapped at a scale of 1:100 by J.R. Woodcock. The company completed five drill holes, collared in hangingwall rocks, in an attempt to intersect downdip extensions of the sphalerite-galena-barite zone. The results of that work have been summarized by Lewis (EMPR Fieldwork 1978 and 1979). Although this drilling did not intersect economic mineralization at Nifty (Assessment Reports 6735, 6836), reconnaissance work resulted in the discovery of another small Pb-Zn showing (later called the Jamtart or West Side occurrence) situated west of Noosegulch Creek, approximately 2.4 kilometres south-west of Nifty. In addition, Pan Ocean discovered a Zn-Pb geochemical anomaly in soils about 6 kilometres south of the Nifty which is called the Keen occurrence (Assessment Report 6836).

In 1980 and 1981, Rio Tinto Canadian Exploration Limited conducted an exploration program over the Nifty and Keen properties

CAPSULE GEOLOGY

(Assessment Reports 8528, 10409). The work included drilling in hangingwall rocks to test for downdip extensions of the Nifty mineralization. The first hole was abandoned at 175 metres due to ground problems; a second parallel hole drilled immediately nearby reached a depth of 495 metres. Assays from drillhole 81-2 from 291 to 293 metres returned values of 0.700 gram per tonne silver, 0.200 gram per tonne gold, 0.2 per cent barite, 0.01 per cent copper, and 0.01 per cent zinc. Both holes intersected sequences of andesitic and dacitic ash and lapilli tuffs with lesser amounts of intrusive rocks, but no economic mineralization was encountered.

Imperial Metals Corporation completed some soil, rock and stream sediment sampling on the Keen and Nifty properties in 1984 and 1989, respectively (Assessment Reports 12747, 19201). It is believed that Imperial Metals drilled into altered footwall rocks immediately east of the Nifty adit but the results of this program are not available. In 1985, Cominco Ltd. once again completed a large program of mapping and sampling over the Nifty and Keen properties without economic success (Assessment Report 14115). In 1992, when the area was restaked, a geological and geochemical program was completed for Inco Exploration and Technical Services Incorporated, and Eastfield Resources Ltd. (Assessment Report 23031).

In 1997 Gerry Ray of the Geological Survey Branch visited the Nifty prospect area to conduct geological investigations and sampling. Most of the detailed work and sampling were conducted in and around the Nifty prospect itself although some time was spent examining and sampling the rocks hosting both the Jamtart occurrence further west and the Keen Pb-Zn soil geochemical anomaly further south. In addition, some mafic volcanics and hornfelsed metasediments close to the Nusatsum pluton, south-west of Matterhorn Mountain were sampled. Chemical plots indicate that the volcanic rocks adjacent to the Nusatsum pluton and those hosting the Jamtart and Keen properties are largely subalkaline, calcalkaline basalts and andesites that have a medium to high K₂O content.

The Nifty prospect represents a shallow-marine, low temperature volcanogenic massive sulphide system that is characterized by disseminated mineralization with an atypical VMS metal tenure. An exhalative origin is indicated by: (1) the stratiform and conformable nature of the barite cap which probably represents a chemical sedimentary unit; and (2) the sporadic occurrence of pyritic, red jasper pods and veins in the hosting sequence (particularly in the hangingwall rocks).

The prospect is hosted by a package of bimodal (basalt-andesite and rhyodacite-dacite) volcanic rocks that contains both tholeiitic and calc-alkaline signatures. Variations in the colour and character of the stratigraphic section suggest the hostrocks were deposited in an oxidized, emerging basin environment that progressively changed from shallow marine to subaerial.

A U-Pb date of 164 Ma on zircons from a suite of post-ore quartz porphyry dikes demonstrates that the Nifty mineralization and its hosting package are Middle Jurassic or older. This radiometric age date, the bimodal chemistry of the volcanics, and the presence of Jurassic fossils at Compass Lake, four kilometres north-east (Glen Woodsworth, personal communication, 1997) and in another roof-pendant approximately 50 kilometres to the north-northeast, supports Baer's (GSC Memoir 372) view that the package hosting the Nifty prospect belongs to the Middle Jurassic Hazelton Group.

The Nifty prospect comprises a caprock of massive barite which passes down into a zone of strongly altered tuffs containing sporadic sphalerite, galena and pyrite in a gangue dominated by quartz, barite and feldspar. This mineralization is underlain by a thick and extensive zone of barren silicification that contains disseminated, fine-grained pyrite. This zone probably represents footwall alteration developed adjacent to the original hydrothermal conduits responsible for the overlying Zn-Pb-Ag-Ba mineralization. These conduits are now probably occupied by younger, post-ore dikes.

Microprobe analyses show that the barite in both the barite cap and in the underlying mineralized zone contains moderate amounts of SrO (up to 2.67 weight per cent). The ore minerals consist primarily of sphalerite and galena with trace amounts of tetrahedrite-tennantite, polybasite (9Ag₂S.Sb₂S₃), chalcopyrite and some other unidentified Ag or Pb-rich sulphides, oxides and sulphates. The chalcopyrite occurs as small (<30 microns) inclusions in other sulphides whereas the other trace minerals form either minute and discrete grains in the gangue or late microscopic veinlets. Sphalerite has a low Fe and Cd content and some crystals contain minute exsolution blebs of chalcopyrite. Galena is Ag-poor and is cut rarely by microfractures containing various unidentified Ag or Pb-rich minerals. The gangue includes potassium and barium-rich feldspars which may indicate that the hydrothermal fluids

CAPSULE GEOLOGY

were highly saline.

As well as having anomalous quantities of Ba, Zn and Pb, Ag and Cd, the mineralization is weakly enriched in As, Hg and Sb. The very low values of Au and Cu, and anomalous amounts of Hg (up to 15 ppm) suggests that the Nifty formed in a relatively low temperature hydrothermal system. No Hg-bearing minerals were detected. However, tetrahedrite-tennantite and sphalerite can contain Hg in their crystal lattice and this may account for the moderate Hg anomalies in the mineralization at the Nifty prospect. The distribution of Na₂O, MgO and K₂O in the footwall rocks indicates the existence of various vertically and laterally distributed alteration zones rich in either albite, chlorite or K-feldspar.

The massive, non-bedded nature of the barite cap, which lacks sedimentary reworking, suggests it precipitated in sea water above a hydrothermal vent or vents. Both the barite and the sulphides were possibly deposited in narrow, fault-controlled topographic depressions on the sea floor, resulting in elongate ore zones. The presence of red jasper veins and pods in the hangingwall succession shows that hydrothermal activity continued in the area well after the formation of the Nifty mineralization.

A postulated model for the Nifty prospect involves oxidized, saline and low temperature hydrothermal fluids rising to the shallow sea floor along conduits that cut tuffs and tuffaceous sediments. Later, these conduits were reactivated by northeast-trending faults which subsequently controlled the emplacement of the quartz porphyry and younger andesitic dikes.

The Nifty rocks have been folded and deformed; they currently lie on the northern, steeply dipping limb of a major anticline. Small-scale fold measurements demonstrate that the major fold has gently (15 to 25 degrees), east to south-east plunging axes. Although the exposed mineralization is relatively minor, blind and elongate orebodies could be present. The plunge of these postulated linear orebodies would be partly controlled by: (1) the strike of the faults marking the original hydrothermal conduits, (2) the orientation of the original sea floor surface, and (3) the easterly trending fold axes. Consequently, detailed geological mapping to determine the geometry of the fold structures, to outline the mineral alteration zones and locate the original hydrothermal conduits are essential prerequisites to any future drilling at the prospect.

The age, bimodal tholeiitic and calc-alkaline chemistry and oxidized, shallow-marine depositional environment of the Nifty hostrocks are similar to the Hazelton Group package hosting the Eskay Creek deposit (104B 007) in northwestern British Columbia, and a correlation is possible. Thus, the volcanic roof pendants in the Bella Coola area and those elsewhere along the Coast Belt should be re-evaluated as potential hostrocks for Eskay Creek-type VMS deposits. Furthermore, because the volcanic rocks that stratigraphically overlie the Nifty prospect show local evidence of hydrothermal activity in the form of jasper veins, it suggests that the subaerial rocks in the package warrant exploration for epithermal targets."

In 1997, Wildrose Resources Ltd. of the Eastfield Group, acquired the Thunderbird property, which includes the Nifty, Keen, Cutfinger, and Jamtart occurrences. After the release of the above cited report by Gerry Ray (EMPR Fieldwork 1997) in February 1998, Wildrose Resources planned an aggressive exploration program for the property in 1998. The T-Bird 1-4, Thunder, and Bird claims are held in good standing by Wildrose Resources Ltd. of Vancouver until October 1999.

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EMPR FIELDWORK *1997, pp. 201-20-28; *1978, pp. 94-95; 2001, pp. 119-134; EM FIELDWORK 2002, pp. 65-75, 131
EMPR GEOL 1977-1981, p. 103
EMPR OF 1999-2; 1999-14
EMPR PF (Wildrose Resources Ltd. Corporate Information, March/April 1998)
GSC MAP 1327A; 1424A
GSC MEM 324; 372
GCNL #49, #163, 1981; #4 (Jan.7), #29 (Feb.11), 1998
PR REL Wildrose Resources Ltd., Nov. 6, Oct. 22, 1997; Jan. 6, Feb. 9, 1998
WWW <http://www.eastfieldgroup.com/wildrose/wrshome.html>;

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 393
REPORT: RGEN0100

BIBLIOGRAPHY

<http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1999/07/15

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEEN**, THUNDERBIRD, THUNDER MOUNTAIN,
T-BIRD, CUTFINGER, WESTSIDE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093D09W
BC MAP:
LATITUDE: 52 31 42 N
LONGITUDE: 126 23 43 W
ELEVATION: 760 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5822992
EASTING: 676687

COMMODITIES: Copper Zinc Lead Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena Malachite
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Lower Cretaceous
Middle Jurassic

GROUP

Gambier
Hazelton

FORMATION

Undefined Formation
Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Intermediate Tuff
Felsic Tuff
Rhyolite Flow
Rhyolite
Epiclastic
Breccia
Rhyolite Porphyry
Mafic Volcanic Rock

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Gambier

Stikine

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The Keen property is underlain by a package of Middle Jurassic or older (EMPR Fieldwork 1997) bimodal (basalt-andesite and rhyodacite-dacite) volcanic rocks, probably of the Hazelton Group. The host rocks were previously thought to belong to the Cretaceous Gambier Group; however a uranium-lead date of 164 Ma for post-ore dikes at the Nifty (093D 006) prospect to the north shows that the host rocks are middle Jurassic at the youngest. The showing area geology consists of mainly tuff, with some rhyolitic flows overlain by tuffs of more intermediate composition with interbedded fine-grained epiclastic rocks. These rocks contain minor amounts of chalcopyrite, sphalerite and galena. Disseminated to massive pyrite is common. The geology is correlative with the Nifty prospect a few kilometres to the north.

The Keen claims were staked as part of the exploration work on the Nifty showing by United Mineral Services in 1977. Mapping, geochemistry sampling and ground electromagnetic surveys were done on the Keen claims in 1977 and 1978.

In 1980 Riocanex optioned the Nifty and Keen from Dimac Resource Corporation and conducted detailed mapping in the area. Rio Tinto conducted further geochemical work on the Keen claims in 1980 and identified the 'Keen anomaly', consisting of coincident anomalous values of copper, lead, zinc, silver, arsenic and iron. Pyritic malachite stained felsic volcanic rocks outcrop on a canyon cliff face 300 metres west along strike of this anomaly. Imperial Metals conducted further geochemical work on the Keen in 1984.

Eastfield Resources undertook geochemical surveys and geological mapping on the Cutfinger and Westside claims in 1993 (Assessment Report 23031), which lie north and west of the Keen claims, between the Keen and Nifty properties. The geology is dominated by felsic to

CAPSULE GEOLOGY

mafic volcanic rocks which are intruded by a variety of dikes. Work continued in 1994 (Assessment Report 23565), with sampling and prospecting of a soil anomaly on the Cutfinger claims on each side of the Noosegulch River, to look at volcanic textures and determine the extent of an hydrothermal alteration zone. They noted 'stringer' style chalcopyrite mineralization, and established a hydrothermal zone at least 700 metres by 350 metres. Geologists mapped unsorted breccias west of Noosegulch River, broad pervasive silicification and a large volume of rhyolite porphyry intrusions. They observed epigenetic mineralization, but also a multi-element geochemical signature (copper, zinc, lead, silver) may represent stringer-type mineralization in a volcanogenic massive sulphide deposit.

In 1997, Wildrose Resources Ltd. of the Eastfield Group, acquired the Thunderbird property, (which includes the Nifty, Keen, Cutfinger, and Jamtart (093D 023) occurrences). Gerry Ray of the B.C. Geological Survey visited the Thunderbird claims in 1997 and released a report in February 1998 (EMPR Fieldwork 1997) in which he noted similarities between the depositional environment and time of the Nifty showing to that of the Eskay Creek deposit (104B 008) in northern B.C. Wildrose Resources Ltd. planned an aggressive exploration program for the Thunderbird property in 1998. The T-Bird 1-4, Thunder, and Bird claims are held in good standing by Wildrose Resources Ltd. of Vancouver until October 1999.

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*23565, 24068
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EMPR GEM 1978-E196; 1980-314; *1984-299
EMPR OF 1999-2
GSC MAP 1327A; 1424A
GSC MEM 327
PR REL Wildrose Resources Ltd.; Oct.22, Nov.6, 1997; Jan.6, Feb.4,
1998
WWW <http://www.eastfieldgroup.com/wildrose/wrshome.html>

DATE CODED: 1985/07/24
DATE REVISED: 1999/07/06

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 008**

NATIONAL MINERAL INVENTORY: 093D4 Lst1

NAME(S): **BEALE'S QUARRY**, CUNNINGHAM ISLAND QUARRY, GUNBOAT PASSAGE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093D04W
BC MAP:

Open Pit Underground

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 11 18 N
LONGITUDE: 127 59 01 W
ELEVATION: 24 Metres

NORTHING: 5782472
EASTING: 569482

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on Lot 333 on the north side of Gunboat Passage on the south side of Cunningham Island.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Silica Serpentinite Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Stockwork

CLASSIFICATION: Sedimentary Syngenetic Industrial Min.

TYPE: R09 Limestone

DIMENSION: 1600 x 0300 Metres

STRIKE/DIP: 315/

TREND/PLUNGE:

COMMENTS: Strikes northwest and dips vertically.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous-Tertiary

Coast Plutonic Complex

LITHOLOGY: Limestone
Greenstone
Granite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

PHYSIOGRAPHIC AREA: Fjord Ranges (Northern)

TERRANE: Alexander

Plutonic Rocks

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE:

COMMENTS: Situated in a roof pendant within the Coast Plutonic Complex.

CAPSULE GEOLOGY

The Beale's Quarry lies within metamorphosed sedimentary rocks ascribed to the Alexander Terrane. The Alexander Terrane is a fragmented belt dominated by plutonic rocks of the Coast Plutonic Complex. The Paleozoic to Tertiary Coast Plutonic Complex consists predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre- to post-kinematic. Interspersed within the plutonic complex are Paleozoic(?) paragneisses, younger deformed metasediments and volcanics related to the Stikinia Terrane.

A 180 to 300-metre wide vertically dipping bed of limestone extends northwestward for 1.6 kilometres from the head of a lagoon on the south side of Cunningham Island, 10 kilometres east-northeast of Bella Bella. The limestone lies within a roof pendant of greenstone enclosed in foliated granite and quartz diorite of the Coast Plutonic Complex. The limestone is intruded by mafic dikes and sills and the occasional tongue of granite, which become less common to the northwest.

The bed is comprised of white to bluish white coarse grained high calcium limestone that is occasionally siliceous and locally contaminated with serpentinite. Pyrite is formed near some of the dikes. The limestone tends to also contain streaks of disseminated pyrite on the east side of the deposit. A chip sample taken over a 30 metre width contained 54.59 per cent CaO, 0.23 per cent MgO, 1.00 per cent SiO₂, 0.18 per cent Al₂O₃, 0.22 per cent Fe₂O₃ and 0.02 per cent sulphur (CANMET Report 811, p. 176).

Limestone was produced from two quarries and an underground chamber near the head of the lagoon on Lot 1333 between 1923 and 1934 (owned by J.F. Beale) and during 1948 and 1949. Between 1927 and 1949, 94,424 tonnes of limestone were quarried for the pulp mill at Ocean Falls.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1929-C430; 1930-A61,62,A423; 1931-A34; 1932-A286; 1933-A346;
1934-G41; 1948-188; 1949-256
EMPR OF 1992-18, p. 55
GSC MAP 1327A; 1424A
GSC MEM 372, p. 99
GSC P 66-25, p. 13
CANMET RPT *811, Part V, p. 168-170,176

DATE CODED: 1985/07/24
DATE REVISED: 1989/07/28

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 009**

NATIONAL MINERAL INVENTORY: 093D10 Cu1

NAME(S): **BELLA COOLA CHIEF (L.176)**, SALLOOMT, TORGER COPPER,
 VODKA, RYE, WHISKEY,
 RUM, GIN, QUEEN (L.177),
 RED DEER (L.178), SULPHUR (L.179), MGS

STATUS: Showing	Underground	MINING DIVISION: Skeena
REGIONS: British Columbia		
NTS MAP: 093D10E		UTM ZONE: 09 (NAD 83)
BC MAP:		
LATTITUDE: 52 31 30 N		NORTHING: 5822265
LONGITUDE: 126 32 43 W		EASTING: 666526
ELEVATION: Metres		
LOCATION ACCURACY: Within 1 KM		
COMMENTS: Location from plot on Geological Survey of Canada Map 1327A.		

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
 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>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Biotite Granite Porphyry Dike
 Quartz Feldspar Porphyry Dike
 Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
 TERRANE: Stikine Plutonic Rocks
 PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: ADIT	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1984
SAMPLE TYPE: Chip	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	196.0800 Grams per tonne
Copper	16.2000 Per cent
COMMENTS: Chip sample #3 adit east wall over 2.5 metres.	
REFERENCE: Assessment Report 14674.	

CAPSULE GEOLOGY

The property is located on the Salloomt River, about 24 kilometres northeast of Bella Coola.

The Bella Coola Chief property, consisting of the Bella Coola Chief (Lot 176), Queen (Lot 177), Red Deer (Lot 178), and Sulphur (Lot 179) were Crown-granted in 1906 to Messrs. Arneson, Kellog, Olson and Christenson. Surface trenching was done and two adits were driven, one 18 metres and the other 5 metres long. In 1922 the property was owned by Messrs. Olson, Brynildsen and Clauson; no work was done. Noranda Mines Limited held the properties in 1954. Silver Standard Mines optioned the property in 1956 and trenched (171 metres) and drilled nine holes totalling 91 metres.

The region is underlain mainly by rocks of the Paleozoic to Tertiary Coast Plutonic Complex. These predominantly crystalline rocks exhibit a variety of fabrics ranging from pre- to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures. Between the Hazelton Group of Stikinia to the east and the Coast Plutonic Complex with its deformed metasedimentary terrane to the west is a belt of dominantly mafic rocks, probably of volcanic origin which may be part of the Hazelton Group. The Bella Coola

CAPSULE GEOLOGY

Chief showing is underlain by andesite which has been intruded by numerous biotite granite and quartz feldspar porphyry dikes. Shallowly dipping quartz veins cut the dikes and the andesitic rocks. Irregular and erratic chalcopryrite and pyrite mineralization, with associated gold and silver, occurs within the biotite granite porphyry dikes. The quartz veins are commonly barren of sulphides. A chip sample from the east wall of the #3 adit over 25 metres assayed 196.08 grams per tonne silver and 16.2 per cent copper (Assessment Report 14674).

Cominco trenched and drilled the property (under the name Torger Copper) in 1966. Work included drilling one hole for 107 metres and digging 6 trenches totalling 24 metres. Green Lake Resources optioned the claims in 1983 and staked the property as the MGS claim group; the Whiskey, Gin, Rye, Vodka, and Rum claims. They conducted geochemistry, geophysics and geological mapping in 1984, 1985, and 1986.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1906-H251; 1908-J58; 1910-K83; 1922-N42; 1956-22; 1966-55
EMPR ASS RPT 13493, *14674, 15867
EMPR EXPL 1986-C324; 1987-C266
EMR MP CORPFILE (Silver Standard Mines Limited)
GSC MAP 1327A; 1424A
GSC MEM 372, p. 98

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/20

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 010**

NATIONAL MINERAL INVENTORY: 093D7 Cu1

NAME(S): **SURE COPPER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D07W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 23 37 N
LONGITUDE: 126 45 49 W
ELEVATION: Metres

NORTHING: 5807171
EASTING: 652169

LOCATION ACCURACY: Within 1 KM
COMMENTS: Plot on Geological Survey of Canada Map 1327A.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Copper mineral is assumed to be chalcopyrite.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Hornblende Diorite Granodiorite
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The region is underlain mainly by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre-to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

Between the Hazelton Group of the Stikinia Terrane to the east and the Coast Plutonic Complex with its deformed metasedimentary terrane to the west, is a belt of dominantly mafic rocks, probably of volcanic origin which may be part of the Hazelton Group.

The Sure Copper showing consists of copper mineralization reported to be associated with shearing in a deformed hornblende diorite-granodiorite stock which has intruded metavolcanic rocks, probably related to the Stikinia Terrane.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1907-74; 1908-58; 1909-56; 1910-83
GSC MAP 9-1966; 1327A; 1424A
GSC MEM 372, p. 99

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 011**

NATIONAL MINERAL INVENTORY: 093D7 Cu1

NAME(S): **BELLA COOLA**, SURE COPPER, O'GA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D06E 093D07W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 23 23 N
LONGITUDE: 127 05 00 W
ELEVATION: Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5806114
EASTING: 630428

LOCATION ACCURACY: Within 5 KM

COMMENTS: Described as being on the north side of Burke Channel on Bella Coola Mountain; location very uncertain.

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Mesozoic

Coast Plutonic Complex

LITHOLOGY: Quartz Monzonite
Diorite

HOSTROCK COMMENTS: Host rock type not identified but mapping indicates a quartz monzonite pluton of the Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The showings are apparently located on the west side of Neclletsconnay River about 600 metres north of Bella Coola. The Bella Coola property was owned and prospected by the Bella Coola Copper Co. in 1907 and 1908. The Sure Copper claim group was held by the North Coast Copper Company from 1908 to 1910. They drove two adits on the O'ga claim, the upper one 22 metres long, the lower 37 metres long.

The region is underlain mainly by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre- to post-kinematic. Paragneisses of (?) Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

Between the Hazelton Group of the Stikinia Terrane to the east and the Coast Plutonic Complex with its deformed metasedimentary terrane to the west, is a belt of dominantly mafic rocks. These rocks are probably of volcanic origin and may be part of the Hazelton Group.

Little has been reported on this showing other than it consists of pyrite and chalcopyrite mineralization. Assays were reported as high as 9.6 per cent copper; gold values were also reported. Its given location would place the showing in a quartz monzonite pluton of the Coast Plutonic Complex.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1907-74; 1908-J58; 1909-56; 1910-83
GSC MAP 1327A; 1424A
GSC MEM 372, p. 99

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/24

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 011**

MINFILE NUMBER: **093D 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **PROMISE WELL**, EVANS ARM

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D04E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 06 21 N
LONGITUDE: 127 44 57 W
ELEVATION: 25 Metres

NORTHING: 5773547
EASTING: 585666

LOCATION ACCURACY: Within 1 KM
COMMENTS: East end of Evans Inlet.

COMMODITIES: Iron Copper Uranium

MINERALS

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

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Skarn Replacement Hydrothermal Industrial Min.
TYPE: K03 Fe skarn
DIMENSION: 0021 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Skarn band is 21 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

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

LITHOLOGY: Granodiorite
Garnet Epidote Skarn
Pegmatite

GEOLOGICAL SETTING

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

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1953
SAMPLE TYPE: Chip
COMMODITY GRADE
Uranium 0.0060 Per cent
COMMENTS: Uranium oxide.
REFERENCE: Minister of Mines Annual Report 1953, page A166.

CAPSULE GEOLOGY

Most of the region is underlain by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre-to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

Between the Hazelton Group of the Stikinia Terrane to the east and the Coast Plutonic Complex with its deformed metasedimentary terrane to the west, is a belt of dominantly mafic rocks. These rocks are probably of volcanic origin and may be part of the Hazelton Group.

The Promise Well showing occurs entirely within a granodiorite batholith of the Coast Plutonic Complex. Mineralization occurs in a 21 metre wide band of garnet epidote skarn, consisting of magnetite with minor chalcopyrite. A pegmatitic stockwork cuts this skarn, another nearby skarn, and the granodiorite host rock. This pegmatite is anomalously radioactive with up to 0.006 per cent uranium oxide

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CAPSULE GEOLOGY

(Annual Report 1953 p. A166). The uraniferous mineral has not been identified.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1918-K37; *1953-A166
EMPR MAP 22, #47
GSC EC GEOL 3, Vol. I, p. 54
GSC MAP 9-1966; 1327A; 1424A
GSC MEM 372, p. 106
GSC OF 551

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 013**

NATIONAL MINERAL INVENTORY: 093D2 Ag1

NAME(S): **SMITLEY RIVER, NOMACK, LEAD, COPPER, TK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D02E
BC MAP:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)

LATITUDE: 52 03 24 N
LONGITUDE: 126 35 35 W
ELEVATION: Metres

NORTHING: 5770075
EASTING: 665018

LOCATION ACCURACY: Within 1 KM
COMMENTS: Location plotted on Geological Survey of Canada Map 1327A.

COMMODITIES: Silver Gold Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite

COMMENTS: Assumed minerals - not specified in reports.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Unknown

HOSTROCK COMMENTS: Host rock type not identified.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Gambier

Stikine

PHYSIOGRAPHIC AREA: Pacific Ranges

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1926
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	891.4000	Grams per tonne	
Copper	3.0000	Per cent	
Lead	12.0000	Per cent	
Zinc	10.0000	Per cent	

REFERENCE: Minister of Mines Annual Report 1926, page A68.

CAPSULE GEOLOGY

The region is underlain mainly by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre- to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

Between the Hazelton Group of the Stikinia Terrane to the east and the Coast Plutonic Complex with its deformed metasedimentary terrane to the west, is a belt of dominantly mafic rocks. These rocks are probably of volcanic origin and may be part of the Hazelton Group.

The nature and geological setting of the Smitley River showing is not clear. Its location places it within rocks of possibly deformed and metamorphosed Hazelton Group equivalent on the western margin of the Coast Plutonic Complex. A sample collected in 1926 is reported to contain 891.4 grams per tonne silver, 3 per cent copper, 12 per cent lead and 10 per cent zinc (Minister of Mines Annual Report 1926, page A68).

Old staking records show that the Smitley River occurrence was staked in 1926 by P. Jacobsen and has been staked several times since. It was covered by the Nomack claims in 1944, the Lead and

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CAPSULE GEOLOGY

Copper claims in 1956 and the TK claims in 1984.

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 333-338; 2002, pp. 65-75
EMPR AR *1926-A68
GSC MAP 9-1966; 1327A; 1424A
GSC MEM 372

DATE CODED: 1985/07/24
DATE REVISED: 1999/10/20

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 014**

NATIONAL MINERAL INVENTORY: 093D10 Cu2

NAME(S): **NUMAS**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D10W
BC MAP:

Underground

MINING DIVISION: Skeena

LATITUDE: 52 37 42 N
LONGITUDE: 126 58 36 W
ELEVATION: Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5832849
EASTING: 636942

LOCATION ACCURACY: Within 1 KM

COMMENTS: Plot on Geological Survey of Canada Map 1327A.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Irregular
MODIFIER: Sheared

DIMENSION:

STRIKE/DIP: 110/

TREND/PLUNGE:

COMMENTS: Shear zone dips steeply south striking at 110 degrees.

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Mesozoic

Coast Plutonic Complex

LITHOLOGY: Chlorite Schist
Felsic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The claims are located on the east side of Dean Channel, midway between Kimsquit and Labouchere Channel. The claims were acquired by B.T. Jacobsen, T. Oleon, and A.J. Enjuich in 1928. Some trenching and a 6-metre adit were completed.

The region is underlain mainly by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre-to post-kinematic. Paragneisses of (?) Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

Between the Hazelton Group of the Stikinia Terrane to the east and the Coast Plutonic Complex with its deformed metasedimentary terrane to the west, is a belt of dominantly mafic rocks. These rocks are probably of volcanic origin and may be part of the Hazelton Group.

The Numas showing consists of discontinuous quartz lenses in a shear zone mineralized with sparse pyrite, chalcopyrite and molybdenite. The shear zone, which strikes 110 degrees and dips steeply to the south, cuts a felsic intrusion which is probably related to a quartz diorite batholith immediately to the east of the showing. Chlorite schist occurs within the shear zone.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR *1928-C66
GSC MAP 9-1966; 1327A; 1424A
GSC MEM 372, p. 99

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/24

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 014**

MINFILE NUMBER: **093D 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAST CHANCE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D04E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 09 41 N
LONGITUDE: 127 34 54 W
ELEVATION: Metres

NORTHING: 5779937
EASTING: 597016

LOCATION ACCURACY: Within 1 KM

COMMENTS: East side of King Island across from Mapalaklenk Point.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ALTERATION: Garnet Epidote
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Skarn
TYPE: K07 Mo skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Schist
Garnet Epidote Skarn
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: Pre-mineralization GRADE:

CAPSULE GEOLOGY

The region is underlain mainly by the Paleozoic to Tertiary Coast Plutonic Complex consisting predominantly of crystalline rocks which exhibit a variety of fabrics ranging from pre-to post-kinematic. Paragneisses of (?)Paleozoic age, younger deformed metasediments and volcanics related to the Stikinia Terrane are interspersed within the plutonic complex. The northeastern part of the Bella Coola map area is underlain primarily by mafic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These rocks are variably deformed containing both northeast and northwest trending structures.

Between the Hazelton Group of the Stikinia Terrane to the east and the Coast Plutonic Complex with its deformed metasedimentary terrane to the west, is a belt of dominantly mafic rocks. These rocks are probably of volcanic origin and may be part of the Hazelton Group.

The Last Chance showing consists of molybdenite mineralization at or near the intersection of two pegmatite dikes, a band of garnet epidote skarn (about 30 metres thick) and schist. Mineralization occurs mainly in the schist at the contact with overlying skarn although lesser amounts occur in the skarn and adjacent pegmatite.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR *1953-A165
GSC MAP 1327A; 1424A
GSC MEM 372, p. 106

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **BELLA COOLA VALLEY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D08W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 24 00 N
LONGITUDE: 126 20 06 W
ELEVATION: Metres

NORTHING: 5808871
EASTING: 681302

LOCATION ACCURACY: Within 5 KM

COMMENTS: Near logging road 9.6 kilometres southwest of Firvale.

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Serpentinite
Greenstone
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Pacific Ranges

CAPSULE GEOLOGY

The Bella Coola Valley asbestos showing occurs within the eastern part of the Coast Crystalline Belt. The region is underlain by supracrustal metasedimentary and metavolcanic rocks into which pre- to post-kinematic batholithic intrusions have been emplaced. The supracrustal rocks may be, in part, Jurassic Hazelton Group or, in some cases, older.

The asbestos occurs as short, narrow stringers within serpentinite which occurs in rocks described as greenstone and chlorite schist.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1964-A74
EMPR OF 1995-25
GSC MAP 1327A; 1424A
GSC MEM 372, p. 106

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAGOON BAY**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D04W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 03 59 N
LONGITUDE: 127 52 48 W
ELEVATION: Metres

NORTHING: 5769014
EASTING: 576774

LOCATION ACCURACY: Within 1 KM

COMMENTS: Near the southwest corner of King Island.

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: R12 Volcanic glass - perlite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Glass
Granodiorite
Para Gneiss
Andesitic Volcanic

HOSTROCK COMMENTS: Perlite is probably derived from Tertiary Bella Bella Formation volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

Alexander

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

The Lagoon Bay perlite showing occurs in an area mapped as dominantly foliated granodiorite and paragneiss. On the west side of Fisher Channel, west of the showing, is an area underlain by andesitic volcanic rocks of the Bella Bella Formation. While no volcanic rocks have been mapped in the area of the showing, it is likely that Bella Bella volcanics have been deposited here and that the perlite is derived from these rocks.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1961-A67
GSC MAP 1327A; 1424A
GSC MEM 372, p. 106

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **GREEN GIANT**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D13W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 47 54 N
LONGITUDE: 127 58 23 W
ELEVATION: Metres

NORTHING: 5850331
EASTING: 569238

LOCATION ACCURACY: Within 1 KM

COMMENTS: The Green Giant and Green Giant 1 to 3 claims were located (in 1929) just north of Kynoch Inlet. The four claims together formed a square (Sketch Map - Property File). The Green Giant was "two miles (3.2 kilometres) east of lot 300 R 3 C. D." (Prospectus, Western Canada Graphite - 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

STRATIGRAPHIC AGE: Upper Paleozoic
GROUP: Undefined Group

FORMATION: Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER:

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 Green Giant occurrence near 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 Green 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 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 Green Giant, the other graphite properties held by Western Canada Graphite were called Black Lead (103A 010), Giant (103A 011), Gem (093D 019), Grey Giant (093D 020) and Zenith (093D 021). No record of development exists for these properties.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
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)

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 411
REPORT: RGEN0100

BIBLIOGRAPHY

discussing prospectus information (in 103A 010 (Black Lead) file).
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: **093D 019**

NATIONAL MINERAL INVENTORY:

NAME(S): **GEM**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D13W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 45 35 N
LONGITUDE: 127 52 55 W
ELEVATION: 20 Metres

NORTHING: 5846128
EASTING: 575448

LOCATION ACCURACY: Within 500M

COMMENTS: The Gem claim group was located (in 1929) on or near the north shore of Kynoch Inlet. A sketch map shows two claims of the Gem Group (attached along their common east-west border) located along the east side of Kainet Creek which empties into a small bay or inlet. One claim appears to have its southwest corner at the mouth of the creek and the other has its northwest corner their (the southern claim projects onto a headland or peninsula). A third claim (possibly the Black Giant) is situated west of the southern claim, up to 1.5 kilometres away across the small bay (Prospectus, Western Canada Graphite - Property File). The written description corroborates the sketch map location.

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

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
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 Gem occurrence at or near the north shore of 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 Gem 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 Gem, the other graphite properties held by Western Canada Graphite were called Black Lead (103A 010), Giant (103A 011), Green Giant (093D 018), Grey Giant (093D 020) and Zenith (093D 021). No record of development exists for these properties.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
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
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: **093D 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **GREY GIANT**, GRAY GIANT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D12W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 44 04 N
LONGITUDE: 127 49 03 W
ELEVATION: Metres

NORTHING: 5843386
EASTING: 579843

LOCATION ACCURACY: Within 500M

COMMENTS: The Gray Giant is reported to be on Lard Creek near the head of Kynoch Inlet. Gray Giant No.1 is reported to be west of Levi creek at the head of the lagoon at the end of Kynoch Inlet (Prospectus, Western Canada Graphite - Property File). A very rough sketch map shows four claims of the Grey Giant group (forming a square) situated a few kilometres to the northeast of the head of Kynoch inlet.

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

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
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 Grey Giant occurrence near the head of 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 Grey 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 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 Grey Giant, the other graphite properties held by Western Canada Graphite were called Black Lead (103A 010), Giant (103A 011), Green Giant (093D 018), Gem (093D 019) and Zenith (093D 021). No record of development exists for these properties.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR *1929-C67
EMPR PF (*Prospectus, Western Canada Graphite Limited, 1929 (with sketch map of claim locations (in 103A 010 (Black Lead) file);

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 415
REPORT: RGEN0100

BIBLIOGRAPHY

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
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: **093D 021**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZENITH**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D12W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 44 28 N
LONGITUDE: 127 45 48 W
ELEVATION: 200 Metres

NORTHING: 5844189
EASTING: 583487

LOCATION ACCURACY: Within 1 KM

COMMENTS: The Zenith 1 and 2 are reported to be west of Lard Creek, 3 miles (4.8 kilometres) from the head of Kynoch Inlet (Prospectus, Western Canada Graphite - Property File). Location not indicated on sketch map.

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

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

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 Zenith occurrence near the head of 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 Zenith 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 Zenith, the other graphite properties held by Western Canada Graphite were called Black Lead (103A 010), Giant (103A 011), Green Giant (093D 018), Gem (093D 019) and Grey Giant (093D 020). No record of development exists for these properties.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
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).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 417
REPORT: RGEN0100

BIBLIOGRAPHY

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: **093D 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **SMITLEY-OLY, O.L.Y., PATCH,**
ALEETA 1-4, NUS 1-2, BAS 1-2,
SNOOTLI, OLY, SMITLEY RIVER,
SNOOTLI CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D02E
BC MAP:
LATITUDE: 52 14 10 N
LONGITUDE: 126 31 40 W
ELEVATION: 1525 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: In the Oly Valley, at the headwaters of the Smitley River (Assessment Report 14278).

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5790180
EASTING: 668812

COMMODITIES: Gold Silver Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Tetrahedrite Molybdenite
ASSOCIATED: Quartz Epidote
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal Igneous-contact
TYPE: I06 Cu±Ag quartz veins
DIMENSION: Metres STRIKE/DIP: 153/25S TREND/PLUNGE:
COMMENTS: Major vein in the South zone is parallel to the southern contact of the Tertiary granodiorite.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Hazelton	Unnamed/Unknown Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Tertiary Granodiorite
Greenstone
Chlorite Schist
Slate
Argillite
Greywacke
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine Plutonic Rocks
PHYSIOGRAPHIC AREA: Kitimat Ranges

INVENTORY

ORE ZONE: GOSSAN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 1.1300 Grams per tonne
Copper 0.4300 Per cent
Silver 6.8600 Grams per tonne
COMMENTS: North zone gossan.
REFERENCE: Assessment Report 14278.

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 6.2400 Grams per tonne
Silver 58.9700 Grams per tonne
Copper 3.7900 Per cent
COMMENTS: South zone vein, sample #84032.
REFERENCE: Assessment Report 14278.

CAPSULE GEOLOGY

The Smitley-Oly is a chalcopyrite-bornite-tetrahedrite bearing

CAPSULE GEOLOGY

quartz vein and stockwork showing at 1525 metres elevation near Mount Saugstad, about 15 kilometres east of South Bentinck Arm. The oldest rock unit in the area is a Mesozoic (probably Triassic to Jurassic) assemblage of greenstone and chlorite schist, possibly of the Hazelton Group, with a general northwest strike and steep to vertical northeasterly dips. Also represented, in two small areas, are lower to middle Jurassic Hazelton Group slate, argillite, and conglomerate. These rocks are intruded by a 4 by 5 kilometre triangular granodiorite stock of late Cretaceous or Tertiary age. Mineralization appears to be associated with its contact zones and those of small satellitic plugs.

Noranda staked the area as the Snootli and Smitley 1, 2, 3 claims in 1980. It was staked as the Patch Group for Queenstake Resources in 1982, and restaked in 1984 as the Aleeta 1-4 (including the Bas and Nus claims). Work that year identified two zones of interest. The South Zone is a system of subparallel quartz veins, from a few centimetres to several metres in width, about 4 kilometres south of Mount Saugstad summit. The zone appears to lie along the southern contact of the Tertiary granodiorite stock. The major vein strikes 153, and dips 25-30 degrees south, contains pyrite and chalcopyrite, and is exposed for a strike length of 1.5 kilometres. A grab sample from the vein assayed 6.24 grams per tonne gold, 58.97 grams per tonne silver, and 3.79 per cent copper. The North Zone is a large gossan extending southeast from the head of Snootli Creek valley across the summit of Mount Saugstad for a distance of 9 kilometres. A grab sample assayed 1.13 grams per tonne gold, 6.86 grams per tonne silver, and 0.43 per cent copper. The Oly 1-4 claims were staked in 1987 by United Pacific Gold, Ltd. to cover mineralization associated with the intrusive contacts of Tertiary granitoids. In 1988 United Pacific conducted geological mapping and rock sampling.

The claims were forfeited in 1990.

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 333-338; 2002, pp. 65-75
EMPR ASS RPT *14278, 18006
EMPR PF (United Pacific Gold Limited, 1988 in 093M 027)
GSC MAP 9-1966; 1327A
GSC MEM 372

DATE CODED: 1999/07/12
DATE REVISED: 1999/07/12

CODED BY: JMR
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **JAMTART**, THUNDERBIRD, WEST SIDE

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D09W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 34 11 N
LONGITUDE: 126 25 49 W
ELEVATION: Metres

NORTHING: 5827510
EASTING: 674149

LOCATION ACCURACY: Within 500M

COMMENTS: Location is upslope from unstable scree slope described by G.E. Ray in EMPR Fieldwork 1997.

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Galena

COMMENTS: Assumed to be sphalerite and galena.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Volcanogenic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Alkalic Calcareous Basalt
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The Jamtart showing consists of mineralized rocks found in a talus apron below a steep and unstable cliff, about 2.4 kilometres southwest of the Nifty (093D 006) volcanogenic massive sulphide prospect, north-northeast of Hagensborg and west of Noosegulch Creek. The showing was discovered sometime during the late 1970's or early 1980's during a flurry of exploration of the area surrounding the Nifty. Neither descriptions of the showing nor its location appear in the assessment reports over that period, however, it is referred to in passing in later reports as being a lead-zinc showing. Presumably the minerals are sphalerite and galena.

Gerry Ray of the Geological Survey Branch visited the Jamtart occurrence in 1997 during a study of the Nifty occurrence. Chemical plots of samples taken during that visit indicate that the volcanic rocks hosting the Jamtart occurrence are largely subalkaline, calcalkaline basalts and andesite that have medium to high K2O content.

In 1997, Wildrose Resources of the Eastfield Group, acquired the Thunderbird property, which includes the Nifty, Keen (093D 007), Cutfinger, and Jamtart occurrences. The T-Bird 1-4, Thunder, and Bird claims are held in good standing by Wildrose Resources Ltd. of Vancouver until October 1999.

BIBLIOGRAPHY

EMPR FIELDWORK *1997, p. 20-5; 2001, pp. 119-134; 2002, pp. 65-75
GSC MEM 324

DATE CODED: 1999/09/16
DATE REVISED: / /

CODED BY: JMR
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROSCOE INLET**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D05W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 27 09 N
LONGITUDE: 127 46 20 W
ELEVATION: Metres

NORTHING: 5812077
EASTING: 583433

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location from Geological Survey of Canada Memoir 372, Figure 2A

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Schist
Diorite
Granodiorite

GEOLOGICAL SETTING

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

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

Metamorphism of the region ranges from chlorite to sillimanite grade. Sillimanite bearing rocks occur in a broad northwesterly trending zone, more or less parallel to the trend of the Coast Plutonic Complex. The Roscoe Inlet kyanite showing occurs in the sillimanite zone within an enclave of metasedimentary rocks in foliated diorite and granodiorite. Although kyanite is not reported to coexist with sillimanite, the presence of garnet within this zone plus sillimanite suggests high pressure and temperature conditions of metamorphism.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
GSC MAP 1327A; 1424A
GSC MEM 372, p. 91, Figure 2A
GSC P 63-1, p. 20

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 025**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLAZE** JAN 1-4, DANO

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D03W 093D06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 13 14 N
LONGITUDE: 127 17 33 W
ELEVATION: 505 Metres

NORTHING: 5786943
EASTING: 616640

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the south side of Burke Channel, 40 kilometres west-southwest of Bella Coola. Coordinates are from the west facing cliff that is the source of the mineralized talus (Assessment Report 8737).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
ASSOCIATED: Quartz Sphalerite
ALTERATION: Limonite
COMMENTS: Manganese oxide.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
COMMENTS: The molybdenite may be genetically related to south-southwest trending faults and shear zones.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Granite
Syenite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The Blaze property is located on the south side of Burke Channel, 40 kilometres west southwest of Bella Coola.

Molybdenite lies within an easterly trending Miocene granite-syenite pluton approximately 45 kilometres long and 6 kilometres wide.

Sparse molybdenite and chalcopyrite occur in a talus fan in the central part of the property. Granite exposed in the vicinity of this occurrence is cut by closer spaced fractures than elsewhere on the property, and shows weak limonite and manganese stain. Molybdenite in this talus occurs along joints and fractures cutting relatively unaltered sub-porphyrific granite, locally accompanied by quartz, pyrite and chalcopyrite. The source area for this talus is situated on an inaccessible cliff at an elevation between 460 and 550 metres. Granite in the vicinity of the mineralized talus is locally cut by widespread narrow quartz-magnetite steeply dipping veinlets, with an average spacing of one veinlet per 3 centimetres. A few minor occurrences of molybdenite, chalcopyrite and sphalerite were recorded elsewhere on the property. High values of molybdenum, lead and zinc were recorded in several stream sediment and talus fine samples collected on the property.

In 1979 a program of geological mapping and geochemical sampling was completed by BP Minerals Limited as part of an option agreement with Cusac Industries Limited. In 1980 BP Minerals diamond drilled 458.5 metres in two holes under the talus pile. Only rare trace molybdenum was found in the core. The claims were forfeited in the early 1990s.

The property is underlain largely by granite which is in contact with grey biotite granodiorite near the southern property boundary. The granite is cut by sparse dikes of fine grained granite, aplite, quartz feldspar porphyry, and fine grained rocks of intermediate

CAPSULE GEOLOGY

composition. It is also cut by several small bodies of intrusive breccia which consist of fragments of fine grained granite in a similar matrix, and of fragmental quartz feldspar porphyry.

The molybdenite may be genetically related to south-southeast trending faults and shear zones which cross the upper part of the cliffs.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR ASS RPT *8474, *8737
GSC MAP 1327A
GSC MEM 372

DATE CODED: 1999/08/25
DATE REVISED: 1999/08/25

CODED BY: JMR
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **BENTINCK ARM**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 08 52 N
LONGITUDE: 126 47 20 W
ELEVATION: Metres

NORTHING: 5779780
EASTING: 651284

LOCATION ACCURACY: Within 1 KM

COMMENTS: On shore of Bentinck Arm, approximately 24.1 kilometres south of Bella Coola.

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE

Unknown

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Quartz Gneiss
Granodiorite
Meta Volcanic

GEOLOGICAL SETTING

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

PHYSIOGRAPHIC AREA: Pacific Ranges

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and metavolcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

The Bentinck Arm graphite showing, located approximately 24.1 kilometres south of Bella Coola, occurs as small thin graphite flakes widely dispersed in a quartz rich gneiss. Geological Survey of Canada mapping, however, has shown that this area is underlain by metavolcanic rocks which have been intruded by a now foliated granodiorite. No further geological information is available.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR PF (McCammon, J.W., letter of May 7, 1976; Buchanan, R.M., Head of Ore Mineralogy Section, Canmet, letter of May 18, 1976)
GSC MAP 1327A; 1424A
GSC MEM 327

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **ELCHO HARBOUR**, ALKOW HARBOUR

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D06W 093D07E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 23 59 N
LONGITUDE: 127 30 06 W
ELEVATION: Metres

NORTHING: 5806554
EASTING: 601940

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Industrial Min.
TYPE: P04 Crystalline flake graphite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Meta Sediment/Sedimentary
Gneiss
Schist
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

The Elcho Harbour graphite showing is underlain by gneiss of presumed Paleozoic age in which a zone of metasedimentary (amphibolite facies) rocks occurs. These gneisses and schists occur within a large foliated quartz diorite batholith. The occurrence, reported to be a large deposit of disseminated graphite consisting of minute, lustrous, dark steel grey scales and scaly layers, may occur within the metasedimentary rocks. The location given is not precise and no other geological information is available for the occurrence.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
EMPR AR 1886-502; 1956-A65
GSC AR 1896, v. IX, p. 16R
GSC MEM 74, p. 109; 372, p. 106
GSC MAP 1327A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **BURNT BRIDGE** KAHYLSKT CREEK

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D08E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 27 32 N
LONGITUDE: 126 10 20 W
ELEVATION: Metres

NORTHING: 5815840
EASTING: 692117

LOCATION ACCURACY: Within 5 KM

COMMENTS: Burnt Bridge Creek area, east of Bella Coola.

COMMODITIES: Molybdenum Lead Copper

MINERALS

SIGNIFICANT: Molybdenite Galena Chalcopyrite

COMMENTS: Minerals assumed not identified.

MINERALIZATION AGE: Lower Cretaceous

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

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: Chlorite Schist

HOSTROCK COMMENTS: Geological Survey of Canada Map 1327A shows that general area is underlain by greenstone. Fieldwork 2002, p. 124.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Gambier

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks. In the eastern part of the Coast Crystalline Belt supracrustal rocks of possible Mesozoic age and Jurassic Hazelton Group rocks become dominant.

The Burnt Bridge Creek molybdenite showing is underlain predominantly by chlorite schist of presumed Triassic age. Apart from the reported occurrence of molybdenum, lead and copper, no other information is available.

Fieldwork 2002, p. 124, 125-126 suggests area underlain by diorite complexes cut by granodiorite and later basalt dykes and the map unit is labelled early Cretaceous.

BIBLIOGRAPHY

EM FIELDWORK 2001, pp. 124-126; 2002, pp. 65-75
EMPR AR 1961-A67; 1962-A68
GSC MAP 1327A; 1424A
GSC MEM 372, p. 106

DATE CODED: 1986/04/22
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 031**

NATIONAL MINERAL INVENTORY:

NAME(S): **EUCOTT HOT SPRINGS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 27 10 N
LONGITUDE: 127 18 30 W
ELEVATION: Metres

NORTHING: 5812745
EASTING: 614954

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Sulphate Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Syngenetic 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>
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite
Carbonate
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Fiord Ranges (Northern)

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed include the (?) Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

The Eucott hot springs contains a very low amount of dissolved solids (145 milligrams per litre) which has a calcium sulphate, calcium bicarbonate composition. Water temperature at the surface is in excess of 60 degrees Celsius. The rocks underlying the area comprise a foliated quartz diorite into which a post kinematic granodioritic stock has been intruded.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
GSC MAP 1324A; 1327A
GSC MEM 372, p. 99
GSC SUM RPT 1921, part A, p. 41A

DATE CODED: 1986/04/22
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 032**

NATIONAL MINERAL INVENTORY:

NAME(S): **NASCALL HOT SPRINGS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 29 51 N
LONGITUDE: 127 16 24 W
ELEVATION: Metres

NORTHING: 5817775
EASTING: 617214

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Syngenetic 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>
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

The underlying geology of the Nascall hot springs area consists of foliated quartz diorite. The temperature of the water in the hot spring has been estimated at 40 to 50 degrees celsius, however, no information on its composition is available.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
GSC MAP 1327A; 1424A
GSC MEM 372, p. 100

DATE CODED: 1986/04/22
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **TALLHEO HOT SPRINGS**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D02W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 12 15 N
LONGITUDE: 126 56 20 W
ELEVATION: Metres

NORTHING: 5785749
EASTING: 640844

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Syngenetic 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>
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Granodiorite
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Pacific Ranges

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

The bedrock geology of the Tallheo hot springs comprises foliated granodiorite and schist of possible volcanic protolith. The waters of the hot spring are reported to be about 60 degrees celsius; no information on composition is available.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
GSC MAP 1327A; 1424A
GSC MEM 372, p. 99

DATE CODED: 1986/04/22
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 034**

NATIONAL MINERAL INVENTORY:

NAME(S): **NASCALL RIVER**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 42 49 N
LONGITUDE: 127 27 35 W
ELEVATION: Metres

NORTHING: 5841526
EASTING: 604048

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location from Geological Survey of Canada Memoir 372, Figure 2A.

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Schist
Para Gneiss

GEOLOGICAL SETTING

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

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?)Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

Metamorphism of the region ranges from chlorite to sillimanite grade. Sillimanite bearing rocks occur in a broad northwesterly trending zone, more or less parallel to the trend of the Coast Plutonic Complex. Within the sillimanite zone the Nascall River kyanite showing is reported to occur within an assemblage of paragneiss and schist. Although kyanite is not reported to coexist with sillimanite, the presence of garnet plus sillimanite within this zone suggests high pressure and temperature conditions.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
GSC MAP 1327A; 1424A
GSC MEM 372, p. 91, Figure 2A
GSC P 63-1, p. 20

DATE CODED: 1986/06/24
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093D 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **SWALLOP CREEK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093D10E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 52 34 44 N
LONGITUDE: 126 43 20 W
ELEVATION: Metres

NORTHING: 5827864
EASTING: 654335

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location from Geological Survey of Canada Memoir 372, Figure 2A.

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Schist
Quartz Diorite

GEOLOGICAL SETTING

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

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The region is underlain by the Coast Plutonic Complex, consisting of pre- to post-kinematic quartz diorite to granodiorite batholiths intruded into Paleozoic to Mesozoic metasedimentary and meta-volcanic rocks. Younger supracrustal assemblages overlying deformed rocks include the (?) Cretaceous Gambier Group and Tertiary Bella Bella Formation volcanic rocks.

Metamorphism of the region in which the Swallow Creek kyanite occurrence is located is dominantly greenschist. However, in metasedimentary rocks adjacent to a foliated quartz diorite, kyanite has been recognized. Although garnet and sillimanite have been recognized in the same area, it is not known whether these minerals coexist with kyanite. If they do then the occurrence represents a small area of high grade metamorphic rocks within the mainly greenschist facies terrane.

BIBLIOGRAPHY

EM FIELDWORK 2002, pp. 65-75
GSC MAP 1327A; 1424A
GSC MEM 372, p. 91, Figure 2A
GSC P 63-1, p. 20

DATE CODED: 1986/06/24
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 001**

NATIONAL MINERAL INVENTORY: 093E11 Pb1

NAME(S): **EMERALD GLACIER**, EMERALD GLACIER MINE, EMERALD-GLACIER,
 EMERALD, GLACIER

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 093E11W
 BC MAP:
 LATITUDE: 53 44 19 N
 LONGITUDE: 127 15 37 W
 ELEVATION: 1859 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS:

Underground

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

NORTHING: 5955845
 EASTING: 614746

COMMODITIES: Zinc Cadmium Silver Molybdenum Lead Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite
 ASSOCIATED: Quartz
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Shear
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Bladed
 DIMENSION: 1200 Metres STRIKE/DIP: 170/70E TREND/PLUNGE:
 COMMENTS: Quartz veining extends for at least 1200 metres and is associated with shears striking approximately 170 degrees and dipping 60-75 degrees east.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Feldspathic Sandstone
 Siltstone
 Tuffaceous Shale
 Andesitic Tuff
 Dacitic Tuff
 Tuffaceous Sandstone
 Dacitic Dike
 Basaltic Dike
 Rhyolite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

INVENTORY

ORE ZONE: EMERALD-GLACIER

REPORT ON: Y

CATEGORY: Unclassified
 QUANTITY: 40800 Tonnes

YEAR: 1983

COMMODITY	GRADE	
Silver	355.0000	Grams per tonne
Gold	1.1300	Grams per tonne
Lead	6.2300	Per cent
Zinc	9.4900	Per cent

REFERENCE: CIM Special Volume 37, page 186.

CAPSULE GEOLOGY

The Emerald Glacier mine area is underlain by the Lower-Middle Jurassic Hazelton Group which consists of a sedimentary member of feldspathic sandstone with minor siltstone and silty tuffaceous shale, and an overlying volcanic member of andesitic and dacitic breccias, tuffs and some massive volcanic rocks. Mineralization is hosted primarily by sedimentary rocks in a zone of transition between the two members. These rocks include intercalated sandstone, tuff, tuffaceous sandstone, siltstone and shale. Dacite, basalt and rhyolite dikes cut the stratified rocks.

En echelon quartz veining extends for at least 1200 metres and is associated with shears striking about 170 degrees and dipping 60

CAPSULE GEOLOGY

degrees to 75 degrees east. The main mineralization occurs in one of these shears and is associated with quartz veining up to 3 metres wide that is variously stockwork, massive, banded, brecciated and drusy in form. Sulphide mineralization includes galena, sphalerite, chalcopyrite and pyrite in order of decreasing abundance. Smaller veins in the vicinity are dominated by sphalerite.

Unclassified reserves are 40,800 tonnes grading 355 grams per tonne silver, 8.23 per cent lead, 9.49 per cent zinc and 1.13 grams per tonne gold (CIM Special Volume 37, page 186).

BIBLIOGRAPHY

EMPR PF (*Campbell, D.D. (1967): Report on the Emerald Glacier Mine, Emerald Glacier Mine Prospectus; *Crowhurst, J.J. (1974): Report on the Emerald Glacier Mines Ltd. Property)
EMPR AR *1916-K164; 1918-K126; 1919-N105; 1927-C154; 1929-C183; 1945-A68; 1951-A117; 1952-A97; 1966-105; *1967-110-113; 1968-141
EMPR OF 1992-1; 1994-14
EMPR GEM 1969-92; 1970-107; 1971-145; 1973-321
EMPR BULL *75, pp. 53,68
EMPR BC METAL MM00476
GSC SUM RPT *1924, part A, pp. 56A-57A
GSC MAP 1064A
GSC MEM *299, pp. 84-86
GSC OF 708
GSC P 72-1A; 79-1A
EMR MIN BULL MR 223 B.C. 213
EMR MRI 80-7, p. 213
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/24

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **GAM**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 23 50 N
LONGITUDE: 127 28 58 W
ELEVATION: Metres

NORTHING: 5917532
EASTING: 600881

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Gam 1-10 from claim map.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au
COMMENTS: Mineralization has a northwesterly trend.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Acid Intrusive
Quartz Vein
Meta Volcanic
Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Acidic intrusive rocks are in contact with a metamorphosed series of volcanic and sedimentary rocks. Sparse chalcopyrite and molybdenite mineralization is associated with fracturing and narrow quartz veining in both the plutonic and metamorphic rocks. Mineralization occurs along a northwesterly trend.

BIBLIOGRAPHY

EMPR ASS RPT *1631
EMPR OF 1988-2; 1994-14
GSC MEM 299
GSM MAP 1064A
GSC P 52-21; 78-1A
GSC OF 708

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/01

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 003**

NATIONAL MINERAL INVENTORY: 093E11 Cu5

NAME(S): **TROITSA (LAKE)**, OVP, NUSWAT

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 32 48 N
LONGITUDE: 127 21 49 W
ELEVATION: 930 Metres

NORTHING: 5934331
EASTING: 608422

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper Molybdenum Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au
COMMENTS: Mineralized dike trends at 140 degrees.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	
Upper Cretaceous			Troitsa Stock

LITHOLOGY: Granodiorite
Quartz Monzonite
Andesite
Dike

HOSTROCK COMMENTS: Intrusive rocks in the form of a dike.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Taitsa Range

CAPSULE GEOLOGY

The area of interest is mainly underlain by andesites of the Jurassic Hazelton Group which have been intruded by the granodiorite/quartz monzonite Troitsa Stock of Upper Cretaceous Age. The Lake Showing is associated with a monzonite-granodiorite dike about 9 metres wide that has intruded Hazelton rocks. A complicated stockwork of quartz mineralized with pyrite, molybdenite, and chalcopyrite occurs with the dike. Some mineralization, especially pyrite extends into the volcanics.

BIBLIOGRAPHY

EMPR PF (*Cawthorn, N. (1971): Final Report 1971 Program, Troitsa Lake Property)
EMPR ASS RPT 1091, *2026, *3253, *12278, 14953, *15314
EMPR EXPL 1983-412
EMPR GEM 1969-98; 1971-146
EMPR AR 1966-112; 1967-113; 1968-141
EMR MP CORPFILE (Silver Standard Mines Limited)
EMPR BULL *75, pp. 53,67,68
EMPR OF 1994-14
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A

DATE CODED: 1985/07/24
DATE REVISED: 1987/02/25

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 004**

NATIONAL MINERAL INVENTORY: 093E11 Cu3

NAME(S): **OX LAKE**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:
LATITUDE: 53 40 25 N
LONGITUDE: 127 03 25 W
ELEVATION: 960 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of ore zone.

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5948962
EASTING: 628353

COMMODITIES: Copper Molybdenum Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Hematite Magnetite
Pyrrhotite Molybdenite Sphalerite Galena
COMMENTS: Minor sphalerite and galena.
ALTERATION: Biotite Chlorite Sericite Epidote Albite
Magnetite Hematite
ALTERATION TYPE: Potassic Albitic Propylitic Sericitic Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Upper Cretaceous			

LITHOLOGY: Hornfels
Porphyry Dike
Tuff
Andesitic Tuff
Sandstone
Siltstone
Intrusive Breccia
Granodiorite Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: OX LAKE REPORT ON: Y
CATEGORY: Inferred YEAR: 1985
QUANTITY: 17234900 Tonnes
COMMODITY GRADE
Copper 0.3300 Per cent
Molybdenum 0.0350 Per cent
COMMENTS: Geological reserves with minor gold-silver values.
REFERENCE: VSE Offering of Rights Jul.17/85-Consolidated Silver Standard Min.Ltd.

CAPSULE GEOLOGY

The Ox Lake porphyry copper-molybdenum deposit occurs in an area underlain by felsic tuff, andesitic tuff, sandstone and siltstone of the Lower-Middle Jurassic Hazelton Group. Intruding the sequence is a 400 by 600 metre granodiorite porphyry plug of Upper Cretaceous age. Volcanic tuffs marginal to the porphyry plug are hornfelsed and pyritized in a halo up to about 300 metres wide. Intrusive breccias occur along the southwestern side of the plug.
Copper and molybdenum mineralization occur in a peripheral zone around the plug and is concentrated in hornfels immediately west of the plug. The highest grades occur at the porphyry-hornfels contact and gradually decline in the hornfels away from the contact. On the porphyry side of the contact the grade of mineralization falls sharply.

CAPSULE GEOLOGY

The main host to mineralization is an intense stockwork of veins and fractures in the hornfels zone. In general, copper mineralization is most prominent in the hornfels while molybdenum is concentrated in porphyry dikes with small amounts in the hornfels. Nine vein types are developed in four stages that form part of the stockwork. The most common metallic minerals are pyrite, chalcopyrite, bornite, hematite, magnetite, pyrrhotite and molybdenite. Very minor late veins contain some sphalerite and galena.

Potassic, albitic, propylitic, sericitic and argillic alteration are evident at the deposit and are defined by biotite, chlorite, sericite, epidote, albite, magnetite and hematite alteration mineralogy.

Geological reserves are 17,234,900 tonnes grading 0.33 per cent copper and 0.035 per cent molybdenum (VSE Offering of Rights July 17, 1985 - Consolidated Silver Standard Mining Ltd.).

BIBLIOGRAPHY

CIM Special Volume *15, pp. 289-298 (Richards, G. 1976)
EMPR BULL *64, pp. 121-123; *75, pp. 52,63,64
EMPR AR 1968-141
EMPR GEM *1969-93-97
EMPR MAP 65 (1989)
EMPR OF 1987-4; 1992-1; 1994-14
EMPR EXPL 1977-E183
EMPR ASS RPT *6505, *9536, *14482, 19085
EMR MP CORPFILE (Silver Standard Mines Limited)
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR FIELDWORK 1986, pp. 171-179
GCNL #14(Jan.20), 1989
EMR MIN BULL MR 223 B.C. 216
Placer Dome File
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/01

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 005**

NATIONAL MINERAL INVENTORY: 093E11 Cu5

NAME(S): **TROITSA (MAIN), MK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 31 25 N
LONGITUDE: 127 21 03 W
ELEVATION: 1310 Metres

NORTHING: 5931786
EASTING: 609328

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Sericite Quartz Chlorite K-Feldspar Biotite
Epidote
ALTERATION TYPE: Sericitic Potassic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au
COMMENTS: Dike strikes at 130 degrees and dips steeply to west.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Cretaceous			Troitsa Stock

ISOTOPIC AGE: 75.7 +/- 2.3 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Granodiorite
Quartz Monzonite
Feldspar Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Taitsa Range

CAPSULE GEOLOGY

The Main showing is located within a 12 metre by 2100 metre northwest trending feldspar porphyry dike that cuts granodiorite to quartz-monzonite of the Upper Cretaceous Troitsa Stock. Biotite from the Troitsa Stock yielded a potassium-argon date of 75.7 plus or minus 2.3 million years. Alteration of the dike shows a north to south zonation progressing from propylitic, with epidote and chlorite present, to sericitic, with sericite, pyrite, and quartz present, to potassic defined by k-feldspar and biotite. Chalcopyrite, bornite, molybdenite, and pyrite occur both disseminated and in veinlets associated with potassic alteration. Mineralization is restricted to the dike and does not penetrate the Troitsa Stock.

BIBLIOGRAPHY

EMPR PF (*Cawthorn, N. (1971): Final Report 1971 Program, Troitsa Lake Property)
EMPR ASS RPT 1091, *2026, *3253, *12278
EMPR EXPL 1983-412
EMPR GEM 1969-98; 1971-146
EMPR AR 1966-112; 1967-113; 1968-141
EMR MP CORPFILE (Silver Standard Mines Limited)
EMPR BULL *75, pp. 53,67,68
EMPR OF 1994-14
GSC MEM 299
GSC MAP 1064A
GSC OF 708
Cawthorn, N.G., (1973): Geology and Petrology of the Troitsa Lake Property, Whitesail Lake Map Area, B.C., M.Sc. Thesis, U.B.C.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 439
REPORT: RGEN0100

BIBLIOGRAPHY

Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/12

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 440
REPORT: RGEN0100

MINFILE NUMBER: **093E 006**

NATIONAL MINERAL INVENTORY: 093E12 Cu3

NAME(S): **GG**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E12E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 34 29 N
LONGITUDE: 127 39 02 W
ELEVATION: Metres

NORTHING: 5937053
EASTING: 589352

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claim block.

COMMODITIES: Copper Tungsten Bismuth

MINERALS

SIGNIFICANT: Chalcopyrite Scheelite
COMMENTS: The tungsten and bismuth mineral are not identified in available references.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Discordant Disseminated
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn K05 W skarn

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Tahtsa Complex

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

A skarn deposit containing chalcopyrite and other minerals.

BIBLIOGRAPHY

EMPR GEM 1969-76
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1991-17; 1994-14
EMPR BULL 42

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/25

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **TAHTSA RANGE** GLORY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 45 58 N
LONGITUDE: 127 25 34 W
ELEVATION: Metres

NORTHING: 5958649
EASTING: 603741

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of Glory claim block.

COMMODITIES: Silver Lead Copper Gold

MINERALS

SIGNIFICANT: Galena Chalcopyrite Pyrite
ASSOCIATED: Quartz Tourmaline
ALTERATION: Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Attitude of quartz stringers and fractures.

STRIKE/DIP: 040/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Quartz Diorite
Volcanic
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Narrow quartz stringers and fractures in quartz diorite and adjacent Jurassic Hazelton Group rocks contain pyrite, chalcopyrite, silver-bearing galena, hematite and some gold. The stringers are 5 centimetres to 7.6 centimetres wide and are discontinuous. Tourmaline occurs as a minor constituent of the quartz veins.

BIBLIOGRAPHY

GSC MEM 299, p. 88
EMPR GEM 1969-93
GSC MAP 367A; 1064A
EMPR BULL *75, pp. 53,70
EMPR ASS RPT *13703
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1989-1; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/25

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 008**

NATIONAL MINERAL INVENTORY: 093E14 Cu2

NAME(S): **LEAD EMPIRE**, SET, LOST,
ICE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 48 40 N
LONGITUDE: 127 25 18 W
ELEVATION: 2057 Metres

NORTHING: 5963661
EASTING: 603923

LOCATION ACCURACY: Within 500M
COMMENTS: Lead-zinc showing on Fig. 3, Bulletin 66.

COMMODITIES: Silver Lead Zinc Copper Molybdenum

MINERALS

SIGNIFICANT: Galena Sphalerite Covellite Chalcocopyrite Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal
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>
Middle Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Diorite
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Mineralization occurs in a diorite stock and in altered Jurassic Hazelton Group rocks adjacent to the intrusion. Galena, sphalerite, pyrite, and molybdenite occur in a quartz-vein stockwork, while covellite, chalcocopyrite and pyrite occur as disseminations.

BIBLIOGRAPHY

EMPR AR 1951-118; 1952-97
EMPR GEM 1969-92; 1970-108; 1971-157
GSC MEM 299, p. 87
W MINER *1949 v. 22, no. 2, p. 39
GCNL #116, 1971
EMPR BULL 66, p. 89; *75, pp. 53,69
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1989-1; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/25

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 009**

NATIONAL MINERAL INVENTORY: 093E11 Cu5

NAME(S): **TROITSA (CIRQUE), MK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 30 46 N
LONGITUDE: 127 20 29 W
ELEVATION: 1585 Metres

NORTHING: 5930595
EASTING: 609982

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry
TYPE: E04 Sediment-hosted Cu
COMMENTS: Dike strikes at 144 degrees and dips steeply to southwest.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Middle Jurassic
Upper Cretaceous

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Troitsa Stock

ISOTOPIC AGE: 77.0 Ma

DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Granodiorite
Quartz Monzonite
Feldspar Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Taitsa Range

CAPSULE GEOLOGY

The area of interest is underlain mainly by volcanics of the Jurassic Hazelton Group which have been intruded by the Upper Cretaceous granodiorite-quartz monzonite Troitsa stock.

The Cirque showing is associated with a 12 metre wide feldspar porphyry dike within quartz monzonite of the Troitsa stock. Finely disseminated chalcopyrite and pyrite occur in the propylitically altered dike. Fracturing in the surrounding quartz monzonite hosts quartz, pyrite, chalcopyrite and molybdenite.

BIBLIOGRAPHY

EMPR PF (*Cawthorn, N. (1971): Final Report 1971 Program, Troitsa Lake Property)
EMPR ASS RPT 1091, *2026, *3253, *12278
EMPR EXPL 1983-412
EMPR GEM 1969-98; 1971-146
EMPR AR 1966-112; 1967-113; 1968-141
EMR MP CORPFILE (Silver Standard Mines Limited)
EMPR BULL *75, pp. 53,67,68
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/12

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 010**

NATIONAL MINERAL INVENTORY: 093E3 Cu1

NAME(S): **KIM**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 08 29 N
LONGITUDE: 127 21 00 W
ELEVATION: 610 Metres

NORTHING: 5889271
EASTING: 610366

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Quartz Monzonite
Granodiorite
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The property is located on the northwest side of the Kimsquit River, three kilometres from Kimsquit Lake, about 185 kilometres south of Smithers.

The Kim 1-4 claims were held by Kerr Addison Mines Limited in 1970. Work during the year included geological mapping, and 57 metres of diamond drilling in one hole.

Chalcopyrite and molybdenite occur in quartz veins and fractures in Coast Plutonic Complex quartz monzonite. The quartz monzonite intrudes both granodiorite and metavolcanics.

BIBLIOGRAPHY

EMPR GEM 1970-102
EMPR OF 1994-14
GSC MAP 1064A
GSC MEM 299
GSC OF 708

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/24

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **NEW MOON**, JOW, PC,
BAY, LUNAR, MISTY,
DAY, TWILIGHT, SCREE,
PHOBOS, COPPER CLIFF, COMPUTER,
LANDSAT, RHYOLITE FLATS, BOULDER,
SHADOW

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093E13W 093E13E
BC MAP:
LATITUDE: 53 56 38 N
LONGITUDE: 127 46 15 W
ELEVATION: 2103 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Main/Splay zone, 6 kilometres west of Morice Lake, approximately 100 kilometres south-southwest of Smithers (Assessment Report 20542).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5977978
EASTING: 580678

COMMODITIES: Zinc Lead Copper Silver Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Electrum
ASSOCIATED: Quartz Carbonate Calcite
ALTERATION: Silica Sericite Chlorite Hematite Limonite
Malachite Azurite
COMMENTS: Also manganese staining.
ALTERATION TYPE: Silicific'n Sericitic Chloritic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Stockwork Disseminated
CLASSIFICATION: Epithermal
TYPE: H05 Epithermal Au-Ag: low sulphidation G06
I05 Polymetallic veins Ag-Pb-Zn±Au K01 Noranda/Kuroko massive sulphide Cu-Pb-Zn
Cu skarn
SHAPE: Bladed
MODIFIER: Fractured Faulted
DIMENSION: 250 x 220 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Main zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Telkwa
Triassic-Jurassic Topley Intrusions

LITHOLOGY: Rhyolite Tuff
Rhyolite Flow
Andesite Flow
Andesite Tuff
Cherty Tuff
Dacite Tuff
Granite
Quartz Monzonite
Granodiorite
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Zeolite

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Combined YEAR: 1987
QUANTITY: 688712 Tonnes
COMMODITY GRADE
Silver 58.6000 Grams per tonne
Gold 0.9900 Grams per tonne
Lead 1.8200 Per cent
Zinc 5.5100 Per cent

COMMENTS: Preliminary indicated and inferred geological reserve for the Main, Misty, Day and Twilight zones in the 'Plateau' area.
REFERENCE: Assessment Report 21602, page 1.

CAPSULE GEOLOGY

The New Moon property lies at the western limits of the Lower-Middle Jurassic Hazelton Group close to the contact with the Tertiary-Jurassic Coast Plutonic Complex. The Hazelton Group has been subdivided locally into the Telkwa and Nilkitkwa formations. The Telkwa Formation underlies most of the property and consists of a thick suite of calc-alkaline volcanic rocks. The formation is intruded by Late Triassic-Early Jurassic Topley Intrusions and is overlain conformably by the Nilkitkwa Formation.

The New Moon occurrence area is underlain by intermediate to felsic volcanics and volcanoclastics of the Telkwa Formation which have been cut by various dikes and intrusive bodies of the Topley Intrusions. The volcanic rocks consist of andesitic tuffs, hornfels, dacite porphyry flows, dacitic tuffs and agglomerates, rhyolitic flows and tuffs, cherty tuffs, maroon tuffs, felsic crystal tuffs, andesite flows and andesite sills/flows. The Topley Intrusions include granite, quartz monzonite and granodiorite. Dikes are mainly aplite.

The tuffs and flows on the property are generally flat to moderately dipping. Structurally, faulting has had the most significant effect on the volcanic stratigraphy and is the prime localizing factor in the development of mineralized zones. Predominant faults occur along either a northwest or northeast trend with steep to moderate dips. Displacement for the most part is generally minor (less than 5 metres).

The property is host to several styles of alteration. The Telkwa rocks are regionally metamorphosed to zeolite facies which is best exemplified in andesitic rocks. Epidote, prehnite and calcite occur as veins (1-30 centimetres wide), amygdules and as a matrix component in pyroclastics and flows. Silicification is evident along shear and fault zones, feldspars have been moderately altered to clay, mafic constituents in some volcanic rocks have been chloritized, and minor potassium feldspar rims quartz veins.

The New Moon property is host to precious metal-bearing, polymetallic vein showings. A total of 24 mineralized zones have been discovered to date in an 89 square kilometre area and are named the Main/Splay, Misty Day, Twilight, North, Northeast, Scree, CR, BR, D, Rhyolite Flats, PB, Copper Cliff, Camp, Computer, Landsat, Boulder, Shadow, Lunar 4, North Extension, Phobos, Spires, Gossan Creek, Diakow and Radio. These zones appear to be controlled by regional north-northwest trending structures, several of which transect the property. Mineralization also appears to be lithologically controlled. Shallow dipping rhyolites, near the top of the stratigraphic succession exposed on the property, are the primary host rocks. Mineralized veins have also been noted in the andesites and tuffs, but in general they are less extensively developed and have lower concentrations of sulphides and precious metal values. Exceptions occur marginal to the rhyolites.

Zones of economic significance include the Main, Scree, North, Northeast and Phobos zones. These host several vein systems that are of significant strike length (North zone up to 780 metres and the Main zone to 250 metres), are open along strike and at depth and lie along structures that could host additional mineralized zones. Diamond drilling of the Main zone in 1990 has tested the structure to 220 metres downdip where a 4.2-metre wide section assayed 0.23 per cent copper, 3.6 per cent lead, 12.24 per cent zinc, 21.2 grams per tonne silver and 1.4 grams per tonne gold (Assessment Report 20542).

Two types of mineralization have been observed on the property and include epithermal base and precious metal-bearing veins and magnetite skarns. The bulk of the mineralized zones fit into the epithermal vein category. Vein gangue is predominantly quartz with lesser amounts of carbonate, although carbonate-rich veins have been observed. Calcite predominates with local concentrations of orange-brown iron/magnesium carbonates. In general, the vein showings occupy varying levels within an epithermal system. Textures which support this include brecciation and rebrecciation, colloform and banded quartz, open spaces filled with crystalline quartz +/- carbonate, and several stages of local chalcedonic veinlets. The vein systems range from 1-25 metres in width with the individual veins themselves ranging from 0.2 to 7.6 metres in width. The zones pinch and swell along strike and dip (Assessment Report 20542).

Mineralization consists primarily of sphalerite and galena with minor amounts of chalcopyrite, pyrite, malachite and azurite. Gold and silver values occur generally in association with the sulphides. Polished section studies show electrum is associated with pyrite. The sulphides occur both as distinct semimassive to massive bands up to 10 centimetres wide and as disseminations. At surface the mineralized zones are characterized by manganese, limonite and hematite staining. Gossan has formed in areas of heavy sulphide. In drill core, oxidation has been noted at depths of up to 200 metres

CAPSULE GEOLOGY

(Assessment Report 16870).

In general, the wallrock adjacent to the vein systems are highly silicified, weakly to moderately sericitized and chloritized. In drill core, the alteration extends up to 50 metres from the mineralized zone in both the footwall and hanging wall.

North-northwest trending faults are the dominant control on the mineralizing system, with northeasterly trending dilatant zones being developed locally within these broader structures. These dilatant zones extend up to 780 metres in length (North zone). Easterly trending faults may locally offset the northerly trending structures, but more importantly they may have acted as a barrier to mineralized fluids (Assessment Report 20542).

Preliminary indicated and inferred geological reserves for the Main, Misty, Day and Twilight zones in the "Plateau" area are 688,712 tonnes grading 1.82 per cent lead, 5.51 per cent zinc, 58.6 grams per tonne silver and 0.99 gram per tonne gold (Assessment Report 21602, page 1). Maple Resource Corporation drilled (7 holes, 728 metres) on the property in 1991.

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EMPR EXPL 1976-E139; 1978-E197; 1982-284; 1983-413
EMPR FIELDWORK 1978, pp. 99,100; *1989, pp. 83-99
EMPR GEM 1971-146; 1973-323; 1974-244
EMPR OF 1990-15; 1992-1; 1999-2; 1994-14
EMPR PF (Burns, D.W. (1972): Report on the Diamond Drilling Program, Morice Lake Property; Garratt, G.L. and Bojczyszyn T.B. (1978): New Moon Option, 1978 Year End Report; Kowall, C.F. (1979): The New Moon Prospect; *Statement of Material Facts, Aug.8, 1990 - Delane, G.D. (1990): Geological Evaluation of the New Moon Property)
GSC MAP 367A; 1064A
GSC MEM 299
GSC OF 351; 708
GSC P 72-1A; 79-1A
GCNL #164, 1982; #87(May 4), #128, 1990
Chevron File
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1992/01/02

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 012**

NATIONAL MINERAL INVENTORY: 093E6 Mo3

NAME(S): **ICE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 11 N
LONGITUDE: 127 29 11 W
ELEVATION: Metres

NORTHING: 5921884
EASTING: 600548

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of ICE 1-8 claims.

COMMODITIES: Copper Molybdenum Zinc Lead

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Bornite Sphalerite Galena

Pyrrhotite Pyrite

ASSOCIATED: Quartz Sericite Garnet Magnetite

ALTERATION TYPE: Silicific'n Sericitic Skarn Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Epigenetic Hydrothermal Skarn

CLASSIFICATION: Replacement Ag-Pb-Zn±Au K01 Cu skarn

TYPE: I05 Polymetallic veins
L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown			Unnamed/Unknown Informal
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Andesite
Tuff
Hornblende Granite
Andesite Flow
Andesite Tuff
Argillite
Limestone
Quartzite
Argillaceous Skarn

HOSTROCK COMMENTS: Intruded by hornblende granite of Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain by a flat-lying sequence of intensely metamorphosed and silicified andesite flows, tuffs, agglomerates, argillites, limestone and quartzites. This sequence has been intruded by sill-like body of hornblende granite of the Coast Plutonic Complex. A number of different types of mineralization have been reported. The most common type is pyrite, pyrrhotite and small amounts of chalcopyrite, molybdenite and sphalerite in argillaceous skarns. Galena, sphalerite, chalcopyrite and occasional molybdenite are contained in quartz veins averaging about 0.6 metres wide in fractures in limy sediments. Fine-grained, disseminated pyrite, chalcopyrite and bornite are associated with shear zones in volcanics. Lenses of massive magnetite in volcanics contain chalcopyrite and bornite. Molybdenite, pyrite and chalcopyrite occur in shear zones in sericitized granite. Closely spaced jointing in the hornblende granite contains sericite, quartz, molybdenite and pyrite.

BIBLIOGRAPHY

EMPR ASS RPT *732
EMPR AR 1966-54,249
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 012**

MINFILE NUMBER: **093E 013**

NATIONAL MINERAL INVENTORY: 093E12 Cu1

NAME(S): **PINTLEDANNE, JOE, MO**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E12W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 33 41 N
LONGITUDE: 127 53 24 W
ELEVATION: 610 Metres

NORTHING: 5935296
EASTING: 573521

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description in Minister of Mines Annual Report.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite Bornite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Quartz Diorite
Granodiorite
Alaskite Dike
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The area is underlain by coarse-grained quartz diorite and granodiorite of the Coast Plutonic Complex. Mineralization consists of chalcopyrite, chalcocite, malachite, azurite, bornite, molybdenite, and pyrite. Mineralization occurs in quartz veins and as pods in a fine-grained intrusive dike resembling alaskite. Recent reports indicate the quartz veins vary from stringers up to about 2.5 metres in width, however, a 1906 report makes reference to a 30 metre wide quartz vein.

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EMPR ASS RPT *3974
EMPR AR *1906-H68; 1968-69
EMPR GEM 1972-342
GSC MEM 299, p. 98
GSC MAP 1064A
GSC OF 708
EMPR BULL 42
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/01

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 014**

NATIONAL MINERAL INVENTORY: 093E5 Au1

NAME(S): **SMITH-NASH**, SMITH, NASH,
BEAVER, KEMANO

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093E05E 093E12E
BC MAP:

MINING DIVISION: Skeena

LATITUDE: 53 29 29 N
LONGITUDE: 127 44 35 W
ELEVATION: 1450 Metres

UTM ZONE: 09 (NAD 83)

NORTHING: 5927671
EASTING: 583391

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the steep south slope of Sandifer Peak, 14 kilometres southeast of Kemano.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Mesothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION:
COMMENTS: The Smith-Nash vein is up to 0.40 metres wide. STRIKE/DIP: 320/70W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Mesozoic	Hazelton	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Greenstone
Sericite Schist
Hornfels
Meta Volcanic
Meta Sediment/Sedimentary
Tuff
Diorite
Diorite Sill

HOSTROCK COMMENTS: Hazelton Group rocks include Triassic and older rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Regional Contact
PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP: Plutonic Rocks
GRADE: Hornfels

INVENTORY

ORE ZONE: SMITH-NASH VEIN REPORT ON: Y
CATEGORY: Inferred YEAR: 1988
QUANTITY: 20128 Tonnes
COMMODITY: Gold GRADE: 10.3000 Grams per tonne
COMMENTS: Geological reserves.
REFERENCE: Consolidated Silver Standard Mines Ltd. Annual Report 1988.

CAPSULE GEOLOGY

The claim area is underlain by the Hazelton Group rocks of either Triassic or part of or wholly belonging to the Paleozoic Era. The rocks consist of greenstone, metasediments, amphibolites, gneiss, and marble. Diorites and granites are exposed along the eastern margin of the Coast Range batholith and are part of the Mesozoic Coast Plutonic Complex.

The Smith-Nash vein is hosted by a sequence of greenstone, tuff, diorite sills, and/or intrusives, and metasediments, which are described as roof pendants. The metasediments include shallowly dipping, thinly bedded cherty sediments, hornfels, and quartzites

CAPSULE GEOLOGY

which are capped by a metavolcanic sequence marked by sills and pegmatite lenses. The vein is contained within a fault zone that strikes 320 degrees and dips between 60 to 80 degrees west. The vein structure is enclosed in sericite schist and consists of lenses of quartz with blebs and disseminated pyrite, minor chalcocopyrite, and malachite staining. Gold is intimately associated with the pyrite. In 1980, chip samples from the Smith-Nash vein, around elevation 1450 metres, assayed 0.14 to 19.89 grams per tonne gold, and 0.68 to 10.29 grams per tonne silver (Assessment Report 10747). Geological reserves of the Smith-Nash vein are 20,128 tonnes grading 10.3 grams per tonne gold (Consolidated Silver Standard Mines Ltd. Annual Report 1988).

Two other gold bearing quartz veins, the Copper or Barker Zone and the Lower Zone were discovered in 1986, below the main vein at elevation 1300 metres. In 1986, a 38 centimetre channel sample from the Copper Zone which hosts blebs and patches of pyrite, chalcocopyrite, and malachite in a quartz vein, diorite host, assayed 8.09 grams per tonne gold, and 1.01 per cent copper. A grab sample hosting pyrite and minor chalcocopyrite disseminated in quartz from the Lower Zone assayed 129.53 grams per tonne gold (Assessment Report 15677).

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EMPR EXPL 1981-326; 1986-C324-325
EMPR OF 1994-14
EMR MIN BULL MR 223 B.C. 209
EMR MP FILE 503831
GSC MAP 1064A
GSC MEM 299
GSC OF 708
GCNL #163, #180 1988
N MINER July 13, 1972
WWW <http://www.infomine.com/>
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1988/09/16

CODED BY: GSB
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 452
REPORT: RGEN0100

MINFILE NUMBER: **093E 015**

NATIONAL MINERAL INVENTORY: 093E3 Au1

NAME(S): **EAR LAKE**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E03W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 14 24 N
LONGITUDE: 127 21 48 W
ELEVATION: Metres

NORTHING: 5900219
EASTING: 609223

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Middle Jurassic
GROUP: Hazelton
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Metasedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Kitimat Ranges

RELATIONSHIP: Pre-mineralization GRADE:

CAPSULE GEOLOGY

On the west side of Ear Lake, narrow quartz veins mineralized with gold, silver and copper occur in Jurassic Hazelton Group metasediments.

A sample of mineralized vein quartz assayed: 64.46 grams per tonne gold, 51.1 grams per tonne silver, and 3.68 per cent copper. The property was held in 1980 as the Ear 1-7 claims by Pryme Energy Resources Ltd.

BIBLIOGRAPHY

EMPR ASS RPT *8784
EMPR EXPL *1980-314
EMPF OF 1994-14
GSC MAP 1064A
GSC MEM 299, p. 98
GSC OF 708
GSC P 72-1A; 79-1A

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/23

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 015**

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 453
REPORT: RGEN0100

MINFILE NUMBER: **093E 016**

NATIONAL MINERAL INVENTORY: 093E5 Mo1

NAME(S): **JUMBO**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E05E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 20 37 N
LONGITUDE: 127 33 16 W
ELEVATION: Metres

NORTHING: 5911470
EASTING: 596237

LOCATION ACCURACY: Within 500M

COMMENTS:

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>
Mesozoic			Coast Plutonic Complex

LITHOLOGY: Granite
Aplite
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The occurrence is located in an area where Coast Plutonic Complex granite is in contact with metavolcanics. An aplitic phase of the granite contains minor molybdenite mineralization.

BIBLIOGRAPHY

EMPR AR 1964-56; 1965-87
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/28

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 016**

MINFILE NUMBER: **093E 017**

NATIONAL MINERAL INVENTORY: 093E12 Cu2

NAME(S): **SANDIFER LAKE**, PRIMARY, GLITTERING GLORY

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 32 58 N
LONGITUDE: 127 36 16 W
ELEVATION: 1372 Metres

NORTHING: 5934300
EASTING: 592460

LOCATION ACCURACY: Within 500M

COMMENTS: Skarn zone from Assessment Report 10653.

COMMODITIES: Copper Molybdenum Tungsten Lead

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Molybdenite Scheelite Galena

ASSOCIATED: Magnetite Garnet Epidote Calcite Chlorite Quartz

ALTERATION: Malachite Azurite Garnet Hematite Epidote Calcite

ALTERATION TYPE: Skarn Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Replacement Skarn

TYPE: K01 Cu skarn K05 W skarn

SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Cretaceous
Mesozoic

GROUP

Gambier

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Limestone
Limy Siltstone
Argillite
Quartz Diorite
Skarn
Hornfels Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Undivided Metamorphic Assembl.

METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Taitsa Range

RELATIONSHIP: Syn-mineralization

GRADE:

CAPSULE GEOLOGY

Sediments and volcanics of the Cretaceous Age Gambier Group have been intruded by quartz diorite of the Coast Plutonic Complex. At the showing a section of limestone, limy siltstone and argillite or hornfelsic sediments is situated within an embayment in the quartz diorite. A skarn zone that is characterized by minerals such as quartz, garnet, epidote, chlorite, specular hematite and calcite has formed along part of the contact. Also occurring in the skarn zone are minor to trace amounts of chalcopyrite, bornite, malachite, azurite, molybdenite, scheelite and galena.

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EMPR ASS RPT *10653, *11242
GSC MEM *299, p. 99
GSC MAP 1064A
EMPR BULL 42, p. 34
GSC EC GEOL #17, pp. 14-157
GSC OF 708
EMPR OF 1991-17; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/05

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 455
REPORT: RGEN0100

MINFILE NUMBER: **093E 018**

NATIONAL MINERAL INVENTORY: 093E6 Cu1

NAME(S): **SUREL PASS**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 17 18 N
LONGITUDE: 127 13 54 W
ELEVATION: Metres

NORTHING: 5905804
EASTING: 617876

LOCATION ACCURACY: Within 1 KM
COMMENTS: Plot on Geological Survey of Canada Map 1064A.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION:

105 Polymetallic veins Ag-Pb-Zn±Au
STRIKE/DIP: 100/42S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Diorite
Meta Volcanic
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Taitsa Range

CAPSULE GEOLOGY

A 30 centimetre to 60 centimetre wide quartz vein occurs in diorite of the Coast Plutonic Complex near the contact with probable Paleozoic Age metavolcanic rocks. The vein is mineralized with chalcopyrite and pyrite. It strikes at 100 degrees and has a 42 degree south dip.

BIBLIOGRAPHY

GSC MEM 299, p. 100
GSC MAP 1064A
GSC SUM RPT 1920, part A
GSC OF 708
EMPF OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/29

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 018**

MINFILE NUMBER: **093E 019**

NATIONAL MINERAL INVENTORY: 093E6 Au1

NAME(S): **LINDQUIST**, DEER HORN, DEERHORN,
HARRISON

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:
LATITUDE: 53 21 43 N
LONGITUDE: 127 17 19 W
ELEVATION: 1298 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Deer Horn adit.

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5913900
EASTING: 613884

COMMODITIES: Gold Silver Tungsten Zinc Lead
Copper

MINERALS

SIGNIFICANT: Gold Scheelite Sphalerite Galena Chalcopyrite
Hessite Altaite Tellurobismuthite Tetradymite
ASSOCIATED: Quartz Pyrite Pyrrhotite Magnetite Arsenopyrite
ALTERATION: Quartz Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: H05 Epithermal Au-Ag: low sulphidation I02 Intrusion-related Au pyrrhotite veins
I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 370 x 3 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Main vein.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cretaceous	Skeena	Undefined Formation	
Jurassic	Gamsby	Undefined Formation	
Mesozoic-Cenozoic			Coast Plutonic Complex

LITHOLOGY: Diorite
Meta Volcanic
Argillite
Siltstone
Sandstone
Granodiorite
Granodiorite Dike

HOSTROCK COMMENTS: Occurs at contact between Skeena Group and pre-Lower Jurassic Gamsby Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Unclassified YEAR: 1983
QUANTITY: 249425 Tonnes
COMMODITY GRADE
Silver 274.2000 Grams per tonne
Gold 10.7000 Grams per tonne
REFERENCE: CIM Special Volume 37, page 186.

CAPSULE GEOLOGY

The Lindquist quartz veins occur mainly within foliated diorite and associated metavolcanic rocks tentatively assigned to the pre-Lower Jurassic Gamsby Group. The foliated diorite and metavolcanics have been thrust over Lower Cretaceous Skeena Group sediments composed of black argillite, siltstone and sandstone. The thrust fault trends west and dips south. Granodiorite stocks and dikes of the Mesozoic-Cenozoic Coast Plutonic Complex cut these rocks

CAPSULE GEOLOGY

and metamorphose pelitic sediments to andalusite hornfels.

The quartz vein system consists of two types: 1) a main vein striking west and dipping north that is traceable for 370 metres and 2) a zone of quartz stringers in quartz-sericite altered diorite adjacent to the contact with sedimentary rocks.

Pyrite, pyrrhotite, sphalerite, galena, chalcopyrite, magnetite, arsenopyrite, scheelite and the telluride minerals tetradyrite, hessite, tellurobismuth and altaite, occur in a quartz vein up to 3 metres wide and traceable for 370 metres. Gold occurs in the vein as a native mineral and silver occurs in tellurides.

Underground work has defined a 330-metre section of the main vein averaging 7.7 grams per tonne gold and 216 grams per tonne silver over a vein width of 2.9 metres. A section of the Contact zone 221 metres long averaged 13.9 grams per tonne gold and 420 grams per tonne silver over 2.7 metres (Buckles, 1954).

Unclassified reserves at Lindquist are 249,425 tonnes grading 10.7 grams per tonne gold and 274.2 grams per tonne silver (CIM Special Volume 37, page 186).

The original Harrison group claims staked in 1943 followed the discovery of scheelite in talus about 1 kilometre southwest of Lindquist Peak (see Deer Horn showing 093E 020). Development work included construction of a road connecting the property with Whitesail Lake and extensive underground and surface work (Minister of Mines Annual Report 1955).

BIBLIOGRAPHY

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EMPR ASS RPT *50, *19966, 20135
EMPR FIELDWORK 1987, pp. 155-168
EMPR MAP 65 (1989)
EMPR OF 1988-2; 1992-1; 1994-14, 1999-3
EMPR PF (*Holland, S.S. (1944): Harrison Group; *Young, P.E. (1954): Report on Property of Deer Horn Mines Limited, Deer Horn Mines Limited Prospectus)
EMR MIN BULL MR 223 B.C. 210
EMR MP CORPFILE (*Pioneer Gold Mines of B.C. Limited; Premier Gold Mining Company, Limited; Deer Horn Mines Limited; Mentor Exploration and Development Co. Limited)
GSC EC GEOL 17, pp. 14-157
GSC MAP 1064A
GSC MEM *299, p. 93
GSC OF 708
GSC SUM RPT 1920 Part A; 1924 Part A; 1925 Part A, pp. 144-154
*Buckles, H.R. (1954): The Deer Horn Property - Western Miner and Oil Review, Nov. 1954 pp. 82-85
Papezik, V.S. (1957): Geology of the Deer Horn Prospect, Omineca Mining Division, B.C., M.Sc. Thesis, University of British Columbia
*Warren, H.V. (1947): A New Type of Gold Deposit in British Columbia; Transactions of the Royal Society of Canada, Third Series, Section IV, Vol.41
Placer Dome File
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/29

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093E 020**

NATIONAL MINERAL INVENTORY: 093E6 W1

NAME(S): **HARRISON SCHEELITE**, DEER HORN, HARRISON,
LINDQUIST

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 30 N
LONGITUDE: 127 17 50 W
ELEVATION: Metres

NORTHING: 5913485
EASTING: 613321

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Tungsten Copper

MINERALS

SIGNIFICANT: Scheelite Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Porphyry
TYPE: K05 W skarn L07 Porphyry W
L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u> Lower Cretaceous Mesozoic	<u>GROUP</u> Skeena	<u>FORMATION</u> Undefined Formation	<u>IGNEOUS/METAMORPHIC/OTHER</u> Coast Plutonic Complex
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LITHOLOGY: Argillite
Siltstone
Sandstone
Calc-silicate
Diorite
Quartz Diorite
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Tahtsa Range
RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: HARRISON SCHEELITE REPORT ON: Y
CATEGORY: Unclassified YEAR: 1954
QUANTITY: 21100 Tonnes
COMMODITY: Tungsten GRADE: 0.2700 Per cent
COMMENTS: Tonnage is short tons/vertical foot at 0.35% WO₃; conversion to W using the factor 1.2611. Loose material in talus slide in Prov. Park.
REFERENCE: Prospectus, Deer Horn Mining Ltd. Apr.21/54 - P.E. Young, Mar.12/54.

CAPSULE GEOLOGY

The tungsten showings occur near the contact between what is tentatively called pre-Lower Jurassic metavolcanic rocks; foliated diorite of the Gamsby Group; and argillite, siltstone and sandstone of the Lower Cretaceous Skeena Group.
The showings are found in talus slides consisting of fragments of argillite and epidote-garnet skarn. Fractures and quartz stringers in argillite commonly host the scheelite. Minor pyrite and chalcopyrite mineralization have also been reported.
Unclassified reserves are 21,100 tons per vertical foot at a stated grade of 0.35 per cent WO₃; conversion to W using the factor 1.2611. Reserves are based on loose material in a talus slide in Tweedsmuir Provincial Park (Prospectus, Deer Horn Mining Ltd. April 21, 1954 - P.E. Young, March 12, 1954).

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EMPR AR 1944-G175-G177; 1945-A71; 1946-A89; 1952-A98; 1953-A94;
1954-A95; 1955-25-27; 1958-73; 1967-114

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EMR MP CORPFILE (*Pioneer Gold Mines of B.C. Limited; Premier Gold
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tion and Development Co., Limited)
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EMPR OF 1988-2; 1991-17; 1994-14
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A, pp. 144-154
GSC EC GEOL No. 17, pp. 14-157
GSC P 78-1A, pp. 71-75
GSC OF 708
EMR MIN BULL MR 223 B.C. 211
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/29

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 460
REPORT: RGEN0100

MINFILE NUMBER: **093E 021**

NATIONAL MINERAL INVENTORY: 093E6 Ag3

NAME(S): **OLD TIMER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 22 06 N
LONGITUDE: 127 17 18 W
ELEVATION: Metres

NORTHING: 5914611
EASTING: 613886

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Pyrrhotite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Two quartz veins - one strikes 060 degrees and dips 45 degrees south, the other strikes 045 degrees and dips 55 degrees south.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cretaceous Mesozoic	Skeena	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Chlorite Schist
Slate
Tuff
Diorite
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The occurrence consists of two mineralized quartz veins in the contact area between diorite of the Coast Plutonic Complex and sheared chlorite schists, black slate and dark grey laminated tuffs of the Skeena Group. At least one of the veins occurs in schist. One vein is 15 centimetres to 76 centimetres wide while the other is 15 centimetres to 91 centimetres wide. The veins carry pyrite, galena, sphalerite and pyrrhotite mineralization with minor silver values.

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GSC MEM 299, p. 95
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GSC P 78-1A, pp. 71-75
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A, pp. 144-154
GSC OF 708
EMPR FIELDWORK 1987, pp. 155-168
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/29

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 021**

MINFILE NUMBER: **093E 022**

NATIONAL MINERAL INVENTORY: 093E6 Ag4

NAME(S): **HARLOWORTH**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 23 07 N
LONGITUDE: 127 21 18 W
ELEVATION: Metres

NORTHING: 5916392
EASTING: 609407

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Silver Zinc Lead Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: General attitude of quartz veins.

STRIKE/DIP: 028/35E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Argillite
Quartzite
Quartz Vein
Granodiorite Dike
Granitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Tahtsa Range

RELATIONSHIP: Pre-mineralization GRADE:

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY

YEAR: 1929

COMMODITY	GRADE	
Silver	150.8600	Grams per tonne
Gold	1.7100	Grams per tonne
Lead	2.0000	Per cent
Zinc	9.5000	Per cent

COMMENTS: Selected sample of vein material.
REFERENCE: Minister of Mines Annual Report 1929, page A184.

CAPSULE GEOLOGY

Several more or less parallel quartz veins occur in an area underlain mainly by argillite and quartzite which have been intruded in places by granodiorite and granitic dikes. In most places the veins appear to be conformable with bedding which has an attitude of approximately 028 degrees/ 35 degrees East. The veins host minor galena, sphalerite and pyrite mineralization with low gold and silver values. Vein widths up to about two metres reported.

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GSC MAP 1064A
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A, pp. 144-154
GSC OF 708
EMPR FIELDWORK 1987, pp. 155-168

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 462
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/30

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 023**

NATIONAL MINERAL INVENTORY: 093E6 Zn2

NAME(S): **SUREL**, MARTEN CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 17 36 N
LONGITUDE: 127 10 18 W
ELEVATION: Metres

NORTHING: 5906461
EASTING: 621861

LOCATION ACCURACY: Within 1 KM

COMMENTS: Upper part of Marten Creek (flows into Surel Lake). Possible confusion with occurrence 093E 024.

COMMODITIES: Zinc Lead Copper Molybdenum Silver
Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Molybdenite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

This occurrence is located on Marten Creek, which enters Surel Lake on the south side, about 2.5 kilometres from the outlet.

Two groups of claims were staked on the creek in 1945: the Three Bears group of 8 claims (093E 024), located on the lower part of the creek by W.H. Harrison, Jr.; the Surel group of 6 claims, located on the upper part of the creek by Fred Paulig.

Quartz veins from about 25 centimetres to 60 centimetres in width occur in sedimentary rocks and are mineralized with pyrite, galena, sphalerite and molybdenite.

A selected sample assayed 9.92 per cent zinc, 0.08 per cent copper, 21.9 grams per tonne silver and 0.68 grams per tonne gold.

BIBLIOGRAPHY

EMPR AR *1945-A72-A73; 1967-114
EMPR OF 1988-2; 1994-14
GSC MAP 1064A
GSC MEM 299, p. 93
GSC OF 708
GSC SUM RPT 1920, part A; 1925, part A, pp. 144-154

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/24

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 024**

NATIONAL MINERAL INVENTORY: 093E6 Zn2

NAME(S): **THREE BEARS**, SUREL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 18 18 N
LONGITUDE: 127 09 54 W
ELEVATION: Metres

NORTHING: 5907770
EASTING: 622272

LOCATION ACCURACY: Within 1 KM

COMMENTS: Lower part of Marten Creek (flows into Surel Lake). Possible confusion with occurrence 093E 023.

COMMODITIES: Zinc Silver Gold Copper Molybdenum
Lead

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Molybdenite Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Taitsa Range

CAPSULE GEOLOGY

The Three Bears group of 8 claims, located on the lower part of Marten Creek, were staked by W.H. Harrison in 1945. The Surel group (093E 023) is located on the upper part of the creek.

Narrow quartz veins about 7.6 centimetres in width occur in sedimentary rocks and are mineralized with pyrite, sphalerite, molybdenite, chalcopyrite and galena.

BIBLIOGRAPHY

EMPR AR *1945-A72-A73; 1967-114
EMPR MEM 299, p. 93
EMPR OF 1988-2; 1994-14
GSC MAP 1064A
GSC MEM 299, p. 93
GSC OF 708
GSC SUM RPT 1920, part A; 1925, part A, pp. 144-154

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/24

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 025**

NATIONAL MINERAL INVENTORY: 093E6 Mo2

NAME(S): **SUREL LAKE**, ED, FLY

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 18 48 N
LONGITUDE: 127 08 00 W
ELEVATION: Metres

NORTHING: 5908752
EASTING: 624358

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Lower Cretaceous
Mesozoic

GROUP

Skeena

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Diorite
Volcanic
Quartz Vein

HOSTROCK COMMENTS: Coast Plutonic Complex near contact with Lower Cretaceous Skeena Group volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

This occurrence is located on the south side of Surel Lake at its east end; the claims extend westward from the falls on Surel Creek. The Surel Lake group of eight claims was located by J.J. Hepson of Wells in 1945. The vein was examined in August 1945 by J.A. Pike of Island Mountain Mines Limited, who also located the adjoining Fly group of four claims.

The ED and Surel groups, totaling 25 claims, owned by L. Kiss, were optioned to Canex Aerial Exploration Limited. Work during 1967 included geological, geophysical and geochemical surveys and 4104 metres of diamond drilling in three holes.

A quartz vein occurs in diorite of the Coast Plutonic Complex near its eastern margin contact with the Skeena Group volcanics. The vein, which is 30 centimetres to 60 centimetres wide, is reported to carry gold values.

BIBLIOGRAPHY

EMPR AR 1945-A72; 1967-114
EMPR OF 1988-2; 1994-14
GSC MAP 1064A
GSC MEM 299, p. 95
GSC OF 708
GSC SUM RPT 1920, part A; 1925, part A, pp. 144-154

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/24

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 026**

NATIONAL MINERAL INVENTORY: 093E6 Mo1

NAME(S): **REDBIRD**, RED BIRD, CAFB,
OLD GLORY

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:
LATITUDE: 53 17 57 N
LONGITUDE: 127 00 37 W
ELEVATION: 1433 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of the mineralized quartz monzonite stock.

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5907397
EASTING: 632599

COMMODITIES: Molybdenum Copper Lead Zinc

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Galena Sphalerite
COMMENTS: Minor late-stage sphalerite, chalcopyrite and galena.
ASSOCIATED: Quartz Pyrite Fluorite Calcite
COMMENTS: Minor late-stage fluorite and calcite.
ALTERATION TYPE: Potassic Silicific'n Sericitic Argillic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	
Eocene			Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite Porphyry
Intermediate Tuff
Felsic Tuff
Pyroclastic
Biotite Hornfels
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: UNDERGROUND REPORT ON: Y
CATEGORY: Indicated YEAR: 1980
QUANTITY: 29900000 Tonnes
COMMODITY GRADE Per cent
Molybdenum 0.0950
COMMENTS: Drill indicated available by underground at a 0.10% MoS₂ (or 0.059% Mo) cutoff grade. Conversion to Mo using the factor 1.6681.
REFERENCE: Cragmont Mining Ltd. Annual Report 1980.

ORE ZONE: OPEN PIT REPORT ON: Y
CATEGORY: Indicated YEAR: 1980
QUANTITY: 33600000 Tonnes
COMMODITY GRADE Per cent
Molybdenum 0.1070
COMMENTS: Drill indicated available by open pit at a 0.10% MoS₂ (or 0.059% Mo) cutoff grade. Conversion to Mo using the factor 1.6681.
REFERENCE: Cragmont Mining Ltd. Annual Report 1980.

CAPSULE GEOLOGY

The mineralized stock is located at approximately 1150 to 1800 metres elevation on the north side of Haven (Bone) Lake, between Haven and Eutsuk Lakes. The Redbird prospect is on the south slope of a partly separated minor peak southwest of the summit of Red Bird Mountain. The deposit lies just outside the southern boundary of Tweedsmuir Provincial Park.

CAPSULE GEOLOGY

The Redbird porphyry molybdenum deposit is associated with an Eocene stock of quartz monzonite porphyry which has intruded maroon volcanic rocks comprising intermediate to felsic tuffs of the Lower Jurassic Telkwa Formation, Hazelton Group (Personal Communication, Larry Diakow, 1998). The stock is an irregular, elliptical cylinder with a semicircular concentric ring-dike around the northern circumference. In plan, the main mass is 760 by 1070 metres in major and minor axes. At depth the pluton rakes 75 degrees southward.

Alteration and mineralization occurs in a concentric manner within and about the pluton. Pyroclastic rocks surrounding the pluton are pyritized and weathered in prominent annular gossan about 3 kilometres in maximum diameter. Fine-grained volcanic rocks adjacent to the stock have been converted to biotite hornfels. A stockwork of quartz veinlets occurs in the pluton and surrounding country rocks. Veining and alteration are the most intense in an annulus that overlaps the contact but is principally within the pluton. Potassic alteration is evident in some of the hornfelsed rocks and in the core of the stock. Moderately intense, pervasive silicification occurs in a concentric peripheral zone of the porphyry. Sericitic and argillic alteration is also common.

Molybdenum mineralization is primarily associated with banded and drusy quartz-molybdenite-pyrite veins. Molybdenite occurs in trace amounts throughout the stock but only approaches ore-grade in the outer concentric zone. The maximum grade occurs about 20 metres within the pluton. Beyond the stock, molybdenum mineralization decreases sharply but pyrite with minor chalcopyrite continues in the quartz stockwork. Beyond the ore zone a few late-stage veins contain galena, sphalerite and pyrite or, fluorite and calcite. Oxidation is deep and on the surface the veins look barren of molybdenum.

The reader is referred to the Minister of Mines Annual Reports for 1964 and 1966 for a more complete description.

Drill indicated reserves available by open pit are 33.6 million tonnes grading 0.107 per cent molybdenum (or 0.18 per cent MoS₂) at a 0.059 per cent molybdenum (or 0.10 per cent MoS₂) cutoff grade. Drill indicated reserves available by underground are 29.9 million tonnes grading 0.095 per cent molybdenum (or 0.16 per cent MoS₂) at a Conversion to molybdenum uses the factor 1.6681 (Craigmont Mining Ltd. Annual Report 1980).

The original staking was done on minor copper showings on the northeast side of the mountain. Copper mineralization was discovered on the mountain in 1929 by a Mister Harrison and a Mister Worth who staked the Red Bird group of claims on the showings. These claims subsequently lapsed and the showings were restaked in 1944 by Molly Nutter as the Old Glory group. The claims subsequently lapsed. No worthwhile work was done on the showings by either of the previous owners. Phelps Dodge Corporation of Canada Limited prospected the mountain in 1958 and located the CAFB group in 1959. Additional staking was done up until 1966, by which time the CAFB group consisted of 239 claims, centered on the molybdenum deposit. Exploration work on the property began in 1960 with a program of trenching and ground sluicing. No further work was done until 1962 when trenching was resumed and magnetic and induced potential surveys were carried out. A diamond-drill program was begun in 1963 and to the end of 1966 totalled 13,800 metres in 58 holes. In 1966, a 762 metre airstrip was built near the outlet of Bone Creek at Eutsuk Lake. The property was transferred to Ashfork Mines Limited, another wholly owned Canadian subsidiary of Phelps Dodge Corporation of New York. Diamond-drilling in 1967/1968 totalled 3,830 metres in 17 holes. This work indicated some 18.1 million tonnes containing approximately 0.24 per cent molybdenite (Northern Miner, February 19, 1970). Craigmont Mines Limited optioned the property in 1979 and in 1980 completed a diamond-drill program totalling 13,990 metres. This work outlined three possible open pit zones with preliminary estimates indicating about 33.6 million tonnes at 0.18 per cent molybdenite, at a cutoff grade of 0.10 per cent (Craigmont Mines, 1980 Annual Report). An additional indicated 29.9 million tonnes at 0.16 per cent molybdenite, and a similar cutoff grade, would require underground mining. Feasibility studies carried out in 1981 indicated the deposit is sub-economic in the near term. Craigmont dropped the option in 1982.

BIBLIOGRAPHY

- EMPR AR 1929-C185; 1945-A73; 1960-14; 1962-17; 1963-29; *1964-57; 1965-88; *1966-112-116; 1967-114; 1968-142
- EMPR ASS RPT 8349
- EMPR BULL *64, pp. 132-133
- EMPR EXPL 1979-212; 1980-315
- EMPR FIELDWORK 1987, pp. 155-168
- EMPR GEM 1970-102

BIBLIOGRAPHY

EMPR MAP 65 (1989)
EMPR OF 1988-2; 1992-1; 1994-14
EMR MIN BULL MR 223 B.C. 212
EMPR PF (Radiating Section maps (21), Scale 1 inch = 200 feet, Phelps Dodge Corporation, Nov., 1965; Handwritten drill logs, 1966 by A. Sutherland Brown, Cross-section and plan diagrams, @1966 by A. Sutherland Brown; Revised 1966 Diamond-Drill Hole map, Phelps Dodge Corporation Of Canada, Limited, April, 1966; Letter from Nels Vollo, Exploration Manager, Craigmont Mines, March 17, 1980; Level Plans (45) 1"=100'; Geological Cross Sections (10) 1 inch = 100 feet; DDH Sections with assays (13) 1 inch = 50 feet; Various Development Plan maps and Geology))
EMR MP CORPFILE (*Phelps Dodge Corporation of Canada, Limited; Craigmont Mines Limited)
GSC MAP 1064A
GSC MEM 299, p. 100
GSC OF 708
GSC P 72-1A; 79-1A
CIM Special Volume 15, p. 425
N MINER Feb.19, 1970
*Sutherland Brown, A. (1972): Red Bird Prospect; IGC Canada, Guidebook, Field Excursion A09-C09, pp. 24-26
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1998/12/04

CODED BY: GSB
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 027**

NATIONAL MINERAL INVENTORY: 093E6 Ag1

NAME(S): **RAINY**, GOLD COIN, GRIZZLY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 23 30 N
LONGITUDE: 127 04 24 W
ELEVATION: Metres

NORTHING: 5917571
EASTING: 628119

LOCATION ACCURACY: Within 1 KM

COMMENTS: South slope of Chikamin Mountain.

COMMODITIES: Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Arsenopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:
COMMENTS: One of two shear zones.

STRIKE/DIP: 160/70S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE Middle Jurassic GROUP Hazelton FORMATION Undefined Formation IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff

HOSTROCK COMMENTS: Host rock type not specified in reports.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1959
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	4082.0600 Grams per tonne
Gold	0.3400 Grams per tonne
Lead	12.0000 Per cent
Zinc	3.0000 Per cent

COMMENTS: Selected sample of sorted vein material. Copper value is 0.5 per cent.

REFERENCE: Geological Survey of Canada Memoir 299, page 92.

CAPSULE GEOLOGY

The host rock for the occurrence is fine and coarse tuff which, based on Geological Survey of Canada geology maps, probably belongs to the Hazelton Group. Mineralization is associated with two shear zones. An 8.0 metre long adit known as the California adit, along with several open-cuts, expose the main zone for a strike length of 15.0 metres. This main zone has an attitude of 160/70 degrees south-west and carries two quartz stringers with widths of 2.5 centimetres and 15 centimetres. Mineralization consists of pyrite, galena, sphalerite and arsenopyrite. Another shear zone at 040 degrees/ 90 degrees contains galena and arsenopyrite mineralization.

BIBLIOGRAPHY

EMPR AR 1926-A147; *1945-A69
GSC MEM *299, p. 92
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A, pp. 144-154
GSC EC GEOL #4
GSC P 72-1A; 79-1A
EMPR FIELDWORK 1987, pp. 155-168
EMPR OF 1988-2; 1994-14

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 470
REPORT: RGEN0100

BIBLIOGRAPHY

Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/01

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 028**

NATIONAL MINERAL INVENTORY: 093E6 Ag2

NAME(S): **NICKEL PLATE** SHAMROCK, GARNER 1,
MARIE, RUBY ADIT

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:
LATITUDE: 53 24 18 N
LONGITUDE: 127 04 55 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS: At approximately 1625 metres on Chikamin Mountain.

Underground
MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5919039
EASTING: 627507

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite
COMMENTS: Possibly tetrahedrite as well.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
DIMENSION:
COMMENTS: Attitude of quartz vein.
STRIKE/DIP: 135/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Smithers

LITHOLOGY: Tuff
Sandstone
Reworked Volcanic
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1959
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 493.0300 Grams per tonne
Gold 1.3700 Grams per tonne
Lead 18.4000 Per cent
Zinc 6.6100 Per cent

COMMENTS: Sample of vein material.
REFERENCE: Geological Survey of Canada Memoir 299, page 92.

CAPSULE GEOLOGY

A quartz vein occurs in tuffs that probably belong to the Hazelton Group. The vein, which has an attitude of 135 degrees/ 90 degrees, can be traced for about 610 metres and carries mineralization consisting of galena, sphalerite, pyrite, chalcopyrite and possibly tetrahedrite. The greatest observed width of the vein is 68 centimetres. The Ruby Adit with portal at 1625 metres elevation follows the vein for a length of 36.0 metres. The 1935 Ministry of Energy, Mines and Petroleum Resources Annual Report lists the occurrence as a property that shipped ore but the amount was minimal.

BIBLIOGRAPHY

EMPR AR *1926-A147; 1935-A24; *1945-A70
EMPR ASS RPT 20146, 21729, 22432
EMPR OF 1988-2; 1994-14
EMPR BC METAL MM00497
GSC MEM 299, p. 92
GSC SUM RPT 1924, part A, p. 54; 1925, part A, pp. 144-154

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 708
GSC MAP 1064A
GSC P 72-1A; 79-1A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/01

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093E 029**

NATIONAL MINERAL INVENTORY: 093E6 Pb1

NAME(S): **ROOSEVELT**, MONARCH, SILVER TIP

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

Underground

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 24 45 N
LONGITUDE: 127 06 31 W
ELEVATION: 1173 Metres

NORTHING: 5919826
EASTING: 625712

LOCATION ACCURACY: Within 1 KM

COMMENTS: Adit on Figure 4, Geological Survey of Canada Summary Report 1924, part A.

COMMODITIES: Gold Silver Zinc Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Arsenopyrite Pyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 150/75W

TREND/PLUNGE:

COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1945

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	613.7100	Grams per tonne
Gold	9.9400	Grams per tonne
Lead	14.3000	Per cent
Zinc	15.8000	Per cent

COMMENTS: Sample across 20 centimetre quartz vein.

REFERENCE: Minister of Mines Annual Report 1945, page A69.

CAPSULE GEOLOGY

A shear zone approximately 7.6 metres wide occurs in tuffs that Geological Survey of Canada maps show as being part of the Jurassic Hazelton Group. A short adit was driven south-westerly for approximately 11.0 metres intersecting the shear zone. The underground development follows the shear for 12.0 metres and then a 7.5 metre crosscut was driven (Duffel, Memoir 299). Quartz veining up to about 23 centimetres in width occurs within the shear zone and carries pyrite, galena, sphalerite, arsenopyrite, and chalcopyrite mineralization. Good gold and silver values also reported.

BIBLIOGRAPHY

EMPR AR 1919-N105; 1923-A119; *1926-A146; *1945-A69
EMPR FIELDWORK 1987, pp. 155-168
EMPR OF 1988-2; 1994-14
EMPR ASS RPT 20146, 21729, 22432
EMPR BC METAL MM00501
GSC MEM *299, p. 91
GSC SUM RPT *1920, part A, p. 92; *1924, part A, p. 53; 1925, part A, pp. 144-154
GSC MAP 1064A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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BIBLIOGRAPHY

GSC OF 708
GSC EC GEOL #4
GSC P 72-1A; 79-1A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/07

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 475
REPORT: RGEN0100

MINFILE NUMBER: **093E 030**

NATIONAL MINERAL INVENTORY: 093E6 Pb2

NAME(S): **DAD'S SPECIAL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 25 26 N
LONGITUDE: 127 05 43 W
ELEVATION: 1128 Metres

NORTHING: 5921116
EASTING: 626564

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1945-A69.

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Attitude of stringers.

STRIKE/DIP: 135/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

A zone of pyritized tuffs about 7.6 metres wide contains a 1.3 centimetre stringer of galena and a 0.6 centimetre stringer of sphalerite. Geological Survey of Canada maps indicate the tuffs belong to the Jurassic Hazelton Group.

BIBLIOGRAPHY

EM EXPL 1999-1-11
EMPR AR 1945-69
EMPR FIELDWORK 1987, pp. 155-168
EMPR OF 1988-2; 1994-14
GSC MEM 299, p. 91
GSC MAP 1064A
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A, pp. 144-154
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/07

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 030**

MINFILE NUMBER: **093E 031**

NATIONAL MINERAL INVENTORY: 093E6 Zn1

NAME(S): **MENTOR**, SUNSET, CARIBOO

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 27 30 N
LONGITUDE: 127 04 43 W
ELEVATION: 853 Metres

NORTHING: 5924977
EASTING: 627569

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Zinc Silver Gold Lead Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite Arsenopyrite Pyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive Disseminated

CLASSIFICATION: Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The showings are in an area of tuffs that have been highly weathered, sheared and fractured. Geological Survey of Canada maps indicate the tuffs are part of the Jurassic Hazelton Group. Veinlets of quartz and calcite that occupy fractures are mineralized with sphalerite, galena, pyrite, chalcopyrite and arsenopyrite. The veinlets are up to 38 centimetres wide and the mineralization occurs in lenses up to 1.8 metres in length. All workings on these claims were flooded when the level of Whitesail Lake was raised.

BIBLIOGRAPHY

EMPR AR *1916-K165,K166; *1926-A146; 1927-C155; 1945-A64,A68
GSC MEM *299, p. 90
GSC SUM RPT *1920, part A, p. 92; *1924, part A, p. 52; 1925, part A
GSC EC GEOL #4
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1988-2; 1994-14
EMPR FIELDWORK 1987, pp. 155-168

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/07

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 477
REPORT: RGEN0100

MINFILE NUMBER: **093E 032**

NATIONAL MINERAL INVENTORY: 093E6 Au2

NAME(S): **CORE**, SHIRLEY, MAG

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 25 50 N
LONGITUDE: 127 11 01 W
ELEVATION: 914 Metres

NORTHING: 5921705
EASTING: 620677

LOCATION ACCURACY: Within 500M

COMMENTS: "Fault zone" showing (Assessment Report 11530).

COMMODITIES: Gold Copper Silver Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Pyrite
ASSOCIATED: Quartz
ALTERATION TYPE: Leaching Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Attitude of fault zone. Dip is vertical to steep south.

STRIKE/DIP: 055/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Telkwa	

LITHOLOGY: Tuff
Feldspar Porphyritic Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area of the occurrence is underlain primarily by pyroclastics and flows of rhyolitic to andesitic composition belonging to the Telkwa Formation of the Jurassic Age Hazelton Group. A bleached argillic altered pyritic zone up to 30 metres wide is associated with a fault zone trending at 055 degrees and dipping vertically to steeply south. The fault marks the contact between Hazelton rocks and a dike or sill of Upper Cretaceous - Early Tertiary Age massive diorite - feldspar porphyry. The altered zone is in the volcanics which occur on the hanging wall side of the fault. Sporadic chalcopyrite mineralization occurs in the zone and quartz stringers, some containing minor sphalerite, are common.

BIBLIOGRAPHY

EMPR ASS RPT 1192, *9066, *11530
GSC MEM 299, pp. 95-96
EMPR EXPL 1980-316; 1983-403
EMPR AR 1945-A70
GSC MAP 1064A
EMPR FIELDWORK 1987, pp. 155-168
EMPR OF 1988-2; 1994-14
GSC OF 708
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
GSC P 72-1A; 79-1A

DATE CODED: 1985/07/24
DATE REVISED: 1987/11/23

CODED BY: GSB
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 032**

MINFILE NUMBER: **093E 033**

NATIONAL MINERAL INVENTORY: 093E6 Cu3

NAME(S): **ACE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 17 N
LONGITUDE: 127 01 00 W
ELEVATION: 1067 Metres

NORTHING: 5922834
EASTING: 631744

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of the Ace 8 claim.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Magnetite
ALTERATION: Pyrite Hematite
ALTERATION TYPE: Pyrite Skarn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Disseminated Shear
CLASSIFICATION: Hydrothermal Skarn
TYPE: K01 Cu skarn L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Agglomerate
Chert
Limy Tuff
Hematite Tuff
Intrusive Breccia
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is underlain by andesite, agglomerate, chert, limy tuff and hematitic tuff all of which Geological Survey of Canada maps indicate belong to the Jurassic Hazelton Group. An intrusive breccia occurring in one area has a pyritic halo. Skarn type mineralization consisting of magnetite, chalcopyrite and bornite occurs along shear zones beyond the pyritic halo. Disseminated hematite, pyrite and chalcopyrite occur in agglomerates, tuffs and andesites.

BIBLIOGRAPHY

EMPR ASS RPT *730, 19925
EMPR AR 1966-112
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
GSC P 72-1A; 79-1A
EMPR OF 1988-2; 1994-14
EMPR FIELDWORK 1987, pp. 155-168

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/07

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 034**

NATIONAL MINERAL INVENTORY: 093E6 Cu2

NAME(S): **DEUCE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 24 38 N
LONGITUDE: 127 04 05 W
ELEVATION: 1920 Metres

NORTHING: 5919682
EASTING: 628413

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of Deuce 1-4 claims.

COMMODITIES: Copper

MINERALS

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

DEPOSIT

CHARACTER: Podiform Stratabound Disseminated
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limy Tuff
Porphyritic Volcanic
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area contains flat-lying porphyritic volcanic rocks which are underlain by a 3 metre to 9 metre thick limy tuffaceous bed that has been altered to skarn. Geological Survey of Canada maps indicate the units belong to the Jurassic Hazelton Group. The skarn contains chalcopyrite, pyrrhotite and magnetite mineralization in the form of pods and disseminations.

BIBLIOGRAPHY

EMPR ASS RPT *729
EMPR AR 1966-112
GSC MEM 299
GSC MAP 1064A
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1988-2; 1994-14
EMPR FIELDWORK 1987, pp. 155-168

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/07

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 035**

NATIONAL MINERAL INVENTORY: 093E11 Ag1

NAME(S): **CAPTAIN**, SWANNELL, SWING AND PEAK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:
LATITUDE: 53 38 29 N
LONGITUDE: 127 15 52 W
ELEVATION: 1494 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Upper adit on Captain vein.

Underground
MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5945023
EASTING: 614735

COMMODITIES: Silver Lead Zinc Gold Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Tetrahedrite Chalcopyrite Arsenopyrite
 Pyrite
ASSOCIATED: Quartz Calcite
ALTERATION TYPE: Silicific'n Argillic Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Captain vein, dip is actually steep SW. STRIKE/DIP: 150/90 TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous Kasalka Undefined Formation

LITHOLOGY: Porphyritic Dacite
 Andesite
 Tuff
 Rhyolite
 Diorite
 Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 289.3700 Grams per tonne
Copper 0.0900 Per cent
Lead 2.6200 Per cent
Zinc 1.2600 Per cent

COMMENTS: Channel sample across 0.9 metres. Best of 39 samples.
REFERENCE: Assessment Report 10261 (part 2 of 2).

CAPSULE GEOLOGY

The area of interest is primarily underlain by the Upper Cretaceous Kasalka Group consisting mainly of andesite or dacite breccia, tuff and/or flow, rhyolite, volcanic conglomerate and minor sedimentary rocks. A porphyritic dacite that has been termed andesite - diorite could be either intrusive or extrusive. Mineralization occurs in shear zones or in quartz veins within the volcanics and the andesite - diorite. The mineralization consists of galena, sphalerite, pyrite and smaller amounts of chalcopyrite, arsenopyrite, and tetrahedrite. The main showing referred to as the Captain vein, is a 3 metre wide shear zone striking 150 degrees and dipping steeply southwest in porphyritic dacite.

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RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 481
REPORT: RGEN0100

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GSC OF 708
GSC EC GEOL #4
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
EMR MP CORPFILE (Tahtsa Mining Co. Ltd.)

DATE CODED: 1985/07/24
DATE REVISED: 1987/12/03

CODED BY: GSB
REVISED BY: LC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 036**

NATIONAL MINERAL INVENTORY: 093E11 Au1

NAME(S): **RIVERSIDE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 41 03 N
LONGITUDE: 127 06 55 W
ELEVATION: 853 Metres

NORTHING: 5950033
EASTING: 624469

LOCATION ACCURACY: Within 1 KM

COMMENTS: North side of Tahtsa River, 2.4 kilometres downstream from Kasalka Creek junction.

COMMODITIES: Gold Silver Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Arsenopyrite Pyrite

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Replacement Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

COMMENTS: Main showing fracture zone.

I02 Intrusion-related Au pyrrhotite veins
STRIKE/DIP: 085/80S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The main showing is associated with a zone of silicification along a fracture at 085 degrees/ 80 degrees south in massive, blocky-fracturing tuffs and breccias of the Jurassic Hazelton Group. The mineralization consists of arsenopyrite and minor amounts of pyrite, sphalerite and chalcopyrite over widths up to about 36 centimetres. Other fractures also carry pyrite and/or arsenopyrite. Sampling indicates that the arsenopyrite mineralization is auriferous.

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GSC EC GEOL #4
GSC SUM RPT 1920, Part A; 1924, Part A; 1925, Part A
GSC P 72-1A; 79-1A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/08

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 037**

NATIONAL MINERAL INVENTORY: 093E11 Cu2

NAME(S): **HUCKLEBERRY**, LEN, MAIN,
EAST

STATUS: Producer
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:
LATITUDE: 53 40 52 N
LONGITUDE: 127 10 41 W
ELEVATION: 1052 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of the best mineralization (Canadian Institute of Mining and Metallurgy Special Volume 15).

Open Pit

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5949585
EASTING: 620332

COMMODITIES: Copper Molybdenum Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Magnetite Pyrite
ASSOCIATED: Quartz Orthoclase Pyrite Calcite Gypsum
Zeolite Anhydrite
ALTERATION TYPE: Potassic Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry Epigenetic Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au
DIMENSION: 900 x 300 Metres STRIKE/DIP:
COMMENTS: East zone. Main zone is 500 by 100 metres. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Telkwa
Upper Cretaceous Bulkley Intrusions

LITHOLOGY: Crystal Tuff
Andesite
Dacite
Hornfels
Granodiorite Porphyry
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: EAST REPORT ON: Y
CATEGORY: Proven YEAR: 2002
QUANTITY: 51610000 Tonnes
COMMODITY GRADE
Copper 0.4780 Per cent
Molybdenum 0.0130 Per cent
REFERENCE: Personal Communication - P. Wojdak, Smithers Regional Geologist.

ORE ZONE: MAIN REPORT ON: Y
CATEGORY: Proven YEAR: 2002
QUANTITY: 2774000 Tonnes
COMMODITY GRADE
Copper 0.5170 Per cent
Molybdenum 0.0140 Per cent
REFERENCE: Personal Communication - P. Wojdak, Smithers Regional Geologist.

CAPSULE GEOLOGY

At the Huckleberry deposit, porphyry copper and molybdenum mineralization is associated with a near elliptical stock of Upper Cretaceous age granodiorite porphyry (Bulkley Intrusions) measuring approximately 670 by 425 metres. The stock intrudes fine-grained crystal tuff of the Lower-Middle Jurassic Hazelton Group. Tuffs adjacent to the intrusion have been hornfelsed.

CAPSULE GEOLOGY

Mineralization consists of chalcopyrite and minor molybdenite in fractures, principally in the hornfelsed volcanics but also in the stock. Minerals accompanying chalcopyrite are quartz, orthoclase and pyrite with probably later calcite, gypsum and zeolite. Magnetite occasionally accompanies chalcopyrite. Disseminated chalcopyrite also occurs. Molybdenite usually occurs with quartz in hairline fractures. The mineralization generally occurs around the stock contact but the extent outward from the contact and the grade vary greatly. The best mineralization occurs on the east side of the stock. Potassic, pyrite and chlorite alteration haloes surround the stock.

A feasibility study in 1974 by Kennecott/Granby stated that there was a mining reserve of 77,647,760 tonnes grading 0.41 per cent copper, 0.01 per cent molybdenum and 1.50 grams per tonne silver at a 1.11:1 waste-to-ore strip ratio. Within this reserve lies a near-surface high-grade zone of 14,332,180 tonnes grading 0.55 per cent copper (George Cross News Letter #189 (September 30) 1992).

Estimated reserves in 1993 for the Main zone were 31 million tonnes grading 0.52 per cent copper (Information Circular 1994-1, page 12).

An eight hole evaluation of the East zone, discovered by the drilling of a water quality monitoring well 1219 metres from the Main zone, was completed in 1993. The area of mineralization measures 182 by 60 by 121 metres deep that is open on all sides and to depth (Northern Miner - May 3, 1993)

At a cutoff grade of 0.30 per cent copper, the company reported total mineable reserves at 91.2 million tonnes grading 0.52 per cent copper, 0.014 per cent molybdenum, 0.06 gram per tonne gold and 2.8 grams per tonne silver. Reserves for the Main and East zones are reported to be 30.9 million tonnes grading 0.48 per cent copper, 0.066 gram per tonne gold, 2.17 grams per tonne silver and 0.013 per cent molybdenum; and 60.3 million tonnes grading 0.536 per cent copper, 0.063 gram per tonne gold, 3.1 gram per tonne silver and 0.014 per cent molybdenum, respectively (Information Circular 1995-1, page 13).

The ore zones at Hucklyberry are enclosed by an easterly-oriented zone of alteration approximately 4 kilometres long and 1 kilometre to 2 kilometres wide. The Main zone occurs along the eastern periphery of a subcircular stock located in the western part of the alteration zone and is further centred on an apophysis of the stock. Most of the mineralization occurs in an arc measuring 500 metres by 100 metres. The East zone occurs within and surrounding a similar porphyritic stock in the eastern part of the system and is approximately 900 metres by 300 metres and remains open at depth.

The East zone appears to be centred on an apophysis of the East zone. In 1994, New Canamin calculated the Main zone to contain a fully diluted in situ reserve of 53.7 million tonnes grading 0.445 per cent copper, 0.013 per cent molybdenum, 0.06 gram per tonne gold and 2 grams per tonne silver, based on a 0.30 per cent copper cutoff; and the East zone to contain an in situ reserve of 108.4 million tonnes grading 0.484 per cent copper, 0.014 per cent molybdenum, 0.055 gram per tonne gold and 3 grams per tonne silver at a cutoff grade of 0.30 per cent copper (CIM Special Volume 46, page 313).

The Huckleberry deposit will be mined by two open pits, the Main zone and the East zone. Planned mill throughput is 15,500 tonnes per day for the East zone and 14,000 tonnes per day for the Main zone, producing a total of 27,300 tonnes of copper annually over the anticipated 17-year mine life (Information Circular 1996-1, page 11).

Mineralization was first discovered in 1962 by Kennco Explorations, which explored the area between 1962 and 1971. In 1972, the property was optioned to Granby Mining, which proved up the Main zone by means of drilling and metallurgical tests.

The East zone deposit was discovered in early 1993, after New Canamin Resources Ltd. optioned the property from Kennecott Canada a year before. New Canamin became sole owner of the project in 1994, and Princeton bought the company in July 1995. A feasibility study was finished in September, and a final production decision was issued the following June. Mineable reserves reported in 1995 were 26.82 million tonnes grading 0.48 per cent copper, 0.07 grams per tonne gold, 2.17 grams per tonne silver and 0.013 molybdenum for the Main zone and 72.71 million tonnes grading 0.52 per cent copper, 0.06 grams per tonne gold, 3.1 grams per tonne silver and 0.014 per cent molybdenum for the East zone (Exploration in BC 1996, page A15).

In December 1995, the mine received a project approval certificate for the development of the mine. Site development began in March 1996 and startup is planned for September 1997. Mine construction began in 1997 at budgeted capital cost of 137 million dollars. The mine will process 16,500 tonnes of ore per day for a

CAPSULE GEOLOGY

planned 16 year mine life. The mine was officially opened on October 1, 1997.

Based on a feasibility study prepared by H.A. Simons Ltd., the combined geological resource of the two deposits (Main and East zones) is 162 million tonnes grading 0.47 per cent copper and 0.014 per cent molybdenum. Based on a 0.30 per cent copper cutoff grade, total mineable reserves (includes proven and probable reserves scheduled in the mining plan) are calculated to be 90,372,500 tonnes grading 0.513 per cent copper, 0.062 gram per tonne gold, 2.812 grams per tonne silver and 0.014 per cent molybdenum. Mineable reserves (includes proven and probable reserves scheduled in the mining plan) for the East zone are 66,131,500 tonnes grading 0.523 per cent copper, 0.061 gram per tonne gold, 3.043 grams per tonne silver and 0.014 per cent molybdenum. Mineable reserves (includes proven and probable reserves scheduled in the mining plan) for the Main zone are 24,241,000 tonnes grading 0.484 per cent copper, 0.066 gram per tonne gold, 2.181 grams per tonne silver and 0.013 per cent molybdenum. Both the Main and East zone deposits will be mined by open pit methods with a waste to ore ratio, including overburden, at a relatively low 1:1 (Princeton Mining Corporation 1996 Annual Report, page 5).

Imperial, as operator, owns 60 per cent of Huckleberry, and the Japan Group, a consortium which consists of Mitsubishi Materials Corporation, Marubeni Corporation, Dowa Mining Co. Ltd. and Furukawa Co., owns 40 per cent.

In 1998, ore milled amounted to 6,547,500 tonnes, averaging 0.632 per cent copper, from which 36,800,000 kilograms of copper and 248,000 kilograms of molybdenum were produced. Mineable reserves on January 1, 1999 were 80.754 million tonnes grading 0.501 per cent copper, 0.061 gram per tonne gold, 2.73 grams per tonne silver and 0.014 per cent molybdenum based on a copper price of US \$1.00 per pound and a cutoff grade of 0.30 per cent copper (Exploration in British Columbia 1999, page 22). Ore mined to date is from the East zone starter pit which will be completed in 2000. The Main zone pit, 600 metres west of the East pit, has been stripped of overburden and its production will be blended with East pit ore in 1999.

The Northern Miner (June 7, 1999) reports mineable reserves at the end of 1998 at 74.7 million tonnes grading 0.51 per cent copper and 0.014 per cent molybdenum, 0.06 gram per tonne gold and 2.82 grams per tonne silver, at a stripping ratio of 0.93 to 1.

In the East pit, ore is derived 85 per cent from Hazelton Group andesite and 15 per cent from a dike, 40 metres wide, emplaced along an ore-controlling 110 degree fault. The dike is an offshoot of an 82 Ma biotite granodiorite stock which metamorphosed Hazelton Group andesite to biotite hornfels. Best copper grade occurs in the granodiorite dike and in hornfels on the south (footwall) side of the controlling fault.

In 1998, the Huckleberry company drilled seven exploration holes in a 700-metre semicircular arc around the west side of the Main stock. A hole near the south contact of the stock intersected a zone of secondary copper enrichment including chalcocite and native copper that grades 0.8 per cent copper over the initial 27 metres of the hole, and then continued in primary mineralization that averages 0.4 per cent copper (Exploration in British Columbia 1998, page 23).

In April 1999, Imperial Metals reduced its mineable reserves in light of the current copper price. The Main zone reserves are 16 million tonnes, grading 0.51 per cent copper (cf. 24 million tonnes grading 0.484 per cent copper). The East zone reserves are being revised.

Mining of the East zone starter pit was completed in November, after supplying 76 per cent of the total ore milled during 1999. Pre-stripping of the Main zone was carried out throughout the year in preparation for full scale mining of ore and waste from this pit, beginning in November. Mill feed is scheduled to come from the Main zone for years 2000 and 2001. Overburden stripping of the East zone pushback is scheduled to begin in 2001 in anticipation of a return to full scale mining from this pit later that year.

A complete review of the proven and probable ore reserves was completed in late 1999 using updated topographic surveys and operating costs. Copper prices of US \$0.70 per pound for the Main zone and US \$1.00 per pound for the East zone were used for the pit optimization process. Proven and probable ore reserves as of December 31, 1999 are tabled below:

	Cutoff	Ore	Copper	Moly	Gold	Silver	Strip Ratio
	(% Cu)	(tonnes)	(%)	(%Mo)	(g/t)	(g/t)	
East zone	0.26	46,169,000	0.488	0.014	0.056	2.925	0.73
Main zone	0.35	15,593,000	0.519	0.014	0.071	2.265	0.77
Total		61,762,000	0.496	0.014	0.060	2.758	0.74

CAPSULE GEOLOGY

In the late fall of 1999, a geophysical survey was conducted over an area west of the tailings dam. Detailed geological mapping in the East zone pit during 1999, combined with previous geophysical and geochemical work identified two exploration target areas. These target areas will be drilled in 2000, testing possible ore extension to the northeast and southwest of the East zone pit.

Total probable reserves as of December 31, 2000 are 56,498,000 tonnes grading 0.494 per cent copper, 0.014 per cent molybdenum, 0.059 gram per tonne gold and 2.805 grams per tonne silver at a strip ratio of 0.66. This total includes 46,169,000 tonnes grading 0.488 per cent copper, 0.014 per cent molybdenum, 0.056 gram per tonne gold and 2.925 grams per tonne silver at a strip ratio of 0.73 and cutoff copper grade of 0.26 per cent in the East zone; and 10,329,000 tonnes grading 0.521 per cent copper, 0.014 per cent molybdenum, 0.071 gram per tonne gold and 2.269 grams per tonne silver at a strip ratio of 0.34 and cutoff copper grade of 0.35 per cent in the Main zone (Imperial Metals Corporation 2000 Annual Report).

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N MINER Feb.1, May 3, 1993; June 12, 1995; Oct.21, 1996; June 9, Oct. 13, 1997; Feb.9, Feb.23, June 29, Dec.14, 1998; June 7, 1999; Sept.18, 2000; Sept.10, 2001
PR REL Imperial Metals Corporation, Nov. 26, 1998; May 28, 1999
WWW <http://www.imperialmetals.com>;
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Imperial Metals Corporation Annual Report 1997, pp. 8,9; 1998, pp. 8,9; 1999, pp. 8-10
*Princeton Mining Corporation 1996 Annual Report, pp. 4-7
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1997/05/01

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 487
REPORT: RGEN0100

MINFILE NUMBER: **093E 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEN 45**, LEN 54, HUCKLEBERRY

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 40 49 N
LONGITUDE: 127 08 50 W
ELEVATION: 1158 Metres

NORTHING: 5949545
EASTING: 622371

LOCATION ACCURACY: Within 500M
COMMENTS: Map (Assessment Report 2693).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE: Middle Jurassic
GROUP: Hazelton

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff
Hornfels

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nechako Plateau

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

Isolated stringers of chalcopyrite occur in hornfelsic dark grey tuff of the Jurassic Hazelton Group.

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GSC P 69-49; 72-1A; 79-1A
EMR MP CORPFILE (Granby Mining Corporation)
GSC MEM 299
GSC MAP 367A; 1064A
EMPR FIELDWORK 1986, pp. 171-179
GSC OF 708
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
EMPR OF 1987-4; 1994-14
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/09

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 038**

MINFILE NUMBER: **093E 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEN 56**, LEN 58, HUCKLEBERRY

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 40 50 N
LONGITUDE: 127 08 05 W
ELEVATION: 1036 Metres

NORTHING: 5949597
EASTING: 623196

LOCATION ACCURACY: Within 500M
COMMENTS: Map (Assessment Report 2693).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Arsenopyrite Pyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Quartz and calcite veinlets up to about 10 centimetres wide are erratically spaced within an area approximately 250 metres by 125 metres in an area mapped as Jurassic Hazelton Group andesites. The veinlets carry arsenopyrite, chalcopyrite, pyrite and sphalerite mineralization.

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GSC P 69-49; 72-1A; 79-1A
EMR MP CORPFILE (Granby Mining Corporation)
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/09

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **REA, TL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 38 29 N
LONGITUDE: 127 08 00 W
ELEVATION: Metres

NORTHING: 5945243
EASTING: 623402

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of REA and TL claim blocks.

COMMODITIES: Copper Molybdenum Silver

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
ALTERATION: Pyrite
ALTERATION TYPE: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L04 Porphyry Cu ± Mo ± Au I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Argillite
Chert
Pyroclastic
Felsic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The claims are underlain by Jurassic Hazelton Group pyroclastics, argillites, and cherts that have been intruded by at least two small felsic stocks. The rocks are strongly pyritized locally and contain minor chalcopyrite, molybdenite, and silver mineralization.

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GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
GSC P 72-1A; 79-1A
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EMPR OF 1987-4; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/09

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 041**

NATIONAL MINERAL INVENTORY: 093E11 Cu4

NAME(S): **FAB**, TROITSA

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 31 21 N
LONGITUDE: 127 13 47 W
ELEVATION: 1341 Metres

NORTHING: 5931855
EASTING: 617359

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Lead

Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz Calcite
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Cretaceous Kasalka

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Galena and sphalerite occur in argillic altered thin bedded tuffs of the Kasalka Group. The mineralization is mainly fracture controlled but there is also some disseminated galena, sphalerite, and pyrite. Massive galena, sphalerite, and pyrite occur in quartz and calcite veinlets up to 1.3 centimetres wide. The Kasalka Group rocks have been preserved within a graben.

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EMPR BULL 75, pp. 52,65-67
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EMPR AR 1967-113; 1968-141
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GSC MAP 1064A
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EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14

DATE CODED: 1985/07/24
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REVISED BY: LC

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 491
REPORT: RGEN0100

MINFILE NUMBER: **093E 042**

NATIONAL MINERAL INVENTORY: 093E11 Cu4

NAME(S): **FAB 49**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 32 06 N
LONGITUDE: 127 14 15 W
ELEVATION: 1250 Metres

NORTHING: 5933233
EASTING: 616809

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Magnetite Pyrite
ASSOCIATED: Quartz
ALTERATION: Biotite Orthoclase
ALTERATION TYPE: Biotite Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Porphyry
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>
Middle Jurassic	Hazelton	Undefined Formation	
Upper Cretaceous			Bulkley Intrusions

ISOTOPIC AGE: 83.8 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Hornblende Biotite Porphyritic Granodiorite
Dacitic Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Porphyry copper mineralization is associated with a sub-circular porphyritic, hornblende-biotite-granodiorite stock of the Bulkley Intrusions. The stock is primarily bounded by a dacite porphyry lacolith and cuts Hazelton Group rocks on its western edge. Mineralization consists of chalcopyrite, pyrite and molybdenite in quartz vein stockworks and sulphide-filled microfractures. Pervasive biotite-orthoclase alteration is associated with this mineralization. Chalcopyrite-magnetite-biotite stringers are also present.

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EMPR AR 1967-113; 1968-141
GSC MEM 299
GSC MAP 1064A
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GSC P 72-1A; 79-1A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 042**

MINFILE NUMBER: **093E 043**

NATIONAL MINERAL INVENTORY: 093E11 Cu4

NAME(S): **FAB 44**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 31 22 N
LONGITUDE: 127 15 25 W
ELEVATION: 1372 Metres

NORTHING: 5931841
EASTING: 615554

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Galena Sphalerite Magnetite
Pyrite
ASSOCIATED: Quartz Calcite Sericite Kaolinite
ALTERATION TYPE: Carbonate Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Pipe
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au 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>
Middle Jurassic Unknown	Hazelton	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Breccia
Quartz Diorite
Andesitic Tuff

HOSTROCK COMMENTS: A breccia pipe occurs at the contact between a quartz diorite intrusion and andesitic tuff of the Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

A small west-dipping breccia pipe is located along the south-east contact of a quartz diorite intrusion with andesitic tuff of the Hazelton Group. The breccia is composed of angular to tabular clasts of quartz diorite, quartz porphyry and hornfelsed argillite in a matrix of coarse-grained and vuggy matrix of quartz, calcite, sericite, chalcopyrite, magnetite and minor molybdenite. Variable amounts of galena and sphalerite associated with a late stage of carbonate - kaolinite alteration and vug filling are also present.

BIBLIOGRAPHY

EMPR ASS RPT 1073, 1679, *2003, 3309, *10975
EMPR BULL *75, pp. 52,65-67
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EMPR GEM 1969-98; 1970-104; 1971-145; 1972-340
EMPR AR 1967-113; 1968-141
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
GSC P 72-1A; 79-1A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 044**

NATIONAL MINERAL INVENTORY: 093E11 Cu4

NAME(S): **FAB 45**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 32 20 N
LONGITUDE: 127 14 59 W
ELEVATION: 1570 Metres

NORTHING: 5933645
EASTING: 615989

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Biotite Orthoclase
ALTERATION TYPE: Biotite Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Middle Jurassic
Upper Cretaceous

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Bulkley Intrusions

LITHOLOGY: Quartz Diorite
Hornfels Andesite
Feldspar Biotite Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

A northeasterly trending Upper Cretaceous Bulkley Intrusion of quartz diorite intrudes and has hornfelsed Jurassic Hazelton Group andesitic fragmental rocks. Quartz veinlets with minor amounts of pyrite and chalcopyrite are associated with small zones of biotite - orthoclase alteration in the quartz diorite. Disseminated chalcopyrite and pyrite also occur in a feldspar - biotite porphyry which intrudes the quartz diorite.

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EMPR EXPL 1982-282
EMPR GEM 1969-98; 1970-104; 1971-145; 1972-340
EMPR AR 1967-113; 1968-141
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
GSC P 72-1A; 79-1A
EMPR FIELDWORK 1986, pp. 177-179
EMPR OF 1987-4; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 045**

NATIONAL MINERAL INVENTORY: 093E6 Mo4

NAME(S): **COB**, AM

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 22 18 N
LONGITUDE: 127 12 30 W
ELEVATION: Metres

NORTHING: 5915113
EASTING: 619199

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of COB and AM claim blocks from claim map.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated

CLASSIFICATION: Hydrothermal

TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cretaceous Mesozoic	Skeena	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Volcanic Rock
Granite
Quartz Vein

HOSTROCK COMMENTS: Geology maps indicate mainly rhyolite to andesite flows in area.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Disseminated pyrite, molybdenite and minor chalcopyrite in quartz veins occurs in andesitic volcanic rocks in the vicinity of granitic rocks of the Coast Plutonic Complex.

BIBLIOGRAPHY

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EMPR ASS RPT 20135, 21559
GSC MEM 299
GSC MAP 1064A
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GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/01

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 046**

NATIONAL MINERAL INVENTORY: 093E14 Cu1

NAME(S): **BERG**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 093E14W
 BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 48 13 N
 LONGITUDE: 127 26 06 W
 ELEVATION: 1707 Metres

NORTHING: 5962808
 EASTING: 603063

LOCATION ACCURACY: Within 500M

COMMENTS: Located in the Tahtsa Mountain Ranges, approximately 84 kilometres southwest of Houston.

COMMODITIES: Copper Molybdenum Silver

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Chalcocite Sphalerite Galena

COMMENTS: Minor sphalerite, galena and sulphosalt minerals.

ASSOCIATED: Quartz Pyrite Carbonate

ALTERATION TYPE: Argillic Propylitic Potassic Sericitic Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
 CLASSIFICATION: Porphyry Hydrothermal
 TYPE: L04 Porphyry Cu ± Mo ± Au
 SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Eocene			

LITHOLOGY: Quartz Monzonite Porphyry
 Quartz Diorite
 Quartz Latite Porphyry Dike
 Volcanic
 Sediment/Sedimentary
 Biotite Hornfels

HOSTROCK COMMENTS: Berg Stock.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine
 METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Tahtsa Range

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: BERG

REPORT ON: Y

CATEGORY:	Indicated	YEAR:	1980
QUANTITY:	238000000 Tonnes		
COMMODITY		GRADE	
Copper		0.3900	Per cent
Molybdenum		0.0310	Per cent
Silver		2.8400	Grams per tonne

COMMENTS: Based on 93 drill holes; at a 0.25 per cent copper cut-off; 0.052 per cent molybdenite.

REFERENCE: CIM Special Volume 37, page 1986.

CAPSULE GEOLOGY

The area of the Berg porphyry copper-molybdenum deposit is underlain by massive and clastic volcanic and sedimentary rocks of the Lower-Middle Jurassic Hazelton Group. These rocks have been intruded by an elongate body of quartz diorite and a circular quartz monzonite porphyry stock (Berg Stock) approximately 800 metres in diameter. A breccia pipe and quartz latite porphyry dikes postdate the stock. Volcanic and sedimentary rocks adjacent to the stock have been metamorphosed to biotite hornfels. Mineralization is associated with the Eocene age porphyry stock.

The most common forms of primary mineralization are fracture-controlled and disseminated pyrite and chalcopyrite with quartz stockworks of pyrite, molybdenite and chalcopyrite. Less commonly, quartz and quartz-carbonate veins contain pyrite, sphalerite, galena,

CAPSULE GEOLOGY

chalcopyrite and sulphosalt minerals. Secondary copper sulphides, with chalcocite being the most important, are found in an enrichment blanket over most of the deposit. Primary ore minerals are most abundant in an asymmetrical annular zone around the quartz monzonite stock.

In general, the best molybdenum mineralization is within and adjacent to the stock while the highest copper values are normally 70 metres or more beyond the contact. The best developed mineralization occurs along the eastern side of the stock.

A pyrite halo extends 300 to 600 metres beyond the stock contact. Potassic, phyllic, propylitic and argillic alteration types are all present at Berg.

The Taitsa Ranges were first prospected in the early 1900's after gold was discovered near Sibola Mountain. Prior to the late 1920's, several lead-zinc-silver, gold-tungsten and copper showings had been staked. In 1948, the Lead Empire Syndicate restaked claims originally located by Cominco Ltd. in 1929 over several lead-zinc occurrences. These are now recognized as part of the Berg porphyry system. The potential for porphyry copper style mineralization at Berg was first understood by Kennco Explorations (Western) Ltd. who recognized the prominent gossan and associated stream sediment anomaly. Kennco started an exploration program in 1968 that eventually discovered an extensive supergene enrichment blanket over hypogene chalcopyrite and molybdenite mineralization. Canex Placer Limited optioned the property in 1972 and by 1980 a total of 93 diamond drill holes totalling 16,907.8 metres had been completed and a geological resource of 238 million tonnes of 0.40 per cent copper, 0.031 per cent molybdenum (0.052 per cent MOS_2) and 2.84 grams per tonne silver (at a 0.25 per cent copper cut-off) outlined (CIM Special Volume 37, page 1986). Since 1982, the only activity on the project was the computerization of the drilling database by Placer Dome Inc. in 1992.

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EMPR MAP 65 (1989)
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GSC P 72-1A; 79-1A
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Guidebook, pp. 25-27

DATE CODED: 1985/07/24
DATE REVISED: 1999/09/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 497
REPORT: RGEN0100

MINFILE NUMBER: **093E 047**

NATIONAL MINERAL INVENTORY: 093E11 Pb1

NAME(S): **GLACIER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 44 23 N
LONGITUDE: 127 15 09 W
ELEVATION: 1859 Metres

NORTHING: 5955981
EASTING: 615256

LOCATION ACCURACY: Within 1 KM

COMMENTS: A half mile from, at approximately the same elevation, the mine symbol on 1:50,000 Topo Map.

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Shear zone trends northeast and dips northwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Mineralization consisting of irregular lenses of galena and sphalerite is associated with quartz veining in a shear zone 1.8 metres to 2.4 metres wide. The zone, which trends northeasterly with a northwest dip, occurs in porphyritic andesite which Geological Survey of Canada maps indicate belongs to the Jurassic age Hazelton Group.

BIBLIOGRAPHY

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GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR FIELDWORK 1986, pp. 171-179
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 047**

MINFILE NUMBER: **093E 048**

NATIONAL MINERAL INVENTORY: 093E11 Ag2

NAME(S): **STANLEY, SUNSET**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 44 00 N
LONGITUDE: 127 14 36 W
ELEVATION: 1554 Metres

NORTHING: 5955285
EASTING: 615878

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of crown Grants 2768 and 2769 on 1:50,000 Topo Map.

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Arsenopyrite Marcasite

ASSOCIATED: Pyrite Quartz

ALTERATION: Hematite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: Shear zones trend northeast and dip northwest.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	2280.0000	Grams per tonne
Gold	7.5400	Grams per tonne
Lead	42.0000	Per cent
Zinc	15.0000	Per cent

COMMENTS: Sample consisting of picked mineralization.

REFERENCE: Minister of Mines Annual Report 1927, page C154.

CAPSULE GEOLOGY

Two parallel shear zones each about 46 centimetres in width, trend northeasterly and dip northwesterly. The zones occur in porphyritic andesite which Geological Survey of Canada maps indicate belongs to the Jurassic age Hazelton Group. Quartz veining in the shear zones hosts pyrite, marcasite, chalcopyrite, arsenopyrite, galena, sphalerite and hematite mineralization. Good gold and silver values are reported.

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GSC SUM RPT *1924, part A, p. 57A
EMPR AR 1927-C154
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 048**

MINFILE NUMBER: **093E 049**

NATIONAL MINERAL INVENTORY: 093E14 Mo1

NAME(S): **WHITING CREEK (RUSTY), WHIT**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 45 30 N
LONGITUDE: 127 12 54 W
ELEVATION: 1540 Metres

NORTHING: 5958113
EASTING: 617677

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
ALTERATION: Biotite
ALTERATION TYPE: Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L05 Porphyry Mo (Low F- type) L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Upper Cretaceous			

LITHOLOGY: Biotite Hornfels
Hornblende Biotite Granodiorite
Porphyritic Quartz Monzonite
Biotite Hornblende Feldspar Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact
PHYSIOGRAPHIC AREA: Nechako Plateau
RELATIONSHIP:
GRADE: Hornfels

CAPSULE GEOLOGY

The area is characterized by several Upper Cretaceous intrusions into Jurassic Hazelton Group fragmental rocks which have been hornfelsed. The largest intrusive body is the Whiting hornblende-biotite granodiorite stock. The Rusty Zone is situated between an altered porphyritic quartz monzonite stock to the north and the Whiting Stock to the south. Molybdenite occurs in quartz vein stockworks within biotite-hornfelsed volcanic rocks. Chalcopyrite is concentrated in northwesterly trending biotite - hornblende - feldspar porphyry dikes.

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EMPR AR 1916-K161; 1964-55; 1965-87
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A; 1924, part A; 1925, part A
EMPR OF 1989-1; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/26

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 050**

NATIONAL MINERAL INVENTORY: 093E11 Cu1

NAME(S): **WHITING CREEK (CREEK), WHIT**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 44 23 N
LONGITUDE: 127 12 22 W
ELEVATION: 1230 Metres

NORTHING: 5956057
EASTING: 618315

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz Gypsum
ALTERATION: Biotite Epidote Chlorite
ALTERATION TYPE: Potassic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal 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
Upper Cretaceous			Whiting Stock

ISOTOPIC AGE: 81.3 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Hornblende Biotite Granodiorite
Quartz Monzonite
Hornblende Biotite Porphyritic Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1985
SAMPLE TYPE:	Drill Core		
COMMODITY	GRADE		
Copper	0.2440	Per cent	
Molybdenum	0.0260	Per cent	

COMMENTS: 196 metres of diamond drill core.
REFERENCE: Bulletin 75, page 60.

CAPSULE GEOLOGY

The area is characterized by several intrusions into Jurassic Hazelton Group fragmental rocks which have been hornfelsed. The largest intrusive body is the Whiting hornblende-biotite granodiorite stock of Upper Cretaceous age. The Creek zone occurs in the Whiting Stock in close association with a later porphyritic hornblende-biotite granodiorite to quartz monzonite phase. Mineralization is in the form of veinlets and disseminations of chalcopyrite, molybdenite and pyrite. The best grades of mineralization occur within zones of potassic alteration. From earliest to latest the indicated sequence of vein formation is pyrite veinlets with or without epidote and chlorite, followed by chalcopyrite, quartz-chalcopyrite and quartz-molybdenite veinlets followed by gypsum veinlets.

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EMPR EXPL 1980-317; 1981, pp. 130,148
EMPR FIELDWORK 1986, pp. 171-179

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 501
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1972-341
EMPR OF 1987-4; 1994-14
GSC MAP 367A; 1064A
GSC MEM 299
GSC OF 708
CIM Special Volume 15, 1976, pp. 33-34

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/23

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 502
REPORT: RGEN0100

MINFILE NUMBER: **093E 051**

NATIONAL MINERAL INVENTORY: 093E14 Ag3

NAME(S): **ORIENTAL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 45 01 N
LONGITUDE: 127 08 46 W
ELEVATION: Metres

NORTHING: 5957333
EASTING: 622241

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of Lots 1073-1078 on 1:50,000 Topo Maps.
May be Gold Crown, Bellecini, Golden Chest, Jolimont.

COMMODITIES: Silver Lead Gold Zinc

MINERALS

SIGNIFICANT: Galena Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
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>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff

HOSTROCK COMMENTS: Rock type not specified but maps show mainly tuff in the area.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Geological Survey of Canada maps indicate the area is underlain by Hazelton Group rocks consisting mainly of volcanics with some sedimentary units. Quartz stringers and veins up to approximately 45 centimetres wide are mineralized with pyrite and minor galena. Low gold and silver values reported.

In 1988, a diamond-drillhole just west of the original showing intersected tuff hosting an irregular 2.5 centimetre quartz vein mineralized with blebs of chalcopyrite. Analysis of 15 centimetres of this core yielded 7.0 grams per tonne gold, 3.8 grams per tonne silver, 0.55 per cent zinc and 0.10 per cent copper (Assessment Report 18399, page 1).

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EMPR OF 1989-1; 1994-14
GSC MEM 299
GSC MAP 367A; 1064A
GSC P 72-1A; 79-1A
GSC OF 708

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/05

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 051**

MINFILE NUMBER: **093E 052**

NATIONAL MINERAL INVENTORY: 093E14 Cu3

NAME(S): **BERGETTE**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 47 47 N
LONGITUDE: 127 16 47 W
ELEVATION: 1829 Metres

NORTHING: 5962241
EASTING: 613308

LOCATION ACCURACY: Within 500M

COMMENTS: Breccia zone from Geology, Exploration and Mining 1971, Figure 23.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT:	Chalcopyrite	Molybdenite	Pyrite		
ASSOCIATED:	Gypsum	Fluorite	Epidote	Biotite	Quartz
ALTERATION:	Azurite	Jarosite	Quartz	Adularia	Epidote
	Zeolite	Biotite	Sericite		
ALTERATION TYPE:	Oxidation		Potassic		Propylitic
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER:	Stockwork	Breccia	Pipe
CLASSIFICATION:	Hydrothermal	Porphyry	
TYPE:	L04	Porphyry Cu ± Mo ± Au	

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	
Upper Cretaceous	Kasalka	Undefined Formation	
Upper Cretaceous			Sibola Stock

ISOTOPIC AGE: 76.7 +/- 2.5 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Feldspar Porphyritic Dike
Porphyritic Quartz Monzonite
Breccia
Granitic Quartz Porphyry
Aplite
Quartz Diorite
Porphyritic Andesite
Hornfels Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Taitsa Range
TERRANE: Stikine	
METAMORPHIC TYPE: Contact	RELATIONSHIP: GRADE: Hornfels

CAPSULE GEOLOGY

The porphyry copper-molybdenum occurrence is in an area underlain by the Jurassic Hazelton Group hornfelsed argillite and Cretaceous Kasalka Group porphyritic andesite. These have been intruded by the Upper Cretaceous Sibola Stock which consists of quartz diorite, aplite, granitic quartz porphyry, porphyritic quartz monzonite, breccia, and feldspar porphyry dikes. Biotite from porphyritic quartz monzonite yielded potassium-argon isotopic age of 76.7 plus or minus 2.5 million years. One type of mineralization is associated with a breccia zone in the Sibola Stock where molybdenite bearing quartz occurs between breccia fragments and vugs contain calcite, pyrite, chalcopyrite, magnetite, epidote, biotite, chalcocite, and zeolites. The other type of mineralization is widespread on the west side of the stock and is comprised of pyrite, chalcopyrite, and minor molybdenite filling fractures with quartz and adularia. Sericitic alteration envelopes these fractures and the zone, approximately 6.5 square kilometres, is pervasively oxidized. Jarosite and azurite are abundant.

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RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 504
REPORT: RGEN0100

BIBLIOGRAPHY

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GSC MEM 299
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1989-1; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/05

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 053**

NATIONAL MINERAL INVENTORY: 093E14 Cu4

NAME(S): **DUAL**, CON, LILLY

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 56 46 N
LONGITUDE: 127 01 22 W
ELEVATION: 1280 Metres

NORTHING: 5979336
EASTING: 629765

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Con claims.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT:	Chalcopyrite	Molybdenite	Pyrite	
ALTERATION:	Tourmaline	Silica	Sericite	
ALTERATION TYPE:	Tourmalin'z'n	Silicific'n	Argillic	Sericitic
MINERALIZATION AGE:	Unknown			

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Volcanic Breccia
Tuff
Andesite
Quartz Monzonitic Porphyry
Feldspar Porphyritic Dike
Granodiorite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is primarily underlain by Jurassic Hazelton Group rocks consisting of fragmental volcanics, andesites and felsitic rocks. Intruding the Hazelton rocks is a quartz-monzonite porphyry which grades to a finer-grained, more mafic rich granodiorite or quartz diorite in places. A feldspar porphyry likely a dike, is also present. A silicified and argillic to phyllic altered zone occurs at the northern margin of the stock and contains pervasive pyrite with minor chalcopyrite and molybdenite occurring in fractures. Tourmaline is also present.

BIBLIOGRAPHY

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GSC MEM 299
GSC MAP 367A; 1064A
GSC SUM RPT 1924, part A
GSC P 72-1A; 79-1A
GSC OF 708

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/09

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **TSAH**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 42 28 N
LONGITUDE: 127 39 21 W
ELEVATION: 1400 Metres

NORTHING: 5951849
EASTING: 588723

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Azurite Malachite Ferrimolybdite
ALTERATION TYPE: Propylitic Pyrite Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry
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>
Middle Jurassic Mesozoic	Hazelton	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Granodiorite
Quartz Monzonite
Augite Andesite
Basalt
Dacite
Quartz Vein

GEOLOGICAL SETTING

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

PHYSIOGRAPHIC AREA: Taitsa Range

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

A granodiorite - quartz monzonite stock of the Coast Plutonic Complex intrudes Jurassic Hazelton Group rocks consisting primarily of augite andesite with lesser basalt and dacite. The volcanics have been variably metamorphosed. A weak porphyry copper-molybdenum system occurs within and adjacent to the stock. The mineralization consisting of chalcopyrite, molybdenite with associated azurite, malachite, and ferrimolybdite occurs mainly as disseminations but it has also been reported in association with fractures and quartz veinlets.

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GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, part A
EMPR OF 1994-14
EMPR BULL 42

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/14

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 055**

NATIONAL MINERAL INVENTORY: 093E13 Cu1

NAME(S): **NEW NANIK**, NANIKA, NANIKA LAKE,
DW, CORB, CUP,
NANIKA OPTION, SILVER CUP

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093E13E 093E12E
BC MAP:
LATITUDE: 53 45 04 N
LONGITUDE: 127 41 12 W
ELEVATION: 1006 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of mineralized zone, on the west shore of Nanika Lake, 4 kilometres south of the mouth of Fenton Creek, 82 kilometres south of New Hazelton (Assessment Report 18656).

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5956631
EASTING: 586599

COMMODITIES: Copper Molybdenum Silver Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Molybdenite
ALTERATION: Biotite Silica Chlorite
ALTERATION TYPE: Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic Mesozoic-Cenozoic	Hazelton	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Dacite Porphyry
Quartz Monzonite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine Plutonic Rocks

INVENTORY

ORE ZONE: MAIN REPORT ON: Y
CATEGORY: Inferred YEAR: 1973
QUANTITY: 16458422 Tonnes
COMMODITY GRADE
Copper 0.4370 Per cent
REFERENCE: George Cross News Letter October 30, 1973.

CAPSULE GEOLOGY

The New Nanik occurrence area lies approximately 4.8 kilometres east of the main contact between the Tertiary-Jurassic Coast Plutonic Complex to the west and various Mesozoic sediments and volcanics, principally Lower-Middle Jurassic Hazelton Group, to the east. A block of Hazelton Group rocks approximately 3.2 kilometres in length is present lying along the western shoreline of Nanika Lake.

The Nanika Lake mineralized zone lies along a large shattered and faulted zone trending 030 degrees and dipping from 20 to 40 degrees west. The tabular zone follows the western contact of intrusive rocks and Hazelton Group rocks. Thin sections suggest the principal host rock is dacite porphyry, however, it is intensely altered and identification is inconclusive. The principal intrusive is quartz monzonite. A younger fine-grained, magnetite-rich quartz diorite has been intruded along the footwall of the southern portion of the mineralized zone; it is apparently post-mineral.

The main structural control of mineralization appears to be the faulted and shattered contact zone. Two east-west faults cut the zone suggesting block faulting. No folding is evident (Assessment Report 18656).

Sulphide mineralization occurs as disseminations, fracture-filling and veinlets. Sulphide minerals in order of

CAPSULE GEOLOGY

abundance are pyrite, chalcopyrite, pyrrhotite and molybdenite. Pyrrhotite is a minor constituent in the mineralized zone and occurs in a few massive lenses a few centimetres wide. Molybdenite in minute amounts is widespread.

Alteration minerals in the mineralized dacite porphyry includes biotite, silica and chlorite and are locally intensely developed. The alteration minerals do not necessarily occur together. Only minor, spotty alteration has been noted outside the mineralized zone. No significant pyrite halo has been observed.

The New Nanik porphyry copper deposit was discovered in the late 1960s to early 1970s. Inferred reserves are 16,458,422 tonnes grading 0.437 per cent copper (George Cross News Letter October 30, 1973).

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EMPR AR 1968-140
EMPR ASS RPT 4207, *18656, 22246
EMPR OF 1990-15; 1992-1; 1992-3; 1994-14
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1924 Part A
GSC P 72-1A; 79-1A
GCNL Oct. 30, 1973; #9(Jan.14), 1992
EMR MIN BULL MR 223 B.C. 217

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 056**

NATIONAL MINERAL INVENTORY: 093E10 Au1

NAME(S): **WHITESAIL RANGE** STAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E10W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 34 15 N
LONGITUDE: 126 59 18 W
ELEVATION: Metres

NORTHING: 5937656
EASTING: 633208

LOCATION ACCURACY: Within 1 KM

COMMENTS: In 1984 area covered by the Star Claim (Geological Survey of Canada
Memoir 299, page 98).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic Hydrothermal Igneous-contact
TYPE: I02 Intrusion-related Au pyrrhotite veins I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Cretaceous-Tertiary GROUP: Ootsa Lake FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Felsic Volcanic
Felsic Dike
Lamprophyre Dike
Felsic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Abundant pyrite mineralization is associated with a wide, sheared and silicified zone. A pyrite sample returned 0.17 grams per tonne of gold.

Gold bearing disseminated pyrite occurs in silicified gossans occurring along the contacts of felsic volcanics and felsic intrusives or felsic dikes. Lamprophyre dikes also cut this package.

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GSC MAP 367A; 1064A
GSC OF 708
GSC SUM RPT 1924, part A
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EMPR OF 1987-4; 1994-14
EMPR BULL 75
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/14

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHITESAIL OUTLET**, GUT, WHITEGOLD

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E10W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 36 34 N
LONGITUDE: 126 47 43 W
ELEVATION: Metres

NORTHING: 5942329
EASTING: 645857

LOCATION ACCURACY: Within 500M
COMMENTS: Area of 1983 drilling.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Gold Chalcopyrite Arsenopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Tuff
Rhyolite
Volcanic Breccia
Argillite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1983
SAMPLE TYPE: Drill Core
COMMODITY: Gold GRADE: 3.0000 Grams per tonne
COMMENTS: Over 3.9 metres in DDH 7.
REFERENCE: Assessment Report 17212, page 7.

CAPSULE GEOLOGY

Numerous drusy and brecciated gold-bearing quartz (chalcedony) veins contain variable amounts of very fine grained pyrite and arsenopyrite. Minor chalcopyrite has also been reported. Drilling intersected volcanic rocks mainly consisting of tuff, rhyolite, volcanic breccia and argillite. Some diorite was also observed. The veins occur in the area of a prominent low angle, east-west trending fault. The best assay from drilling was 3.0 grams per tonne gold over 3.9 metres in DDH 7 (Assessment Report 17212, page 7).

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GSC SUM RPT 1925, part A, p. 153A
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
EMPR BULL 75
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/23

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 058**

NATIONAL MINERAL INVENTORY: 093E2 Cu2

NAME(S): **POND**, PONDOSY, RIVERS PEAK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 11 19 N
LONGITUDE: 126 43 29 W
ELEVATION: Metres

NORTHING: 5895669
EASTING: 652017

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Pond Claim Group.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ALTERATION: Chalcocite Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: L04 Porphyry Cu ± Mo ± Au

L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Middle Jurassic
GROUP: Hazelton

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Felsic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The main area of interest is a fault bound block of Jurassic Hazelton Group felsic volcanics which contain abundant pyrite mineralization and some disseminated chalcopyrite. Disseminated malachite and chalcocite also reported from a porphyry rock.

BIBLIOGRAPHY

EMPR ASS RPT *2993, *4185
EMPR GEM 1971-144; 1972-339
EMPR AR 1965-88; 1966-116
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A
GSC P 72-1A; 79-1A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/15

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 059**

NATIONAL MINERAL INVENTORY: 093E2 Cu1

NAME(S): **TETRAHEDRITE** AT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 06 38 N
LONGITUDE: 126 38 49 W
ELEVATION: 1753 Metres

NORTHING: 5887156
EASTING: 657498

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1926-150.

COMMODITIES: Silver Copper

MINERALS

SIGNIFICANT: Tetrahedrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION:
COMMENTS: Attitude of vein.

105 Polymetallic veins Ag-Pb-Zn±Au
STRIKE/DIP: 100/35S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Geological Survey of Canada maps indicate the area is mainly underlain by Jurassic Hazelton Group volcanics. A siliceous, crudely banded vein with a maximum exposed width of about 15 centimetres occurs in andesites. The vein contains tetrahedrite which normally occurs in a thin layer in the central part of the vein. The surrounding andesites carry disseminated chalcopyrite and azurite.

BIBLIOGRAPHY

EMPR AR 1919-38; 1923-44; 1924-44; *1926-150; *1966-117
GSC MEM 299, p. 100
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1986/05/06
DATE REVISED: 1986/05/06

CODED BY: GRF
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 060**

NATIONAL MINERAL INVENTORY: 093E2 Cu1

NAME(S): **CHALCOPYRITE** AT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 06 47 N
LONGITUDE: 126 39 19 W
ELEVATION: 1676 Metres

NORTHING: 5887416
EASTING: 656932

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1926-150.

COMMODITIES: Copper Silver Lead Barite

MINERALS

SIGNIFICANT: Chalcopyrite Galena Tetrahedrite Barite
ASSOCIATED: Quartz
ALTERATION: Malachite Silica
ALTERATION TYPE: Oxidation Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Geological Survey of Canada maps indicate the area is mainly underlain by Jurassic Hazelton Group volcanics. Chalcopyrite and malachite mineralization is associated with a zone of fractured and silicified andesites. A separate vein contains some galena, tetrahedrite and barite mineralization.

BIBLIOGRAPHY

EMPR AR 1919-38; 1923-44; 1924-44; *1926-150; *1966-117
GSC MEM 299, p. 100
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOLLY D**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 06 22 N
LONGITUDE: 126 38 32 W
ELEVATION: 1600 Metres

NORTHING: 5886672
EASTING: 657831

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description from Minister of Mines Annual Report 1926.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ALTERATION: Malachite Silica
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Amygdaloidal Andesite
Agglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Geological Survey of Canada maps indicate the area is mainly underlain by Jurassic Hazelton Group volcanics. Minor chalcopyrite and malachite mineralization is associated with a silicified zone about 3.7 metres wide. The zone has amygdaloidal andesite on the hanging wall and volcanic agglomerate on the foot wall.

BIBLIOGRAPHY

EMPR AR 1919-38; 1923-44; 1924-44; *1926-150; 1966-117
GSC MEM 299, p. 100
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A
GSC P 72-1A; 79-1A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 062**

NATIONAL MINERAL INVENTORY: 093E1,2 Cu1

NAME(S): **TWO BEAR HILL**, CHEZKO RIVER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E 093E01W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 07 56 N
LONGITUDE: 126 30 43 W
ELEVATION: Metres

NORTHING: 5889871
EASTING: 666449

LOCATION ACCURACY: Within 1 KM

COMMENTS: The Two Bear Hill lies on the southeast slope of Two Bear Hill.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Middle Jurassic
GROUP: Hazelton

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Two Bear Hill lies on the southeast slope of Two Bear Hill. A zone that is 0.9 metre to 1.2 metres wide, trends 130 degrees and is exposed for about 60 metres, contains quartz stringers mineralized with chalcopyrite, pyrite and hematite in Jurassic Hazelton Group sediments. A grab sample assayed 7.9 per cent copper and trace gold.

BIBLIOGRAPHY

EMPR OF 1994-14
GSC MAP 1064A
GSC MEM *299, p. 99
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/19

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 063**

NATIONAL MINERAL INVENTORY: 093E1,2 Cu1

NAME(S): **SPECULAR**, CHEZKO RIVER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E01W 093E02E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 07 58 N
LONGITUDE: 126 29 48 W
ELEVATION: 945 Metres

NORTHING: 5889969
EASTING: 667469

LOCATION ACCURACY: Within 1 KM

COMMENTS: North side of Chezko River, about 3.2 kilometres from Tesla Lake.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Galena Pyrite
ALTERATION: Hematite Silica
ALTERATION TYPE: Oxidation Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

STRIKE/DIP: 105 Polymetallic veins Ag-Pb-Zn±Au
135/90 TREND/PLUNGE:

DIMENSION:
COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Specular occurs on the north side of Chezko River, about 3.2 kilometres from Tesla Lake. In 1926, the property was owned by C.W. Frank. Work was limited to open cutting.

A silicified and oxidized shear zone about 4.5 metres wide occurs in andesite that Geological Survey of Canada maps indicate belongs to the Jurassic Hazelton Group. Within the zone is a 15-centimetre quartz vein that is mineralized with chalcopyrite, hematite, pyrite, and galena.

A sample assayed 3.59 per cent copper, 54.9 grams per tonne silver and 0.69 gram per tonne gold.

BIBLIOGRAPHY

EMPR AR *1926-A150
EMPR FIELDWORK 1992, pp. 475-481
EMPR OF 1994-14
GSC MAP 1064A
GSC MEM *299, p. 99
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/19

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 064**

NATIONAL MINERAL INVENTORY:

NAME(S): **RENE, JAM**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 14 23 N
LONGITUDE: 126 41 51 W
ELEVATION: 1372 Metres

NORTHING: 5901412
EASTING: 653653

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is underlain mainly by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. At the main showing pods of chalcopyrite, pyrite, and bornite occur in fractures in andesite.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 1064A
GSC SUM RPT 1920, part A
GSC P 72-1A; 79-1A
GSC OF 708
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 518
REPORT: RGEN0100

MINFILE NUMBER: **093E 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **RON 47**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 12 41 N
LONGITUDE: 126 44 43 W
ELEVATION: 1981 Metres

NORTHING: 5898159
EASTING: 650564

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Unknown
TYPE: D03 Volcanic redbed Cu 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>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Amygdaloidal Tuffaceous Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain mainly by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Stratabound mineralization consisting of disseminated chalcopyrite and minor bornite occurs in amygdaloidal tuffaceous andesite close to the contact with a friable red basalt.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 1064A
GSC SUM RPT 1920, part A
GSC P 72-1A; 79-1A
GSC OF 708
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 065**

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 519
REPORT: RGEN0100

MINFILE NUMBER: **093E 066**

NATIONAL MINERAL INVENTORY: 103H8 Cu2

NAME(S): **STEWART**, TECKLA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E12W
BC MAP:

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 31 00 N
LONGITUDE: 127 59 48 W
ELEVATION: Metres

NORTHING: 5930216
EASTING: 566527

LOCATION ACCURACY: Within 1 KM

COMMENTS: On Kemano River, 6 miles up from Gardner Canal.

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal

TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Main host is a dike of unknown composition within the Coast Plutonic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline

TERRANE: Undivided Metamorphic Assembl.

PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

Gold, silver and copper values are associated with a 60 metre wide dike in granodiorite of the Coast Plutonic Complex. Bornite and chalcopyrite carrying gold and silver values also occurs in small veins and disseminations.

BIBLIOGRAPHY

EMPR AR 1917-43; 1921-40; 1922-44
GSC MAP 278A; 1970-23
GSC SUM RPT 1921, part A, p. 39
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1994-14
EMPR BULL 42

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/22

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 066**

MINFILE NUMBER: **093E 067**

NATIONAL MINERAL INVENTORY: 093E6 Au2

NAME(S): **CORE B**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 20 N
LONGITUDE: 127 10 26 W
ELEVATION: 1158 Metres

NORTHING: 5922648
EASTING: 621299

LOCATION ACCURACY: Within 500M

COMMENTS: "E" showing (Assessment Report 11530).

COMMODITIES: Copper Gold Silver Iron

MINERALS

SIGNIFICANT: Chalcopyrite Hematite Pyrite
ASSOCIATED: Quartz Calcite Specularite
ALTERATION: Magnetite Epidote Chlorite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Podiform
CLASSIFICATION: Skarn Industrial Min.
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal
Middle Jurassic	Hazelton	Telkwa	

LITHOLOGY: Feldspar Porphyry
Diabase
Rhyolite
Andesite

HOSTROCK COMMENTS: The host intrusive is either a dike or a sill within the Telkwa Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain primarily by pyroclastics and flows of rhyolitic to andesitic composition belonging to the Telkwa Formation of the Jurassic Age Hazelton Group. The showing is hosted by a dike or sill of feldspar porphyry and diabase near the intersection of a northeasterly trending fault and a fault with a general east-west strike. Mineralization consists of stringers and pods of specularite, chalcopyrite, pyrite and magnetite associated with quartz and skarn minerals.

BIBLIOGRAPHY

EMPR ASS RPT 1192, *9066, *11530, 14526
GSC MEM 299, pp. 95-96
EMPR EXPL 1980-316; 1983-403
EMPR AR 1945-A70
GSC MAP 1064A
GSC OF 708
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/20

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 521
REPORT: RGEN0100

MINFILE NUMBER: **093E 068**

NATIONAL MINERAL INVENTORY:

NAME(S): **SLEEPER**, CORE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 27 42 N
LONGITUDE: 127 12 54 W
ELEVATION: 884 Metres

NORTHING: 5925112
EASTING: 618505

LOCATION ACCURACY: Within 500M

COMMENTS: Mouth of Coles Creek (Assessment Report 13079).

COMMODITIES: Silver

Copper

MINERALS

SIGNIFICANT: Tetrahedrite Chalcopyrite Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)
COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Lapilli Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The occurrence is associated with a 1 to 3 metre wide shear zone in Middle Jurassic lapilli tuff of the Hazelton Group. The zone has a general east-northeast trend. Fine chalcopyrite and tetrahedrite occur as disseminations and fracture fillings.

BIBLIOGRAPHY

EMPR ASS RPT 13079, 14536
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/20

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 068**

MINFILE NUMBER: **093E 069**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHICKAMIN GROUP**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 25 30 N
LONGITUDE: 127 01 06 W
ELEVATION: Metres

NORTHING: 5921379
EASTING: 631673

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Silver Lead Zinc Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
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>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff
Greywacke
Argillite
Breccia
Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Galena, sphalerite, chalcopyrite and gold are found in veins varying from 2.5 to 60 centimetres wide, but averaging less than 30 centimetres which may persist for over 610 metres. The mineralization occurs in interbedded siliceous tuffs, greywacke, breccia, argillite, and flows of the Hazelton Group.

BIBLIOGRAPHY

EMPR AR 1955-27
N MINER Sept. 19, 1918; July 24, 1969
W MINER Sept. 1968
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/22

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 070**

NATIONAL MINERAL INVENTORY:

NAME(S): **KAYO, KEMANO GOLD, SOUTH SIDE,
BEAVER, DAVID, SLIDE,
VANCE, PAT, MAIN,
SVEN, JOHNNY, R,
Z**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E05E
BC MAP:

LATITUDE: 53 29 22 N
LONGITUDE: 127 41 43 W
ELEVATION: 1450 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Located on a valley slope opposite Sandifer Peak and the Smith-Nash occurrence (093E 014), 18 kilometres southeast of Kemano (Assessment Report 17036).

MINING DIVISION: Skeena

UTM ZONE: 09 (NAD 83)

NORTHING: 5927512
EASTING: 586565

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Gold Chalcopyrite Bornite Tetrahedrite
ASSOCIATED: Quartz
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Mesothermal
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
DIMENSION: Metres STRIKE/DIP: TREND/PLUNGE: /

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Mesozoic-Cenozoic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Coast Plutonic Complex

LITHOLOGY: Calcareous Phyllite
Meta Greywacke
Chlorite Schist
Cherty Hornfels
Quartzite
Greenstone
Diorite
Granodiorite
Granite
Gneissic Leucocratic Granite

GEOLOGICAL SETTING

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

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Kitimat Ranges

GRADE:

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1988

COMMODITY	GRADE	
Silver	38.2000	Grams per tonne
Gold	24.3000	Grams per tonne
Copper	6.5700	Per cent

COMMENTS: The average of 6 samples from a trench on the Kayo zone.
REFERENCE: Assessment Report 18479, page 7.

CAPSULE GEOLOGY

The "South Area" or "South Side" was discovered in 1987, about 3.5 kilometres southeast of the Smith-Nash vein (093E 014), on the opposite side of the valley. A total of sixteen gold-bearing veins have been found of which eight warrant further exploration. These are the Vance, Kayo, Pat, Main, Sven, Johnny, R and Z veins.

The geological setting is similar to that of the Smith-Nash

CAPSULE GEOLOGY

occurrence. Intermediate to acidic intrusive rocks (diorite, granodiorite, granite, gneissic leucogranite) of the Tertiary-Jurassic Coast Plutonic Complex have intruded northwest striking, moderately east dipping metasediments of the Upper Triassic-Middle Jurassic Hazelton Group. The metasediments comprise metagreywacke, calcareous phyllite, chlorite schist, thin bedded cherty hornfels and quartzite with black shaly horizons. Greenstone is also prevalent in the area. Dikes composed of andesite, diabase and hornblende porphyry cut the metasediments.

North-northeast trending fractures and shearing control quartz veins. Mineralization consists of native gold, pyrite, chalcopyrite, bornite and tetrahedrite. Pyrite occurs in massive form, blebs, streaks, fracture fillings and pods within the quartz. Chalcopyrite is evident as disseminations and fracture fillings. A distinct brown iron alteration (limonite) envelope surrounds the quartz veining and is up to 2 metres wide.

In 1988, a trenching program on the Kayo vein was completed. The average of 6 samples from a trench yielded 6.57 per cent copper, 24.3 grams per tonne gold and 38.2 grams per tonne silver (Assessment Report 18479, page 7).

BIBLIOGRAPHY

EMPR ASS RPT *17036, *18479
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1994-14
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/01/20

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 071**

NATIONAL MINERAL INVENTORY:

NAME(S): **IDA**, NADI

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 55 11 N
LONGITUDE: 127 04 19 W
ELEVATION: Metres

NORTHING: 5976312
EASTING: 626619

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of claim block as of 1973.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cretaceous	Skeena	Undefined Formation	
Lower Jurassic	Hazelton	Telkwa	
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Andesite
Andesitic Volcanic Rock
Tuff
Porphyritic Quartz Monzonite
Quartz Latite
Tonalite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Ida property is underlain by andesitic volcanic rocks of the Lower Cretaceous Skeena Group. A small area of Lower Jurassic tuffs, belonging to the Telkwa Formation (Hazelton Group), occurs just south of Copper Pond in the mineralized area. Two small stocks were intersected in drillholes; one centred around Copper Pond, and one just east of Camp Lake. The Copper Pond stock is composed of porphyritic quartz monzonite and quartz latite. The Camp Lake stock is tonalitic.

Porphyry-type alteration is associated with both intrusions. An extensive sulphide system surrounds both intrusions, and is particularly intense just southeast of Copper Pond. To date, mineralization has been found only at Copper Pond; a significant area of disseminated chalcopyrite with copper grades varying between 0.01 and 0.61 per cent also contains appreciable molybdenum.

BIBLIOGRAPHY

GSC OF 708
EMPR ASS RPT 3776, *4181, 4182, 4183, *20101
EMPR GEM 1970-108; 1972-345; 1973-321
EMPR OF 1989-1; 1994-14
EMPR BULL 75
GSC MEM 299
GSC MAP 367A; 1064A
GSC SUM RPT 1924, Part A

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/22

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **L & H, ALE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 57 44 N
LONGITUDE: 127 04 03 W
ELEVATION: 1021 Metres

NORTHING: 5981048
EASTING: 626782

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Kaolinite Epidote
ALTERATION TYPE: Silicific'n Argillic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Hydrothermal Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Middle Jurassic
Unknown

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY:

Basalt
Andesite
Plagioclase Porphyry
Hornfels Basalt
Granodiorite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nechako Plateau

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

The area is underlain by Jurassic Hazelton Group argillic to propylitic to silicic altered rocks consisting of basalt, andesite and plagioclase porphyry. Basalt is hornfelsed and epidotized in the vicinity of a small pluton of granodiorite and quartz diorite.

A quartz vein stockwork in hornfelsed basalt and granodiorite hosts chalcopyrite, pyrite and minor molybdenite mineralization.

BIBLIOGRAPHY

EMPR ASS RPT *4184
EMPR EXPL 1976-E141
EMPR GEM 1972-346
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC SUM RPT 1924, part A
GSC P 72-1A; 79-1A
EMPR OF 1989-1; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 527
REPORT: RGEN0100

MINFILE NUMBER: **093E 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOMINION**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 44 07 N
LONGITUDE: 127 15 10 W
ELEVATION: 1667 Metres

NORTHING: 5955486
EASTING: 615250

LOCATION ACCURACY: Within 5 KM
COMMENTS: South slope of Sweeney Mountain at 1667 metres.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Hematite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Unknown
TYPE: K01 Cu skarn

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>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Felsic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

A 30 to 60 centimetre wide zone in felsic volcanic rocks carries chalcopyrite, magnetite, pyrite and hematite mineralization.

BIBLIOGRAPHY

EMPR AR 1916-K165
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC SUM RPT 1924, part A
EMPR OF 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/13

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 073**

MINFILE NUMBER: **093E 074**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIBOLA MOUNTAIN**, WEST VIEW, SIBOLA EAST,
SIBOLA WEST

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:
LATITUDE: 53 45 15 N
LONGITUDE: 127 11 06 W
ELEVATION: 1630 Metres
LOCATION ACCURACY: Within 500M

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5957700
EASTING: 619666

COMMENTS: Located on the southern flank of Sibola Peak about 80 kilometres southwest of the community of Houston (Assessment Report 18907).

COMMODITIES: Gold Molybdenum Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Chalcopyrite Galena Molybdenite
ASSOCIATED: Quartz Pyrrhotite
ALTERATION: Quartz Sericite
ALTERATION TYPE: Silicific'n Sericitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 61 x 47 Metres
COMMENTS: Sibola East zone.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	
Upper Cretaceous			Bulkley Intrusions

LITHOLOGY: Andesite
Fragmental Andesite
Tuffaceous Andesite
Andesite Porphyry
Porphyritic Dacite
Rhyolite Tuff
Rhyolite
Hornblende Biotite Granodiorite
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1988

COMMODITY	GRADE	
Silver	70.9000	Grams per tonne
Gold	11.9000	Grams per tonne
Zinc	3.3700	Per cent

COMMENTS: Sample across 2.29 metres of core.
REFERENCE: Assessment Report 18907.

CAPSULE GEOLOGY

The Sibola Mountain property is underlain predominantly by massive, fragmental and tuffaceous andesites, andesite porphyry, minor porphyritic dacite and welded rhyolite tuff of the Lower Jurassic Telkwa Formation (Hazelton Group). Hornblende biotite granodiorite of the Late Cretaceous Bulkley Intrusions is exposed in the northern portion of the property and locally, the andesitic units are altered to biotite hornfels. Late post-mineralization aplite dikes intrude all of the units.

Two parallel, northwest striking and near vertical dipping mineralized zones are hosted in andesite and exposed by trenches near

CAPSULE GEOLOGY

the centre of the property. The mineralized zones are 259 metres apart and are called the Sibola West and Sibola East zones.

The Sibola East zone (formerly the West View) is characterized by pyrite-sphalerite mineralization present as stockwork stringers and thin lenses accompanied by sulphide-rich quartz stringers and veins. Minor amounts of chalcopyrite, molybdenite and galena are also evident. The wallrock andesite is silicified and sericitized. Resampling of the discovery trench yielded 6.5 grams per tonne gold, 49.3 grams per tonne silver and 10.1 per cent zinc over 0.9 metre. Nine drillholes delineated the Sibola East zone over a strike length of approximately 61 metres to a vertical depth of 47 metres. The drilling yielded erratic but strongly anomalous to significant gold, silver and zinc values over narrow widths; the deepest hole assayed 11.4 grams per tonne gold, 70.9 grams per tonne silver and 3.37 per cent zinc over 2.29 metres of core length. The zone is open along strike to the southeast and to depth (Assessment Report 18907).

The Sibola West zone consists of diffuse phyllic alteration with several per cent disseminated pyrite enveloping a massive pyrite-pyrrhotite lens exposed in a trench. The highest gold value obtained was 2.0 grams per tonne.

A bulk sample from a surface trench from the Sibola East zone containing massive sphalerite and pyrite with minor chalcopyrite was sent for metallurgical testing. Head assays reveal that the ore contains considerable gold and silver values in addition to zinc, minor copper and lead (Assessment Report 23112).

BIBLIOGRAPHY

EMPR AR 1916-K163
EMPR ASS RPT 15786, 16578, *18907, 23112
EMPR BULL 75, pp. 53,69
EMPR OF 1989-1; 1994-14
GSC MAP 367A; 1064A
GSC MEM 299
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, Part A
WWW <http://www.infomine.com/>
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 075**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRAND VIEW**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 45 06 N
LONGITUDE: 127 16 53 W
ELEVATION: Metres

NORTHING: 5957263
EASTING: 613318

LOCATION ACCURACY: Within 5 KM
COMMENTS: On Sweeney Mountain near a glacier.

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Galena Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
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>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Stringers and veins are reported to carry pyrite and galena. Although the host rock is not specifically mentioned the general area has been mapped by the Geological Survey of Canada as being underlain by andesitic fragmentals of the Jurassic Hazelton Group.

BIBLIOGRAPHY

EMPR AR 1916-K165
GSC MEM 299
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, part A
GSC MAP 367A; 1064A
EMPR OF 1989-1; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/13

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 076**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOB 5**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 14 23 N
LONGITUDE: 126 42 25 W
ELEVATION: 1676 Metres

NORTHING: 5901392
EASTING: 653023

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is underlain mainly by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Fracture type mineralization consisting of chalcopyrite and malachite occurs in andesite.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 077**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOB 2**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 14 57 N
LONGITUDE: 126 43 04 W
ELEVATION: 1829 Metres

NORTHING: 5902419
EASTING: 652266

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Unknown
TYPE: D03 Volcanic redbed Cu 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>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is underlain mainly by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Stratabound mineralization consisting of disseminated chalcopyrite and minor bornite occurs in amygdaloidal tuffaceous andesite close to the contact with friable red basalt.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 078**

NATIONAL MINERAL INVENTORY:

NAME(S): **JAM 7**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 13 47 N
LONGITUDE: 126 43 51 W
ELEVATION: Metres

NORTHING: 5900229
EASTING: 651464

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is underlain by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Fracture mineralization consisting of chalcopyrite, pyrite, and malachite occurs in andesite.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A
GSC P 72-1A; 79-1A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 534
REPORT: RGEN0100

MINFILE NUMBER: **093E 079**

NATIONAL MINERAL INVENTORY:

NAME(S): **RON 43**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 12 49 N
LONGITUDE: 126 43 22 W
ELEVATION: 1920 Metres

NORTHING: 5898454
EASTING: 652059

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Fracture filling mineralization consisting of chalcopyrite and pyrite occurs in two 30 centimetres fractures in andesite.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 079**

MINFILE NUMBER: **093E 080**

NATIONAL MINERAL INVENTORY:

NAME(S): **RON 48**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 12 25 N
LONGITUDE: 126 44 02 W
ELEVATION: 1981 Metres

NORTHING: 5897689
EASTING: 651340

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Syngenetic Igneous-contact
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>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Stratabound mineralization consisting of disseminated chalcopyrite, pyrite, and minor bornite occurs in amygdaloidal tuffaceous andesite close to the contact with friable red basalt.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 081**

NATIONAL MINERAL INVENTORY:

NAME(S): **RON 4**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 12 22 N
LONGITUDE: 126 43 10 W
ELEVATION: 1981 Metres

NORTHING: 5897627
EASTING: 652308

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain mainly by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Fracture type mineralization consisting of chalcopyrite and pyrite occurs over a width of about 1.2 metres in andesite.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 082**

NATIONAL MINERAL INVENTORY:

NAME(S): **RON 10**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E02E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 12 21 N
LONGITUDE: 126 43 19 W
ELEVATION: 1890 Metres

NORTHING: 5897591
EASTING: 652142

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 3540.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesite
Rhyolite
Basalt
Quartz Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain mainly by andesite, rhyolite and minor basalt of the Jurassic Hazelton Group. Fracture type mineralization consisting of chalcopyrite and pyrite occurs over a width of about 2.4 metres in what is reported as a quartz breccia zone.

BIBLIOGRAPHY

EMPR ASS RPT *3540
EMPR PF (*Jackson, E.V. (1973): Preliminary Mineral Potential Appraisal of RON, BOB Claims Area)
EMPR GEM 1972-339
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 083**

NATIONAL MINERAL INVENTORY:

NAME(S): **RD, RSM**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E13E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 59 19 N
LONGITUDE: 127 34 14 W
ELEVATION: 1250 Metres

NORTHING: 5983200
EASTING: 593722

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of RSM claim block.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Volcanic Breccia
Granite
Monzonitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Showing is underlain by Jurassic Hazelton Group andesite and volcanic breccia which toward the south have been intruded by a small granite plug and dikes and tongues of monzonite porphyry. Variable amounts of pyrite with some associated chalcopyrite occurs as disseminations and along fractures in the volcanics, particularly near intrusive contacts. Stronger mineralization occurs in one area where pyrite and chalcopyrite are found in silicified fracture zones in the volcanics. The zones trend north-northeasterly and are up to 30 centimetres wide. In general the copper mineralization is weak, restricted and erratic in distribution. Very minor molybdenite has been reported.

BIBLIOGRAPHY

EMPR ASS RPT 4868, 5595, *7715
EMPR EXPL 1975-E128; 1979-213
EMPR GEM 1973-322; 1974-245
GSC MEM 299
GSC OF 708
GSC P 72-1A; 79-1A
GSC MAP 367A; 1064A
GSC SUM RPT 1924, part A
EMPR OF 1990-15; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/09

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 084**

NATIONAL MINERAL INVENTORY:

NAME(S): **TETS**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E15W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 50 47 N
LONGITUDE: 126 57 25 W
ELEVATION: Metres

NORTHING: 5968366
EASTING: 634405

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claim block.

COMMODITIES: Copper Zinc Lead Silver

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena Bornite Chalcocite
 Copper Pyrite
ASSOCIATED: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Breccia Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff
 Volcanic Breccia
 Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is mainly underlain by Jurassic Hazelton Group rocks consisting of volcanic flows, volcanic tuffs and volcanic breccias. Mineralization consists of chalcopyrite, sphalerite, bornite, native copper, chalcocite and galena. The mineralization occurs in breccia zones, in fractures and as open space fillings in the volcanics.

BIBLIOGRAPHY

EMPR EXPL 1978-E198
EMPR GEM 1973-326; 1974-248
GCNL #108, 1979
EMPR ASS RPT 4580, *7101, 9072, 9248, 10308, 12175, 13648, *16003,
17343, 18733
GSC MEM 299
GSC MAP 367A; 1064A
GSC P 72-1A; 79-1A
GSC OF 708
GSC SUM RPT 1920, part A
EMPR OF 1994-14
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/03

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 085**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHELFORD HILLS**

MINING DIVISION: Omineca

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093E15E
 BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 53 18 N
 LONGITUDE: 126 37 08 W
 ELEVATION: 1402 Metres

NORTHING: 5973725
 EASTING: 656484

LOCATION ACCURACY: Within 500M

COMMENTS: Area of rock sampling about 10 kilometres north of Ootsa Lake and 60 kilometres south of the community of Houston (Assessment Report 19107).

COMMODITIES: Zinc Lead Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena
 ALTERATION: Sericite Clay Chlorite Quartz
 ALTERATION TYPE: Sericitic Argillic Silicific'n
 MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
 CLASSIFICATION: Epithermal Hydrothermal
 TYPE: H04 Epithermal Au-Ag-Cu: high sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown	Unnamed/Unknown Group	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Felsic Volcanic
 Dacitic Rhyolitic Tuff
 Dacite Andesite
 Andesite Basalt
 Diorite
 Monzonite
 Granodiorite
 Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
 TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Rock
 COMMODITY
 Gold
 Zinc

YEAR: 1989

<u>GRADE</u>	<u>Grams per tonne</u>
0.3100	Per cent
0.4300	

REFERENCE: Assessment Report 19107, page 1.

CAPSULE GEOLOGY

The Shelford Hills showing is underlain by felsic to mafic subaerial volcanic rocks intruded by (coeval?) stocks of gabbro to monzonite. Large areas of weakly altered (sericite, clay, chlorite or quartz) felsic volcanics with disseminated pyrite mineralization occur along part of a circular structure. The volcanic rocks comprise dacitic to rhyolitic tuffs and tuff breccias, andesitic to dacitic flows and basaltic to andesitic flows. Intrusive rocks comprise a unit of gabbro to diorite, and a unit of diorite-granodiorite-monzonite.

The most common type of mineralization consists of rusty rhyolites and dacites with disseminated pyrite or iron oxides after pyrite. Pyrite is usually associated with siliceous, sericitic or clayey alteration of the felsic volcanics. Minor disseminated sphalerite and galena have also been observed.

Rock analyses are highly anomalous in a few samples for zinc and gold (up to 0.43 per cent and 0.31 gram per tonne gold, respectively)(Assessment Report 19107, page 1).

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RUN TIME: 11:27:59

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BIBLIOGRAPHY

EMPR ASS RPT 17804, *19107
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
EMPR OF 1994-14

DATE CODED: 1995/01/29
DATE REVISED: 1995/02/15

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 086**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 42 12 N
LONGITUDE: 127 10 29 W
ELEVATION: Metres

NORTHING: 5952062
EASTING: 620489

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of Wee claim block.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ALTERATION: Epidote
ALTERATION TYPE: Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Andesite
Pyroclastic
Dacite
Tuff
Granodiorite
Sandstone
Shale
Volcanic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The property is underlain by a sedimentary-volcanic section of Jurassic Hazelton Group rocks that has been intruded by several small stocks. From oldest to youngest the Hazelton section consists of andesitic tuffs and flows, pyroclastic material characterized by lapilli tuffs, amygdaloidal and/or porphyritic andesite with inter-bedded dacitic flows and pyroclastics, and massive arkosic sandstone and finely bedded shale. Although sulphide mineralization occurs throughout the volcanics and in the granodiorite, the most significant chalcopyrite and molybdenite mineralization occurs in a number of breccia zones within the volcanics. The breccia bodies are composed of angular tuff and andesite fragments. Epidote alteration is common in places.

BIBLIOGRAPHY

EMPR ASS RPT 5978, *7006, 7577, 22558, 23085
EMPR BULL 75
EMPR EXPL 1976-E139; 1978-E196; 1979-212; 2001-1-9
EMPR FIELDWORK 1986, pp. 171-179
EMPR GEM 1974-243
EMPR OF 1987-4; 1994-14
GSC MAP 367A; 1064A
GSC MEM 299
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, Part A

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/03

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 087**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUS**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 43 56 N
LONGITUDE: 127 09 19 W
ELEVATION: Metres

NORTHING: 5955309
EASTING: 621689

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of SUS claim block.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Syngenetic Porphyry Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic Unknown	Hazelton	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Sediment/Sedimentary
Intrusive
Pyroclastic
Felsic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Mineralization is generally weak and consists of pyrite and rare chalcopyrite in intrusive rocks and pyrite, pyrrhotite and rare chalcopyrite in a sedimentary unit. Percussion holes intersected a variety of sedimentary and volcaniclastic rocks which have been intruded by a felsic body, probably granitic, which is strongly altered in one hole.

BIBLIOGRAPHY

EMPR ASS RPT 5287, 10052, 11797
EMPR GEM 1973-320; *1974-244
GSC MAP 367A; 1064A
GSC MEM 299
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, part A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/03

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 088**

NATIONAL MINERAL INVENTORY:

NAME(S): **PAM**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 51 34 N
LONGITUDE: 127 00 59 W
ELEVATION: 1036 Metres

NORTHING: 5969708
EASTING: 630454

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of percussion drilling about 70 kilometres southwest of the community of Houston.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite
ALTERATION: Biotite K-Feldspar Quartz Sericite Clay
ALTERATION TYPE: Potassic Sericitic Propylitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Lower Cretaceous
Unknown

GROUP

Skeena

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Volcanic Flow
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1991

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Copper

0.1100

Per cent

Molybdenum

0.0100

Per cent

COMMENTS: The best hole average over 73 metres.

REFERENCE: Assessment Report 21969, page 21.

CAPSULE GEOLOGY

The Pam occurrence is centred over a small granodiorite stock which intrudes Lower Cretaceous Skeena Group volcanic flows and tuffs. The stock and adjacent volcanics are extensively pyritized and altered. The alteration is concentrically zoned with a central potassic core grading outward into a middle phyllic zone and an outer propylitic zone.

The phyllic zone has a diameter of about 1.2 kilometres and characteristically contains 2-10 per cent pyrite as fracture coatings, veins and disseminations within a grey to white quartz-sericite-clay matrix. The extent of the potassic zone is uncertain; a few outcrops and drillholes along what is inferred to be the southern and western edges of the zone show secondary biotite and K-spar with a moderate to strong quartz-sericite overprint. The main part of the potassic zone is thought to occupy the central part of the phyllic alteration zone and underlie a core measuring approximately 800 by 500 metres.

Several drillholes intersected significant copper-molybdenum mineralization with the best hole averaging 0.11 per cent copper and 0.01 per cent molybdenum over 73 metres (Assessment Report 21969). Although the mineralization intersected to date is low grade, there is a definite increase in grade toward the potassic core.

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RUN TIME: 11:27:59

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BIBLIOGRAPHY

EMPR ASS RPT 5223, 5668, 5669, *21969
EMPR GEM 1973-324; 1974-247; 1975-E131
EMPR OF 1989-1; 1994-14
EMPR BULL 75
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, Part A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 089**

NATIONAL MINERAL INVENTORY:

NAME(S): **SYLVIA**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)

LATITUDE: 53 51 01 N
LONGITUDE: 127 10 51 W
ELEVATION: Metres

NORTHING: 5968398
EASTING: 619667

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of percussion drilling about 70 kilometres southwest of the community of Houston.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite
ALTERATION: Biotite Clay Sericite
ALTERATION TYPE: Potassic Sericitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Unknown
Unknown

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Quartz Monzonite
Volcanic
Monzonite Dike
Quartz Monzonite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1991

COMMODITY

Copper
Molybdenum

GRADE

0.3300 Per cent
0.0200 Per cent

COMMENTS: Average over a 63-metre interval.

REFERENCE: Assessment Report 21969, page 23.

CAPSULE GEOLOGY

Porphyry-style copper-molybdenum mineralization occurs on the south edge of a granodiorite stock at the Sylvia occurrence. The mineralization has been essentially identified by a single drillhole (S-8) which reportedly intersected mineralization over an entire bedrock interval of 63 metres averaging 0.33 per cent copper and 0.02 per cent molybdenum with higher grade intervals grading up to 0.63 per cent copper and 0.13 per cent molybdenum (Assessment Report 21969, page 23). The drillhole is at the inside edge of a crescent-shaped pyritic zone which has a maximum width of 400 to 500 metres and an arc length of about 2000 metres. This zone, which contains 1-5 per cent pyrite as fracture fillings and disseminations, straddles the south contact of the granodiorite stock. Volcanics adjacent to the stock are variably hornfelsed and locally cut by numerous fine-grained monzonite/quartz monzonite dikes.

The mineralization occurs within a medium-grained granodiorite and fine-grained quartz monzonite with up to 10 per cent felted masses of fine-grained biotite (probably secondary). Thin sections of this material show feldspars partly altered to clay and sericite.

In outcrop, about 1.2 kilometres east of the original drillhole, chalcopyrite occurs as disseminations and fracture fillings within an

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CAPSULE GEOLOGY

epidote-rich tuff adjacent to a grey, feldspar porphyry dike.

BIBLIOGRAPHY

EMPR ASS RPT 5670, 5671, 6078, *21969
EMPR GEM 1973-324; 1974-246; 1975-E129; 1976-E140
EMPR OF 1989-1; 1994-14
EMPR BULL 75
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, Part A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 090**

NATIONAL MINERAL INVENTORY:

NAME(S): **CS, NS, SMOKE MOUNTAIN,
FIRE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14W
BC MAP:
LATITUDE: 53 53 29 N
LONGITUDE: 127 16 08 W
ELEVATION: Metres

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5972826
EASTING: 613763

LOCATION ACCURACY: Within 1 KM
COMMENTS: Located 100 kilometres due south of the community of Smithers, on the southern slopes of Smoke Mountain (Assessment Report 20012).

COMMODITIES: Copper Molybdenum Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Sphalerite Pyrite
ALTERATION: Epidote Carbonate Chlorite Quartz Magnetite
Hematite
ALTERATION TYPE: Propylitic Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au 105 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	
Upper Cretaceous			Kasalka Intrusions
Upper Cretaceous			Bulkley Intrusions

LITHOLOGY: Quartz Diorite
Tuff
Agglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Lithologies present in the CS occurrence area comprise volcanic and lesser sedimentary rocks of the Lower to Middle Jurassic Hazelton Group, Lower to Upper Cretaceous Kasalka Group, Lower Cretaceous Skeena Group and Middle Jurassic to Lower Cretaceous Bowser Lake Group. Tuffs of the Lower Jurassic Telkwa Formation (Hazelton Group) are the most common rock type, varying from finely laminated to coarse agglomerates.

Stratigraphic units are intruded by two Late Cretaceous quartz dioritic stocks of the Bulkley and Kasalka intrusions. Exposed porphyry-type alteration and mineralization is associated with the Kasalka intrusion. Thermal alteration of sedimentary rocks occurs at the contact of the Kasalka intrusion, but elsewhere stratigraphic rocks exhibit a regional epidote-carbonate-chlorite-quartz assemblage.

Drilling in the intrusive rocks intersected chalcopyrite, molybdenite, pyrite, magnetite and hematite occurring as disseminations and in veinlets. Traces of sphalerite have also been noted. The hostrocks are well fractured and exhibit concentric zones of hydrothermal alteration.

BIBLIOGRAPHY

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EMPR GEM 1974-246
EMPR OF 1989-1; 1994-14
EMPR BULL 75
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 549
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT 1924, Part A

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/04

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 091**

NATIONAL MINERAL INVENTORY:

NAME(S): **TARA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 50 03 N
LONGITUDE: 127 13 43 W
ELEVATION: 1127 Metres

NORTHING: 5966526
EASTING: 616569

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of claim block about 70 kilometres southwest of the community of Houston.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite Magnetite
ALTERATION: Quartz Sericite Clay Pyrite
ALTERATION TYPE: Sericitic Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry 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

Tertiary

Unnamed/Unknown Informal

LITHOLOGY: Felsic Intrusive

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY

YEAR: 1975

Copper

GRADE
0.1200 Per cent

COMMENTS: Best interval over 3 metres.

REFERENCE: Assessment Report 21969, page 26.

CAPSULE GEOLOGY

At the Tara occurrence, low grade porphyry-style mineralization is hosted by a Tertiary felsic stock and occurs within the central part of a broad quartz-sericite-pyrite alteration zone. The alteration is well exposed in a creek canyon which dissects the southern part of the zone. Here, altered rocks typically are light green and pale greenish grey to white and contain abundant finely disseminated pyrite within a quartz-sericite-clay matrix. Patchy silicification often imparts a spotted texture to altered units.

In 1975, the best interval from drilling assayed 0.12 per cent copper over 3 metres (Assessment Report 21969, page 26). Chalcopyrite, molybdenite, magnetite and pyrite occur as fracture fillings and disseminations.

Minor chalcopyrite and malachite occur throughout a small outcrop area situated about 200 metres north of the canyon area and 200 metres east of Noranda's (circa 1975) easterly drillholes. The area contains a weak stockwork of drusy quartz veinlets and local, irregular-shaped zones of intense bleaching and silicification. The best of 3 samples collected from the zone assayed 0.13 per cent copper, 137 ppb gold and 42.7 ppm silver (Assessment Report 21969, page 26).

BIBLIOGRAPHY

EMPR ASS RPT 5646, *21969
EMPR GEM 1975-E130
EMPR OF 1989-1; 1994-14
EMPR BULL 75

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 551
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC SUM RPT 1924, Part A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 092**

NATIONAL MINERAL INVENTORY:

NAME(S): **RIP**, ANDREW BAY, MIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E15E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 49 57 N
LONGITUDE: 126 44 33 W
ELEVATION: Metres

NORTHING: 5967249
EASTING: 648560

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Rip claim block.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Magnetite Pyrite
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Epigenetic Hydrothermal Igneous-contact
TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Hornfels Pyroclastic
Greywacke
Siltstone
Pyroclastic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

CAPSULE GEOLOGY

Mineralization is associated with a sequence of greywackes, siltstones, volcaniclastics and hornfelsed equivalents belonging to the Hazelton Group. A quartz - chalcopyrite - molybdenite - magnetite stockwork occurs mainly in hornfels. Pervasive phyllic (sericitic) alteration occurs in the area of the stockwork.

BIBLIOGRAPHY

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EMPR GEM 1973-326; 1975-E131
EMPR EXPL 1980-318
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A; 1924, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/03

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 093**

NATIONAL MINERAL INVENTORY:

NAME(S): **BA, BB, BC,
BD**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E14E
BC MAP:

LATITUDE: 53 52 27 N
LONGITUDE: 127 07 43 W
ELEVATION: Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Property File Map.

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

NORTHING: 5971145
EASTING: 623032

COMMODITIES: Iron

MINERALS

SIGNIFICANT: Magnetite Hematite
ALTERATION: Chlorite Epidote
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Feldspar Porphyry
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is underlain by andesite, feldspar porphyry and tuff of the Jurassic Age Hazelton Group. Magnetite and hematite occur in small amounts throughout. Minor chlorite and epidote alteration is present.

BIBLIOGRAPHY

EMPR GEM 1976-E140
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, part A; 1924, part A
EMPR OF 1989-1; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/13

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 094**

NATIONAL MINERAL INVENTORY:

NAME(S): **DILYS**, DUAL

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E15W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 58 39 N
LONGITUDE: 126 53 55 W
ELEVATION: 838 Metres

NORTHING: 5983063
EASTING: 637810

LOCATION ACCURACY: Within 500M
COMMENTS: Trenching on Dilys Claim.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Unknown

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Unnamed/Unknown Informal

LITHOLOGY: Unknown

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Chalcopyrite(?) mineralization is reported to be exposed in trenching. No other information is known.

BIBLIOGRAPHY

EMPR ASS RPT 6126, 8229
EMPR GEM 1975-E145
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC SUM RPT 1920, part A
EMPR OF 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/04

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 095**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEAVER 7**, KEMANO

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E05E 093E12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 29 47 N
LONGITUDE: 127 58 06 W
ELEVATION: 800 Metres

NORTHING: 5927987
EASTING: 568438

LOCATION ACCURACY: Within 500M

COMMENTS: Located along the Sandifer Ridge in the lower U-shaped valley which hosts Sukwyakin Creek.

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Hazelton	Undefined Formation	Coast Plutonic Complex
Cretaceous-Tertiary			

LITHOLOGY: Greenstone
Tuff
Diorite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Stikine Plutonic Rocks
PHYSIOGRAPHIC AREA: Kitimat Ranges

CAPSULE GEOLOGY

The claim area is underlain by Upper Triassic to Middle Jurassic Hazelton Group greenstone, metasediments, amphibolites, gneiss and marble. Diorites and granites are exposed along the eastern margin of the Coast Range batholith.

Locally the A Zone hosts disseminated pyrite, chalcopyrite and pyrrhotite in a quartzite-limestone sequence. Grab samples assayed 0.62 to 2.33 grams per tonne gold.

About 200 metres west of the A Zone, disseminated pyrite occurs in a sheared diorite. A grab sample assayed 6.38 grams per tonne gold.

About 750 metres to the east, the East Zone hosts pyrite and chalcopyrite in a quartz vein which is housed in a shear zone. The shear lies within a siliceous mafic volcanic. In 1986, a sample assayed 6.93 grams per tonne gold and 0.66 per cent copper.

BIBLIOGRAPHY

EMPR AR 1952-A97,A98
EMPR EXPL 1981-326, 1986-C324,C325
EMPR ASS RPT 8834, 10086, *10747, 13420 *14752, *15677
EMPR BULL 42
GSC MEM 299
GSC MAP 1064A
EMPR OF 1994-14
Placer Dome File

DATE CODED: 1987/10/22
DATE REVISED: / /

CODED BY: LLC
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 096**

NATIONAL MINERAL INVENTORY:

NAME(S): **PLAY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 31 20 N
LONGITUDE: 127 02 46 W
ELEVATION: 1075 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

NORTHING: 5932142
EASTING: 629531

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ALTERATION TYPE: Propylitic Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	

LITHOLOGY: Lapilli Tuff
Tuffaceous Mudstone
Feldspar Porphyry
Diorite
Monzonitic Diorite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1986

COMMODITY	GRADE	
Silver	74.9000	Grams per tonne
Gold	4.0100	Grams per tonne

REFERENCE: Assessment Report 16146.

CAPSULE GEOLOGY

These showings occur in Telkwa Formation volcanic assemblages of the Hazelton Group. Intrusive dikes and plugs outcrop in vicinity of the showings. Most of the bedrock here is coarse to fine-grained lithic crystal lapilli tuffs, red tuffaceous mudstones and feldspar porphyries. Bedding appears to have a northeast trend. The intrusive rocks are comprised of diorite, monzonitic diorite and pink granite dikes and/or plugs.

Faulting is the most prominent structure at this locality and is significant with respect to mineralization. East-northeast and north-northeast are the two dominant fault directions. The east-northeast trend belongs to the regional Whitesail fault system. North trending faults along an east facing slope are exposed in association with quartz veins, stockworks, silicified zones and/or breccia system with strong propylitic alteration.

Several of these zones, anomalous in gold, were identified at roughly the 1075 metre elevation within 1200 metres of each other. The zones are sulphide poor with traces of pyrite to a 5 per cent maximum. The two most anomalous zones are the Camp Creek Zone and the Root Zone.

The Camp Creek Zone is greater than 50 metres wide and has been traced on strike for 200 metres. The mineralized zone trends from 10 to 25 degrees with mainly vertical dips. Grab samples returned values of 4.01 and 2.60 grams per tonne gold and 17.7 grams per tonne

CAPSULE GEOLOGY

silver. Highest values are associated with thin seams of finely disseminated pyrite and a dark unidentified mineral within quartz stringers.

Just over a kilometre away, the 15 metre wide Root Zone, within a small intermittent drainage, assayed 3.36 grams per tonne gold from a grab sample of quartz stringers.

The best silver value, from a sample of the Two Pond Creek Zone 500 metres north of the Root Zone, was 74.9 grams per tonne silver.

BIBLIOGRAPHY

EMPR ASS RPT 12326, *16146
GSC MEM 299
GSC BULL 270, p. 73
GSC OF 708-1980
EMPR BULL 66, p. 158; 75
CIM 1976, Vol. 15, p. 284
EMPR OF 1987-4; 1994-14

DATE CODED: 1987/12/15
DATE REVISED: / /

CODED BY: GJP
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 097**

NATIONAL MINERAL INVENTORY:

NAME(S): **HILL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E15W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 56 41 N
LONGITUDE: 126 59 23 W
ELEVATION: 1006 Metres

NORTHING: 5979243
EASTING: 631939

LOCATION ACCURACY: Within 500M

COMMENTS: Area of drilling about 2 kilometres south of Hill-Tout Lake, 50 kilometres south of the community of Houston (Assessment Report 20742).

COMMODITIES: Copper Gold Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Tetrahedrite
ALTERATION TYPE: Propylitic Potassic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Upper Cretaceous

GROUP

Hazelton

FORMATION

Telkwa

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Andesite
Andesite Breccia
Andesite Agglomerate
Dacite
Andesite Lapilli Tuff
Feldspar Porphyry Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY

YEAR: 1990

Gold
Copper
Zinc

GRADE

0.3400 Grams per tonne
0.1800 Per cent
0.3000 Per cent

COMMENTS: Highest assays.

REFERENCE: Assessment Report 20742, page 2.

CAPSULE GEOLOGY

The Hill property is underlain by a sequence of andesite breccia/agglomerate, dacite, andesite and andesite lapilli tuff of the Upper Triassic-Middle Jurassic Telkwa Formation (Hazelton Group). These rocks have been intruded by a feldspar porphyry quartz diorite of Late Cretaceous age.

Most of the volcanic rocks exhibit propylitic and potassic alteration and contain sulphides averaging about 3 per cent. Sulphides comprise pyrite and pyrrhotite with minor chalcopyrite, sphalerite and tetrahedrite. The highest copper assay in drill core was 0.18 per cent over 2 metres. The most significant gold value was 0.34 gram per tonne over 2 metres; and a 2-metre sample also yielded 0.3 per cent zinc (Assessment Report 20742, page 2).

BIBLIOGRAPHY

EMPR ASS RPT *20742
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 559
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1994-14

DATE CODED: 1995/01/29
DATE REVISED: 1995/01/30

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 098**

NATIONAL MINERAL INVENTORY:

NAME(S): **SKY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 43 12 N
LONGITUDE: 127 20 18 W
ELEVATION: 1341 Metres

NORTHING: 5953651
EASTING: 609647

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location north of Tahtsa Lake on Rhine Ridge, about 86 kilometres south of the community of Houston (Assessment Report 19361).

COMMODITIES: Silver Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite
ALTERATION: Silica Sericite Limonite Pyrite
ALTERATION TYPE: Silicific'n Sericitic Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 2 Metres STRIKE/DIP: 280/85N TREND/PLUNGE:
COMMENTS: Two veins between 5 and 10 centimetres wide striking 280 and 252 degrees and dipping vertically to 85 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cretaceous	Skeena	Undefined Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Volcanic Sediment/Sedimentary
Volcanic Rock
Sandstone
Mudstone
Volcanic Sandstone
Andesite
Andesite Flow
Intermediate Mafic Porphyritic Dike
Porphyritic Quartz Monzonite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 24.0000 Grams per tonne
Zinc 1.1000 Per cent

COMMENTS: Highest values from 2 samples over a strike length of between 1.6 and 2 metres. Also assayed greater than 9.9 per cent arsenic.
REFERENCE: Assessment Report 19361, page 13.

CAPSULE GEOLOGY

The Sky property is underlain by Lower Cretaceous Skeena Group sediments and volcanic rocks which are intruded by a series of dikes and intrusive bodies of variable composition. Skeena rocks comprise sandstones, mudstones, volcanic-derived sandstones and andesite flows. The intrusive bodies vary from coarse grained porphyritic quartz monzonite to granite. Dikes are intermediate to mafic in composition and feldspar porphyritic.
Structurally, the entire sequence of rocks is cut by a major fault system that appears to follow the trace of "West Creek". This fault is offset by a least two crosscutting right-lateral faults

CAPSULE GEOLOGY

which follow a roughly east-west orientation.

An extensive gossan zone exists on the property and is due to a widespread pyritic alteration zone along contacts of intrusive bodies with the host sediments and volcanics. The gossan is typified by a moderate to strong, orange-brown to reddish orange coloured limonite coating on the weathered rocks.

Massive sulphide mineralization comprising pyrite and arsenopyrite occurs in a hard silicified or silica cemented volcanic-derived sediment or volcanic rock. The sulphide mineralization occurs in two veins between 5 and 10 centimetres wide which strike 280 and 252 degrees and dip vertically to 85 degrees north, respectively. Two samples collected over a strike length of between 1.6 and 2 metres analysed up to 24 grams per tonne silver, 1.1 per cent zinc and greater than 9 per cent arsenic (Assessment Report 19361, page 13).

About 500 metres east, in "West Creek", massive pyrite veins occur in a monzonite to granite intrusive body and parallel the dominant joint orientation of 285 degrees dipping 85 degrees north. The veins are 10 to 20 centimetres wide and are from 1 to 5 metres apart. There is a distinct sericitic alteration envelope developed around the veins. A sample from the veins analysed 0.9 per cent copper, 0.1 per cent zinc, 22.1 grams per tonne silver and 0.1 per cent bismuth (Assessment Report 19361, page 13).

BIBLIOGRAPHY

GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR ASS RPT 17993, *19361
EMPR OF 1987-4; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 099**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRICE, KASALKA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 36 04 N
LONGITUDE: 127 22 19 W
ELEVATION: 1463 Metres

NORTHING: 5940375
EASTING: 607732

LOCATION ACCURACY: Within 500M

COMMENTS: Massive sulphide pod, 2 metres by 0.5 metre.

COMMODITIES: Gold Silver Zinc Copper Lead

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Galena Arsenopyrite Pyrrhotite
Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Massive Disseminated
CLASSIFICATION: Replacement
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous Kasalka Undefined Formation

LITHOLOGY: Andesite Flow
Volcanic Breccia
Andesite Lapilli Tuff
Feldspar Porphyritic Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The property is primarily underlain by volcanics of the Upper Cretaceous Kasalka Group consisting of andesitic flows, andesitic lapilli tuffs and heterolithic volcanic breccias. A feldspar porphyritic granite intrudes the volcanics. Mineralization occurs within the volcanics. Disseminations of pyrite and pyrrhotite are localized on fractures while small pods of massive pyrite and pyrrhotite occur within and adjacent to the fractures. The pods also carry appreciable gold and silver values and contain chalcopyrite and sphalerite with minor galena and arsenopyrite. The largest pod measures 2.0 metres by 0.5 metres. There is no apparent consistent orientation to the mineralized zones or the controlling fractures.

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EMPR ASS RPT *11507, 17311, 20211
EMPR EXPL 1983-413
EMPR OF 1987-4; 1994-14
EMPR BULL 75
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC SUM RPT 1924, Part A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1987/12/03

CODED BY: GSB
REVISED BY: LC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 100**

NATIONAL MINERAL INVENTORY:

NAME(S): **TROITSA PEAK, JESSE, CUMMINS CREEK,
DISCOVERY, ZINC CREEK, MORAINE,
CHALCO, WOLVERINE, BLITZ CREEK,
BLITZ KNOB**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:
LATITUDE: 53 33 56 N
LONGITUDE: 127 03 25 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Cummins Creek showing, centre of grid.

MINING DIVISION: Omineca
UTM ZONE: 09 (NAD 83)
NORTHING: 5936943
EASTING: 628682

COMMODITIES: Gold Silver Lead Zinc Copper
Gemstones

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopryrite Arsenopyrite Pyrite
ASSOCIATED: Quartz Barite
ALTERATION TYPE: Propylitic Argillic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 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>
Middle Jurassic	Hazelton	Undefined Formation	
Eocene	Ootsa Lake	Undefined Formation	

LITHOLOGY: Andesite Lapilli Tuff
Breccia
Greywacke
Siltstone
Tuffaceous Sandstone
Diorite Dike
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is largely underlain by andesitic tuffs of the Lower to Middle Jurassic Hazelton Group and by tuffs and heterolithic breccias of the Eocene Ootsa Lake Group. Some siltstones, greywackes and tuffaceous sandstones belonging to the Hazelton Group also occur on the property. Diorite dikes and plugs and granite plugs intrude the volcanics.

Locally intense hydrothermal activity has resulted in a number of showings exhibiting hydrothermal alteration, quartz veining and mineralization. Eight zones have been recognized and are: Discovery, Zinc Creek, Moraine, Chalco Creek, Wolverine, Blitz Creek, Blitz Knob and Cummins Creek. In a lot of cases the showings are associated with fracture zones. Anomalous gold and silver values and minor amounts of galena, sphalerite, chalcopryrite, arsenopyrite and pyrite occur in quartz-(carbonate) veins, along fractures and as disseminations adjacent to veins and fractures. The showings often exhibit argillic alteration envelopes which grade out into more general propylitic alteration. Most of the showings occur in Hazelton lapilli tuff, although a couple are in a sedimentary section.

R. Lord and B. Holden discovered doubly terminated quartz crystals as they sampled a quartz vein system. They also uncovered plates of 'pineapple' quartz which consist of tiny crystals that cascade down the sides of larger crystal faces. Collectors are showing a keen interest in the specimens.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 564
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *10875, *11512, *11709, 17654, 17792, 20817, 21720
EMPR EXPL 1982-282; 1983-409
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, Part A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
EMPR BULL 75

DATE CODED: 1985/07/24
DATE REVISED: 1987/11/23

CODED BY: GSB
REVISED BY: LLD

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 101**

NATIONAL MINERAL INVENTORY:

NAME(S): **OX-C, OX-B**

MINING DIVISION: Omineca

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093E11E

BC MAP:

LATITUDE: 53 38 40 N

LONGITUDE: 127 03 16 W

ELEVATION: 1158 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized shear zone of OX-C.

UTM ZONE: 09 (NAD 83)

NORTHING: 5945722

EASTING: 628607

COMMODITIES: Silver Lead Zinc Gold Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Tetrahedrite Bornite

 Arsenopyrite Pyrite

ASSOCIATED: Quartz Calcite Tourmaline

ALTERATION TYPE: Tourmalin'z'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Disseminated

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L01 Subvolcanic Cu-Ag-Au (As-Sb)

DIMENSION: STRIKE/DIP: 170/80W TREND/PLUNGE:

COMMENTS: Attitude of main mineralized shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Undefined Group	Whitesail	
Jurassic	Undefined Group	Ashman	

LITHOLOGY: Rhyolite
 Latite Dike
 Obsidian
 Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: MAIN REPORT ON: Y

CATEGORY: Inferred YEAR: 1985

QUANTITY: 196087 Tonnes

COMMODITY	GRADE	
Silver	411.3000	Grams per tonne
Gold	0.4700	Grams per tonne
Lead	2.8500	Per cent
Zinc	4.6300	Per cent

COMMENTS: Reserves to a depth of 100 metres.
 REFERENCE: SMF Jan.24, 1986 - International Damascus Resources.

ORE ZONE: MAIN REPORT ON: Y

CATEGORY: Indicated YEAR: 1985

QUANTITY: 20735 Tonnes

COMMODITY	GRADE	
Silver	411.3000	Grams per tonne
Gold	0.4700	Grams per tonne
Lead	2.8500	Per cent
Zinc	4.6300	Per cent

COMMENTS: Reserves to a depth of 20 metres.
 REFERENCE: SMF Jan.24, 1986 - International Damascus Resources.

CAPSULE GEOLOGY

Geological Survey of Canada mapping indicates that the area is underlain by Jurassic Whitesail Formation volcanics and Jurassic Ashman Formation sediments. Rhyolite, latite dikes, and obsidian also occur in the area of the mineralization. The most significant mineralization is associated with a shear zone trending 170 degrees

CAPSULE GEOLOGY

and dipping 80 to 85 degrees West in a felsic volcanic unit that varies in composition between porphyritic rhyolite and rhyolite tuff. The mineralization occurs mainly in veinlets, as disseminations and in breccia zones and consists of galena, sphalerite, chalcopyrite, tetrahedrite, arsenopyrite and pyrite. Another showing consists of disseminated chalcopyrite, sphalerite and galena in a tourmalinized sandstone. Blocks of disseminated chalcopyrite, bornite and pyrite occur in a siliceous felsite within a broad fault zone. Another showing associated with a fault zone contains pyrite, chalcopyrite, sphalerite and galena.

Indicated reserves of the Main (Damascus) zone to a depth of 20 metres are 20,735 tonnes grading 411.3 grams per tonne silver, 0.47 gram per tonne gold, 2.85 per cent lead and 4.63 per cent zinc. Inferred reserves for the same zone to a depth of 100 metres are 196,087 tonnes at the same grades (Statement of Material Facts January 24, 1986 - International Damascus Resources).

BIBLIOGRAPHY

EMPR ASS RPT 10168, *12008, 15381, 19094
EMPR BULL 75
EMPR EXPL 1983-410
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
EMR MIN BULL MR 223 B.C. 215
GSC MAP 367A; 1064A
GSC MEM 299
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, Part A; 1924, Part A
www.infomine.com/index/properties/OX_CLAIM_GROUP.html
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/05

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 102**

NATIONAL MINERAL INVENTORY:

NAME(S): **PARK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 20 56 N
LONGITUDE: 127 21 06 W
ELEVATION: 1524 Metres

NORTHING: 5912349
EASTING: 609722

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of area of skarn mineralization.

COMMODITIES: Copper Silver Zinc

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Sphalerite Pyrite Magnetite
ALTERATION: Calcite Wollastonite Epidote Andradite Malachite

ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Massive
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Gamsby

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Phyllite
Skarn
Dacite
Rhyolite Dike
Andesite
Quartz Monzonite
Phyllitic Siltstone
Quartz Diorite

GEOLOGICAL SETTING

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

PHYSIOGRAPHIC AREA: Tahtsa Range

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The occurrence is situated near the eastern margin of the Coast Crystalline Complex. The property is mainly underlain by the Paleozoic (?) Gamsby Group which on the property is represented by dacitic-andesite, phyllite and phyllitic siltstone. These rocks are intruded by plutons ranging in composition from quartz diorite to quartz monzonite. Rhyolite dikes or sills also occur in both the volcanics and sediments. Two types of massive copper-silver mineralization are associated with skarn lenses within phyllites. One type consists of bornite accompanied by wollastonite, while the other type consists of chalcopyrite accompanied by andradite garnet. Discontinuous bands of sphalerite also occur locally. The largest observed lens measures approximately 90 metres by 13 metres.

BIBLIOGRAPHY

EMPR ASS RPT 11172, *12209
EMPR EXPL 1982-280; 1983-405
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1988-2; 1994-14
EMPR FIELDWORK 1987, pp. 155-168

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 103**

NATIONAL MINERAL INVENTORY:

NAME(S): **PEACOCK**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 22 06 N
LONGITUDE: 127 21 46 W
ELEVATION: 1676 Metres

NORTHING: 5914495
EASTING: 608933

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of area of quartz veining mineralization.

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT:	Chalcopyrite	Bornite	Galena	Pyrite
ASSOCIATED:	Quartz	Calcite		
ALTERATION:	Malachite	Epidote		
ALTERATION TYPE:	Oxidation	Epidote		
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: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Gamsby	Undefined Formation	

LITHOLOGY: Dacitic Andesite
Rhyolite Dike
Quartz Diorite
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The occurrence is situated near the eastern margin of the Coast Crystalline Complex. The property is mainly underlain by the Paleozoic (?) Gamsby Group which near the occurrence is represented mainly by dacitic-andesite. These rocks are intruded by plutons ranging in composition from quartz diorite to quartz monzonite. Rhyolite dikes or sills also occur in the volcanics. Abundant quartz veining carries pyrite, chalcopyrite, bornite and galena mineralization. The quartz veins range in length from less than one metre up to approximately 50 metres and vary in width from less than one centimetre up to about one metre. The veins are generally small, discontinuous and sporadic.

BIBLIOGRAPHY

EMPR ASS RPT *12209
EMPR EXPL 1983-405
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1988-2; 1994-14
EMPR FIELDWORK 1987, pp. 155-168

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/06

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 104**

NATIONAL MINERAL INVENTORY:

NAME(S): **SAMUEL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 29 49 N
LONGITUDE: 127 17 35 W
ELEVATION: 1219 Metres

NORTHING: 5928910
EASTING: 613229

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Lead Zinc Copper Barite

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Bornite Barite

ASSOCIATED: Quartz Calcite Ankerite

COMMENTS: Silver bearing quartz/calcite/ankerite.

ALTERATION TYPE: Carbonate Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Epigenetic Hydrothermal Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Jurassic
Upper Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Siltstone
Greywacke
Cherty Tuff
Intrusive
Hornfels Sediment/Sedimentary
Breccia

HOSTROCK COMMENTS: Main host is Upper Jurassic sedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Situated at the southern margin of the Tahtsa Caldera which is marked by a major east-west fault zone. The property is underlain by Hazelton volcanics, Jurassic sediments and intrusive stocks and hornfelsed sediments. Within the Jurassic sediments is a well developed quartz-calcite-ankerite alteration zone associated with east-west shearing containing disseminated and fracture filling of galena, sphalerite, chalcopyrite and pyrite. Barite was noted at one locality. The sediments are comprised of well bedded dark gritty siltstone, greywacke, cherty tuff and minor breccia. A zone containing pyrite, chalcopyrite and bornite bearing quartz veins and stringers occurs in Hazelton volcanics.

BIBLIOGRAPHY

EMPR ASS RPT 12714
EMPR EXPL 1983-406
GSC MEM 299
GSC MAP 367A; 1064A
GSC P 72-1A; 79-1A
GSC OF 708
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/06/16

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 105**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEAN TO**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 38 39 N
LONGITUDE: 127 04 35 W
ELEVATION: 1127 Metres

NORTHING: 5945652
EASTING: 627158

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Marcasite Chalcopyrite Sphalerite Tetrahedrite

ASSOCIATED: Galena

QUARTZ: Quartz

ALTERATION: Sericite Kaolinite

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

Calcite Silica Siderite
Carbonate

DEPOSIT

CHARACTER: Breccia
CLASSIFICATION: Replacement Igneous-contact
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb)

L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Middle Jurassic
Unknown

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Plagioclase Porphyritic Dacite
Andesite Flow
Dacitic Flow
Quartz Porphyry
Hornfels
Breccia

HOSTROCK COMMENTS: Brecciated quartz eye porphyry and hornfels.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Drilling intersected a mineralized breccia zone adjacent to a quartz eye porphyry stock that intrudes Jurassic Hazelton volcanics. The breccia contains fragments of intrusive and hornfelsed volcanics. Volcanic rocks include plagioclase porphyritic dacite and andesite and dacite flows. Pyrite, marcasite, chalcopyrite, sphalerite, tetrahedrite, and galena occur with quartz-siderite as infilling around breccia fragments.

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EM EXPL 2000-1-8
EMPR ASS RPT 9098, 10168, *11237
EMPR BULL 75
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
GSC MAP 1064A
GSC MEM 299
GSC OF 708
GSC SUM RPT 1924, part A; 1925, part A
Placer Dome File

DATE CODED: 1985/08/29
DATE REVISED: / /

CODED BY: AW
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 106**

NATIONAL MINERAL INVENTORY:

NAME(S): **CINDERELLA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 27 46 N
LONGITUDE: 127 19 34 W
ELEVATION: Metres

NORTHING: 5925057
EASTING: 611126

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Copper Lead Zinc
Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Molybdenite
ASSOCIATED: Barite Quartz Calcite
ALTERATION: Siderite Malachite
ALTERATION TYPE: Argillic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Lapilli Tuff
Siltstone
Shale
Granitic Dike
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The claims are located adjacent to the southern boundary of the Tahtsa caldera. Tuffs, breccias and siltstones of the Upper Triassic to Middle Jurassic Hazelton Group are intruded by granitic dikes. Mineralization, associated with veins, consists of pyrite, galena, chalcopyrite, sphalerite, malachite and molybdenite.

BIBLIOGRAPHY

EMPR ASS RPT 13070
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/08/29
DATE REVISED: / /

CODED BY: AW
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 572
REPORT: RGEN0100

MINFILE NUMBER: **093E 107**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLDEN GOOSE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 40 35 N
LONGITUDE: 127 28 50 W
ELEVATION: 884 Metres

NORTHING: 5948590
EASTING: 600366

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Lead Zinc Barite

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite Barite
ALTERATION TYPE: Propylitic Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Cretaceous GROUP: Skeena FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Sandstone
Shale
Conglomerate
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The property is underlain by well bedded sandstone, siltstone, shale, and conglomerate of the Skeena Group. Mineralization consists of disseminated stringers of pyrite. Locally galena, sphalerite, chalcopyrite and barite are found as fine disseminations and fracture fillings in argillic and propylitic altered sediments.

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EMPR ASS RPT 13074
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC SUM RPT 1924, part A
EMPR OF 1994-14
EMPR BULL 75

DATE CODED: 1985/08/29
DATE REVISED: / /

CODED BY: AW
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 107**

MINFILE NUMBER: **093E 108**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOPE**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093E12E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 36 49 N
LONGITUDE: 127 36 52 W
ELEVATION: 1600 Metres

NORTHING: 5941426
EASTING: 591659

LOCATION ACCURACY: Within 500M

COMMENTS: Located near the southern shore of Tahtsa Lake, 107 kilometres south of the community of Houston (Assessment Report 20652).

COMMODITIES: Silver Gold Copper Lead

MINERALS

SIGNIFICANT: Pyrite Tetrahedrite Galena Chalcopyrite
ASSOCIATED: Quartz Calcite Carbonate
ALTERATION: Calcite Chlorite Sericite Quartz
ALTERATION TYPE: Propylitic Sericitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) 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	Hazelton	Telkwa	
Eocene			Nanika Intrusions

LITHOLOGY: Granite
Diorite
Hornblendite
Andesite
Andesite Flow Breccia
Tuff
Tuff Breccia
Andesitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Undivided Metamorphic Assembl.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 1305.7000 Grams per tonne
Gold 3.1000 Grams per tonne
COMMENTS: Highest values within the altered zone.
REFERENCE: Assessment Report 20652, page I.

CAPSULE GEOLOGY

The Hope occurrence area straddles the boundary between the Coast Plutonic Complex and the Intermontane Belt. Coarse-grained granite and fine-grained diorite of the Eocene Nanika Intrusions and numerous andesitic dikes are abundant on the property. Andesite and andesite flow breccia with lesser tuff and tuff breccia are also evident and belong to the Telkwa Formation of the Lower to Middle Jurassic Hazelton Group.

Geological mapping and rock chip sampling during 1986 have delineated a sulphide-bearing altered zone, 40 to 50 metres wide and more than 700 metres long, which locally carries significant precious metals in numerous, parallel although discontinuous sulphide veins. Trenching has been carried out on several of these veins. Highest values within the altered zone were 1305.7 grams per tonne silver and 3.1 grams per tonne gold across 0.17 metre of quartz-calcite and tetrahedrite (Assessment Report 20652, page I). Petrographic studies indicate strong calcite, chlorite, sericite and quartz as alteration

CAPSULE GEOLOGY

products in the altered zone. Multiple brecciation of calcite-quartz-sulphide vein material and volcanics are common within the altered zone. Dark green to brown fine grained parts of the zone has been determined to be strongly altered ultramafic rock (hornblendite) cut by secondary calcite-potassium feldspar veinlets.

Adjacent to the altered zone and extending southward into an area dominated by granitic rocks, several quartz-carbonate-galena-chalcopyrite-pyrite veins have been explored by trenching. One of the quartz-galena veins is at least 2345 metres long, 0.1 to 0.3 metre wide, and yielded from 0.27 to 13.0 grams per tonne gold and 4.7 to 1305.7 grams per tonne silver (Assessment Report 20652, page I).

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EMPR ASS RPT 13374, 15553, *20652
EMPR BULL 42
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1920, Part A; 1924, Part A
EMPR OF 1994-14

DATE CODED: 1985/08/30
DATE REVISED: 1995/02/11

CODED BY: AW
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 109**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARB, SUE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 34 00 N
LONGITUDE: 127 03 06 W
ELEVATION: Metres

NORTHING: 5937076
EASTING: 629028

LOCATION ACCURACY: Within 500M

COMMENTS: Location of Sue Group, Legal Corner Post.

COMMODITIES: Gold Silver Copper Lead Zinc
Barite

MINERALS

SIGNIFICANT: Arsenopyrite Chalcopyrite Bornite Galena Sphalerite

Barite
ASSOCIATED: Chalcedony Quartz Ankerite Calcite

ALTERATION: Hematite Kaolinite Quartz

ALTERATION TYPE: Silicific'n Propylitic Argillic Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated

CLASSIFICATION: Epigenetic Hydrothermal Industrial Min.

TYPE: H05 Epithermal Au-Ag: low sulphidation

COMMENTS: Vertical shears trend 030 degrees, 060 degrees and 170 degrees.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Upper Cretaceous

GROUP

Hazelton
Kasalka

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Shale
Volcanic Siltstone
Greywacke
Tuffaceous Breccia
Carbonaceous Limestone
Lapilli Tuff
Quartz Feldspar Porphyritic Dike
Tuffaceous Mudstone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is underlain by Upper Triassic to Middle Jurassic Hazelton Group shale, volcanic siltstone, greywacke, carbonaceous limestone, tuffaceous mudstone, and lapilli tuff. These are cut by quartz feldspar porphyry dikes equivalent to the Upper Jurassic Kasalka Group volcanics.

Several zones of mineralization occur consisting of 1) arsenopyrite disseminated in chalcedonic quartz veinlets occurring in argillically altered volcanic sandstones, 2) chalcopyrite and pyrite in quartz veins and stringers, 3) quartz and quartz-calcite with chalcopyrite, bornite, sphalerite, pyrite and hematite with anomalous gold and silver values in tuffaceous mudstone and lapilli tuff, 4) quartz, quartz-ankerite, quartz-calcite, and calcite veins with chalcopyrite, sphalerite, and pyrite related to shear zones in argillically altered lapilli tuff contains disseminated galena, sphalerite, chalcopyrite, and pyrite and 5) a locally silicified argillically altered tuff breccia zone with green vuggy quartz and barite.

BIBLIOGRAPHY

EMPR ASS RPT *13043, 17654, 17792, 20817
EMPR EXPL 1984-301
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 576
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT 1924, Part A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14
EMPR BULL 75

DATE CODED: 1985/08/29
DATE REVISED: 1988/01/27

CODED BY: AW
REVISED BY: BL

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 577
REPORT: RGEN0100

MINFILE NUMBER: **093E 110**

NATIONAL MINERAL INVENTORY:

NAME(S): **COLES**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06W
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 56 N
LONGITUDE: 127 17 22 W
ELEVATION: Metres

NORTHING: 5923570
EASTING: 613597

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION TYPE: Argillic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Epithermal
TYPE: H05 Epithermal Au-Ag: low sulphidation 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	

LITHOLOGY: Lapilli Tuff
Granodiorite
Quartz Vein
Hornfels Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

CAPSULE GEOLOGY

Northwest dipping Jurassic Hazelton Group lapilli tuffs are cut by north trending, steeply dipping faults. Pyrite, chalcopyrite, galena, and sphalerite and anomalous values of gold are contained within epithermal quartz veins and stringers related to these faults. Argillic and propylitic alteration occurs peripheral to faults. Tuffs found near the western margin of the property are hornfelsed by nearby granodiorite stocks.

BIBLIOGRAPHY

EMPR ASS RPT 12666, 14531, 16677, 17962
EMPR EXPL 1983-405
GCNL #74, 1985
IPDM Nov./Dec. 1983; May/June 1984
GSC MEM 299
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1988-2; 1994-14

DATE CODED: 1985/10/09
DATE REVISED: / /

CODED BY: AW
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 110**

MINFILE NUMBER: **093E 111**

NATIONAL MINERAL INVENTORY:

NAME(S): **MUMBO**

MINING DIVISION: Skeena

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E05E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 21 38 N
LONGITUDE: 127 31 43 W
ELEVATION: 1500 Metres

NORTHING: 5913390
EASTING: 597918

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of claim block (Assessment Report 8913).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite
ALTERATION: Malachite Magnetite
ALTERATION TYPE: Oxidation Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn K03 Fe skarn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown Eocene	Gamsby	Undefined Formation	Coast Plutonic Complex

LITHOLOGY: Tuff
Marble
Skarn
Granite
Volcanic Sandstone
Limestone
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline
TERRANE: Undivided Metamorphic Assembl.
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Kitimat Ranges
RELATIONSHIP: Pre-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The occurrence area is largely underlain by Paleozoic Gamsby Group felsic and mafic tuffs, lesser volcanogenic sandstone and one or more limestone/marble and skarn members up to 200 metres thick. These rocks have all undergone greenschist facies metamorphism. Coast Plutonic Complex granites and quartz monzonites of Eocene age occur along the southern part of the occurring area. Highly erratic copper and silver mineralization is associated with two skarns. The mineralization consists of chalcopyrite, malachite, magnetite and pyrrhotite.

BIBLIOGRAPHY

EMPR ASS RPT *8913
EMPR EXPL 1980-315
GSC MEM 299
GSC MAP 1064A
GSC OF 708
EMPR OF 1994-14

DATE CODED: 1986/04/28
DATE REVISED: / /

CODED BY: GRF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 112**

NATIONAL MINERAL INVENTORY: 093E14 Mo1

NAME(S): **WHITING CREEK, WHIT**

MINING DIVISION: Omineca

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093E14E

BC MAP:

LATITUDE: 53 45 29 N

LONGITUDE: 127 11 56 W

ELEVATION: 1580 Metres

LOCATION ACCURACY: Within 500M

COMMENTS:

UTM ZONE: 09 (NAD 83)

NORTHING: 5958109

EASTING: 618740

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite

ASSOCIATED: Quartz

ALTERATION: Quartz Sericite Pyrite

ALTERATION TYPE: Sericitic Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated

CLASSIFICATION: Porphyry Hydrothermal

TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Upper Cretaceous

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Whiting Stock

LITHOLOGY: Quartz Porphyry
Biotite Hornblende Granodiorite
Biotite Hornfels

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nechako Plateau

RELATIONSHIP:

GRADE: Hornfels

INVENTORY

ORE ZONE: RIDGE

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1985

QUANTITY: 123500000 Tonnes

COMMODITY

GRADE

Copper

0.0620

Per cent

Molybdenum

0.0250

Per cent

COMMENTS: Grade given was 0.043 per cent MoS₂; conversion to Mo using a factor of 1.6681.

REFERENCE: Bulletin 75, page 57.

CAPSULE GEOLOGY

The Whiting Creek occurrence area is characterized by several intrusions into Lower-Middle Jurassic Hazelton Group fragmental rocks which have been biotite hornfelsed. The largest intrusive body is the Whiting hornblende-biotite granodiorite stock of Late Cretaceous age. At the Ridge zone, molybdenite in veinlets and quartz stockworks with or without pyrite and chalcopyrite occurs within a pervasively altered quartz porphyry plug of Late Cretaceous age and in adjacent hornfelsed Hazelton Group rocks just north of the Whiting stock. Low grade copper mineralization also occurs in a moderate to pervasive sericitic (phyllic) altered porphyritic hornblende-biotite granodiorite that cuts the quartz porphyry plug. The highest grade zones in the quartz porphyry are characterized by pervasive quartz flooding and development of banded quartz-molybdenite veins and closely spaced vein stockworks.

Indicated reserves are 123.5 million tonnes grading 0.062 per cent copper and 0.025 per cent molybdenum (Bulletin 75, page 57). Grade given was 0.043 per cent MoS₂; conversion to Mo using the factor 1.6681.

Imperial Metals conducted a geophysical survey in the area in 1998.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 580
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1916-K161; 1964-55; 1965-87
EMPR ASS RPT *3961, *8757, *9119, *9831, *9897, 23289
EMPR BULL *75, pp. 52,56-60
EMPR EXPL 1980-317; 1981, pp. 130,148
EMPR GEM 1972-341
EMPR MAP 65 (1989)
EMPR OF 1989-1; 1992-1; 1992-3; 1994-14
EMR MIN BULL MR 223 B.C. 219
EMR MP CORPFILE (Saskatchewan Mining Development Corporation; Hildon
Mining Explorations Ltd.)
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A; *83-1B, pp. 135-144
GSC SUM RPT 1924 Part A
CIM Special Volume *15, 1976, pp. 33-34
N MINER June 7, 1999
WWW <http://www.infomine.com/>

DATE CODED: 1986/05/26
DATE REVISED: 1987/02/27

CODED BY: GRF
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 113**

NATIONAL MINERAL INVENTORY: 093E11 Cu1

NAME(S): **WHITING CREEK (SWEENEY), WHIT**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 43 35 N
LONGITUDE: 127 12 21 W
ELEVATION: 1130 Metres

NORTHING: 5954575
EASTING: 618371

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Epidote
ALTERATION TYPE: Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L04 Porphyry Cu ± Mo ± Au L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Upper Cretaceous

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Whiting Stock

LITHOLOGY: Biotite Hornfels
Biotite Hornblende Granodiorite
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nechako Plateau

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

The area is characterized by several intrusions into Upper Triassic to Middle Jurassic Hazelton Group fragmentals which have been biotite hornfelsed. The largest intrusive body is the Upper Cretaceous Whiting hornblende-biotite granodiorite stock.

The Sweeney Zone occurs in hornfels around a small plug of granodiorite on the south side of the Whiting stock. Mineralization consists of disseminated pyrite and veinlets of pyrite or quartz-epidote-pyrite-chalcopyrite. Minor disseminated chalcopyrite and molybdenite also occur within the granodiorite plug.

BIBLIOGRAPHY

EMPR ASS RPT *3961, *8757, *9119, *9831, *9897, 23289
EMPR BULL *75, pp. 52,56-60
EMPR EXPL 1980-317
EMPR GEM 1972-341
EMPR AR 1916-K161; 1964-55; 1965-87
GSC MEM 299
GSC MAP 367A; 1064A
GSC OF 708
GSC P 72-1A; 79-1A
GSC SUM RPT 1924, part A
EMPR FIELDWORK 1986, pp. 171-179
EMPR OF 1987-4; 1994-14

DATE CODED: 1986/05/23
DATE REVISED: 1986/05/23

CODED BY: GRF
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 114**

NATIONAL MINERAL INVENTORY:

NAME(S): **CORE A**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 19 N
LONGITUDE: 127 10 50 W
ELEVATION: 1220 Metres

NORTHING: 5922606
EASTING: 620857

LOCATION ACCURACY: Within 500M

COMMENTS: The "A" showing (Assessment Report 9066).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal
TYPE: D03 Volcanic redbed Cu 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>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

Fine disseminations and stringers of chalcopyrite with silver values occur within pyritic tuff of the Jurassic Hazelton Group.

BIBLIOGRAPHY

EMPR ASS RPT 1192, *9066, *11530, 14526
GSC MEM 299, pp. 95-96
EMPR EXPL 1980-316; 1983-403
EMPR AR 1945-A70
GSC MAP 1064A
GSC OF 708
GSC P 72-1A; 79-1A
EMPR OF 1988-2; 1994-14
EMPR FIELDWORK 1987, pp. 155-168

DATE CODED: 1986/05/20
DATE REVISED: / /

CODED BY: GRF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 115**

NATIONAL MINERAL INVENTORY:

NAME(S): **CORE F**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 35 N
LONGITUDE: 127 11 05 W
ELEVATION: 1372 Metres

NORTHING: 5923093
EASTING: 620567

LOCATION ACCURACY: Within 500M

COMMENTS: The "F" showing (Assessment Report 11530).

COMMODITIES: Copper

MINERALS

SIGNIFICANT:	Chalcopyrite	Pyrite			
ASSOCIATED:	Siderite	Ankerite	Calcite	Quartz	
ALTERATION:	Siderite	Ankerite	Calcite	Quartz	Hematite
	Magnetite				
ALTERATION TYPE:	Carbonate		Oxidation		
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Unknown
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu
COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Telkwa	

LITHOLOGY: Andesitic Tuff
Rhyolite Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain primarily by pyroclastics and flows of rhyolitic to andesitic composition belonging to the Telkwa Formation of the Jurassic Age Hazelton Group. Chalcopyrite, hematite and magnetite mineralization occurs as thin stringers associated with siderite - ankerite - calcite - quartz alteration in a north - northeast trending shear zone.

BIBLIOGRAPHY

EMPR ASS RPT 1192, *4530, 9066
GSC MEM 299, pp. 95-96
EMPR EXPL 1980-316; 1983-403
EMPR AR 1945-A70
GSC MAP 1064A
GSC OF 708
EMPR OF 1988-2; 1994-14

DATE CODED: 1986/05/20
DATE REVISED: / /

CODED BY: GRF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 116**

NATIONAL MINERAL INVENTORY:

NAME(S): **CORE C**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E06E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 26 47 N
LONGITUDE: 127 12 11 W
ELEVATION: 1400 Metres

NORTHING: 5923433
EASTING: 619340

LOCATION ACCURACY: Within 500M

COMMENTS: The "C" showing (Assessment Report 9066).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Bornite Chalcopyrite Chalcocite Pyrite
ASSOCIATED: Quartz Siderite Ankerite
ALTERATION: Siderite Ankerite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Unknown
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) D03 Volcanic redbed Cu
COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Hazelton	Telkwa	

LITHOLOGY: Tuff

HOSTROCK COMMENTS: Andesitic and rhyolitic tuff.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
PHYSIOGRAPHIC AREA: Tahtsa Range

CAPSULE GEOLOGY

The area is underlain primarily by pyroclastics and flows of rhyolitic to andesitic composition belonging to the Telkwa Formation of the Jurassic Age Hazelton Group. Bornite, chalcopyrite, chalcocite and lesser pyrite occur in a rusty quartz - carbonate matrix within a shear zone about one half metre wide.

BIBLIOGRAPHY

EMPR ASS RPT 1192, *9066, *11530, 14526
GSC MEM 299, pp. 95,96
EMPR EXPL 1980-316; 1983-403
EMPR AR 1945-A70
GSC MAP 1064A
GSC OF 708
EMPR OF 1988-2; 1994-14
EMPR FIELDWORK 1987, pp. 155-168

DATE CODED: 1986/05/20
DATE REVISED: / /

CODED BY: GRF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 117**

NATIONAL MINERAL INVENTORY:

NAME(S): **POOR SAM (DISCOVERY)**, DISCOVERY, SMABY,
THUMB PEAK, RIDGE, STAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E03E
BC MAP:
LATITUDE: 53 12 28 N
LONGITUDE: 127 08 00 W
ELEVATION: 975 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5897011
EASTING: 624664

COMMODITIES: Zinc Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Pyrite
ALTERATION: Silica Epidote Chlorite Magnetite
ALTERATION TYPE: Silicific'n Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform Massive
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn L01 Subvolcanic Cu-Ag-Au (As-Sb)
DIMENSION: Metres STRIKE/DIP: 140/52W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

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

LITHOLOGY: Rhyolite Tuff
Quartz Sericite Schist
Chlorite Epidote Dacitic Tuff
Rhyolite
Dacite
Andesite

HOSTROCK COMMENTS: Rhyolitic and dacitic tuff may correlate with Jurassic Hazelton Group or Cretaceous Gambier Group.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

A continuous stratified section of rhyolite and dacite tuffs trends northwesterly-southeasterly across the property. A pyritic rhyolite tuff horizon is well foliated, dips steeply to the southwest and has undergone low-grade metamorphism to a quartz-sericite-schist. Dacite tuffs, flows and plagioclase porphyries occur above and below the rhyolitic tuff horizon. The dacite has undergone mild to moderate chlorite and epidote alteration and local silicification. The Discovery Showing is a 10-metre wide horizon of interbedded massive sphalerite and pyrite within a cherty epidote-rich matrix in the footwall side of the rhyolite tuff. Small quartz-pyrite plus or minus chalcopyrite veins cut both the rhyolite and dacite tuffs.

Abacus Mineral Corporation explored the area in 1995. Eight base metal showings occur over a 3-kilometre east-west strike length. High gold values came from the Ridge and Star.

In 1998 Sand River Resources drilled the discovery but the results were inconclusive. There is little sign of footwall alteration and the showing may be vein or skarn related.

The Smaby 1-2 claims are held in good standing until April 10, 2005; and the Smaby 3-5 claims are held in good standing until February 4, 2005 by Hans Smit of Telkwa.

BIBLIOGRAPHY

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EMPR ASS RPT 14598, 22023, 22849, 23415, 23661
EMPR OF 1999-2; 1994-14
GSC MAP 1064A
GSC MEM 299

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 586
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 708

DATE CODED: 1986/06/11
DATE REVISED: 1999/08/22

CODED BY: GRF
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 118**

NATIONAL MINERAL INVENTORY:

NAME(S): **POOR SAM (DICK)**, DICK, SMABY,
THUMB PEAK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E03E
BC MAP:
LATITUDE: 53 13 06 N
LONGITUDE: 127 09 08 W
ELEVATION: 960 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Skeena
UTM ZONE: 09 (NAD 83)
NORTHING: 5898152
EASTING: 623373

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite
ALTERATION: Silica Chlorite Epidote Magnetite
ALTERATION TYPE: Silicific'n Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn L01 Subvolcanic Cu-Ag-Au (As-Sb)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Quartz Sericite Schist
Dacitic Tuff
Dacitic Flow
Rhyolite Tuff
Dacitic Plagioclase Porphyry
Rhyolite
Dacite

HOSTROCK COMMENTS: Rhyolitic and dacitic tuff may correlate with Jurassic Hazelton Group or Cretaceous Gambier Group.

GEOLOGICAL SETTING

TECTONIC BELT: Coast Crystalline PHYSIOGRAPHIC AREA: Tahtsa Range
TERRANE: Stikine
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

A continuous stratified section of rhyolite and dacite tuffs trends northwesterly-southeasterly across the property. A pyritic rhyolite tuff horizon is well foliated, dips steeply to the southwest and has undergone low-grade metamorphism to a quartz-sericite-schist. Dacite tuffs, flows and plagioclase porphyries occur above and below the rhyolitic tuff horizon. The dacite has undergone mild to moderate chlorite and epidote alteration and local silicification. The Dick Showing consists of massive magnetite and pyrite beds interbedded with semi-massive magnetite and pyrite lenses in dacite tuff on the footwall side of the rhyolitic tuff. Mineralized beds are 0.3 to 1.0 metres thick. The mineralization carries significant copper values. Both the rhyolite tuff and dacite tuff are cut by small quartz-pyrite plus or minus chalcopyrite veins with magnetite and epidote also being common vein constituents in the dacite tuff. In 1998 Sand River Resources drilled the Dick showing hoping to intersect a composite zone of narrow less than 50 centimetre bands of massive to semi massive sphalerite, magnetite and pyrite in a chlorite and epidote bearing altered andesite tuff. However the hole failed to intersect the horizon - so potential remains uncertain. The Smaby 1-2 claims are held in good standing until April 10, 2005, and the Smaby 3-5 claims are held in good standing until February 4, 2005, by Hans Smit of Telkwa.

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EMPR ASS RPT 14598, 22023, 22849, 23415, 23661
EMPR OF 1999-2; 1994-14

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 588
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1064A
GSC MEM 299
GSC OF 708
WWW <http://www.infomine.com/>

DATE CODED: 1986/06/11
DATE REVISED: 1999/08/22

CODED BY: GRF
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093E 119**

NATIONAL MINERAL INVENTORY:

NAME(S): **OX-EAST**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 38 46 N
LONGITUDE: 127 01 27 W
ELEVATION: 1113 Metres

NORTHING: 5945963
EASTING: 630603

LOCATION ACCURACY: Within 500M
COMMENTS: Diamond drillhole 84-4.

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Tetrahedrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Kaolinite
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Unknown
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Cretaceous-Tertiary
Middle Jurassic

GROUP

Ootsa Lake
Hazelton

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Rhyolite Tuff
Rhyolite Flow
Rhyolite
Dacitic Tuff
Dacitic Flow
Dacite
Andesite
Basalt
Conglomerate
Rhyolite Quartz Feldspar Porphyry

HOSTROCK COMMENTS: Rhyolitic and dacitic tuff.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The majority of the Ox-East claim is underlain by Ootsa Lake Group rocks which can consist of rhyolite and dacite flows, breccia, and tuff or minor andesite basalt or conglomerate. Intrusive plugs and domes of rhyolitic quartz feldspar porphyry may also be related to the Ootsa Lake Formation. The formation is Upper Cretaceous to Tertiary in age. In the northwest corner of the claim the Jurassic Hazelton Group is in fault contact with the Ootsa Lake Group. Drilling intersected mainly rhyolitic and dacitic tuffs and in one hole a zone having sphalerite, tetrahedrite and/or galena as disseminations and in small veins was encountered. Kaolinization of feldspars is pervasive and fine-grained disseminated pyrite is common to abundant.

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EMPR EXPL 1983-410
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GSC MAP 367A; 1064A
GSC MEM 299
GSC OF 708
GSC SUM RPT 1924, Part A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 590
REPORT: RGEN0100

BIBLIOGRAPHY

WWW http://www.infomine.com/OX_CLAIM_GROUP.html

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

CODED BY: GRF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093E 120**

NATIONAL MINERAL INVENTORY:

NAME(S): **NORTHERN LIGHTS**, ZONA ROSA, GREAT WALL,
BRIGHT LIGHTS, PTARMIGAN, NEW LIGHTS,
SIDE LIGHTS, NO LIGHTS, AGATE ALLEY (NORTH),
AGATE ALLEY (SOUTH)

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093E10W 093E11E
BC MAP:

UTM ZONE: 09 (NAD 83)

LATITUDE: 53 36 00 N
LONGITUDE: 126 59 06 W
ELEVATION: 1650 Metres

NORTHING: 5940906
EASTING: 633337

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of Northern Lights claim.

COMMODITIES: Opal Agate Gemstones

MINERALS

SIGNIFICANT: Opal Agate
ASSOCIATED: Celadonite Zeolite Mica Plagioclase Pyroxene
 Amphibole Apatite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Podiform
CLASSIFICATION: Industrial Min.
TYPE: Q11 Volcanic-hosted opal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	
Lower Jurassic	Hazelton	Unnamed/Unknown Formation	

LITHOLOGY: Lahar
Rhyolite Flow
Rhyolite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Northern Lights opal claims are located well above the tree-line on the eastern spur of the Troitsa Peak, south of Slide Creek.

The precious and common opal showings on the Northern Lights claims are hosted by Ootsa Lake Group volcanics. These volcanics are well-layered, coarsely plagioclase- and pyroxene-phyric andesite flows, approximately 130 to 200 metres thick, that conformably overlie flows of rhyodacitic composition. The andesite flows are characterized by abundant plagioclase and pyroxene phenocrysts. In the area of the opal occurrences the andesite flows are subhorizontal and sheet-like, each of which range from 1 to about ten metres thick. These flows resemble near-source compound lavas, consisting of a number of relatively thin lens-shaped flows separated by poorly sorted, debris flow deposits. Individual flows are typically massive at their base and grade upwards into oxidized and strongly vesicular tops (over 50 per cent vesicles in the uppermost 20-40 cm). Vesicles are scarce in the center of the larger flows, but in some thinner flows the vesicular texture may persist throughout. Vesicles are filled with a variety of minerals that generally include a combination of chalcedonic quartz, celadonite, zeolites, and carbonates. Chabazite may occur locally.

The debris flows are commonly up to two metres thick and interfinger with the compound flows. These deposits are lenticular and composed of unsorted, subrounded to subangular clasts of andesite that locally may average 20 to 30 centimetres in diameter.

A broad zone of pervasive alteration developed in volcanic rocks assigned to the Lower Jurassic Hazelton Group is situated to the south of the opal-bearing. It is not known if the precious opal on the Northern Lights claims is genetically linked to a zone of silicification in the Hazelton rocks.

The dominant opal-bearing lithologies in the area are the debris flows. Less abundant opal-bearing lithologies are massive

CAPSULE GEOLOGY

lava flows and associated flow top breccias and minor, possibly waterlain, ashfall tuffs. Massive flows are commonly dark green and mostly porphyritic, although aphyric flows were also observed. The phenocrysts are predominantly plagioclase (up to 2 cm) and pyroxene (<6 mm). Most of the flows are either strongly vesicular or amygdaloidal. The debris flows consist of subangular to subrounded, vesicular, amygdaloidal or massive clasts that typically vary in size from 2 to 100 centimetres, but some may be several metres in size. The flows are matrix- or clast-supported. Some of the debris flows are polymictic, others are oligomictic. The colour of the clasts varies from dark green, brown, and beige to deep brick-red, a feature that is probably related to the degree of oxidation, and possibly permeability. The scoraceous clasts appear most oxidized. The colour of the matrix varies from yellow to red to gray. Reworking of the debris flows is common, as seen by the rounded heterolithic clasts making up the flows. Some of the flows are truncated by thin bedded, possibly waterlain tuffs, but more commonly by younger debris flows. In thin section most of the opal-bearing rocks consist of 10 to 30 per cent plagioclase phenocrysts (up to 15 millimetres in length), amphiboles (0-2%), pyroxene (<2%), opaque oxides (<2%), apatite and opaques (trace). Vesicles may account for more than 20 volume per cent of some rocks. The vesicles may be partially or completely filled by common and precious opal or agate and coated by celadonite or zeolites.

Locally, shallowly inclined compound flows and debris flows, including the opal-bearing ones, may be repeated by displacement along recent, crescent shaped, steeply dipping slump planes in the southern part of the opal-bearing area. A mica-bearing, subvertical dike oriented N65E, cuts the opalized country rocks. The dike is about 60 centimetres wide and is traceable for 2000 metres as a distinctive positive weathered spine that protrudes as much as 6 metres above the surface. According to the prospectors, the dike itself contains a small amount of precious opal and was the initial opal discovery on the property. Common opal can be seen as thin fracture filling along the intrusive contact with the country rock. Prospectors refer to this dike as the Great Wall. Chemical analysis would be required to determine if this dike is a feeder to a biotite-bearing rhyodacite unit.

The opal occurrences are located near the brim of a flat-topped ridge within an area 1200 by 2000 metres. There are at least 10 precious opal occurrences. Most of the precious opal extracted for testing purposes by the prospectors was from the Zona Rosa and Ptarmigan occurrences.

In general, opal and agate occur most commonly as open space fillings in the matrix and vesicles of clasts and rarely as thin films along fractures in debris flows and flow top breccias. It occurs also as amygdules in massive flows. Due to the complex history of some of the reworked flows, agate may be present only in the vesicles of individual clasts. In such flows only one clast out of fifty may contain agate fillings. Geopetal indicators generally suggest that the agate and opal formed when the lithological units acquired their present orientation. However, in rare cases they suggest that the strata has been tilted approximately 15 degrees south since the agate was formed. Celadonite, a soft, green, earthy mineral of the mica group, is present throughout the area as a vesicle filling and in some places it is so abundant that it gives the rocks a bright green colour. Celadonite commonly forms the rims of empty or agate filled vesicles, suggesting that celadonite predated agate.

Two of the metre-scale clasts within the same debris flow at the Agate Alley showing, display concentric layering (zoning) in terms of the vesicle fillings. The vesicles within the core zone (central portion) of these clasts are empty (silica-free). The core is surrounded by 10 to 15 centimetres thick zone containing individual vesicles coated by a one millimetre thick celadonite layer. This is in turn surrounded by an outer zone characterized by agate partially or completely filling the vesicles, suggesting that the fluids that deposited the celadonite and agate were penetrating the clast from the more porous matrix and moving inward. The high concentrations of celadonite on the property do not appear to coincide geographically with the high opal concentrations. As at the Klinker deposit, the presence of zeolites within the area indicates a favorable geological environment for opal preservation. The opal stability field is similar to that of clinoptillolite and chabasite.

Most of the agate is colorless, gray or white. The largest agate eggs observed at the site measured up to 15 centimetres in longest dimension. The agate deposition may be in layers or it may form from several nucleation sites simultaneously.

Precious opal occurs as irregular zones filling individual

CAPSULE GEOLOGY

vesicles or fractures in some of the common opal and agate-bearing debris and compound flows. The size of the opal-bearing zones is difficult to evaluate, but the best exposed occurrence is Ptarmigan. At this location the opal occurs within a trench at least one metre deep, 2 metres wide and 5 metres in length. It appears genetically unrelated to the degree of oxidation, filling vesicles in both hematized and unoxidized lava flows. In most cases, vesicle fillings result in small flecks of opal being densely distributed throughout the rock, similar to examples of Honduran opal. Where the vesicles are large, solid opal recovery is possible. In places, the host volcanic material appears fresh and hard, and will probably take a good polish if polished simultaneously with the matrix opal. In other areas it appears porous and soft and may not give adequate support for the opal during processing. Uncommonly thin (<1mm) fractures filled by precious opal have also been observed. Some of these appear suitable for production of assembled stones as doublets and triplets.

The typical precious opal body colours observed at the sites are white, brown and honey yellow, although black is present but scarce. Most of the opal is opaque to translucent (semi-crystal). The play of colours within the precious opal are green, red, blue and yellow (no systematic study was attempted). The stones appear average or better than average in terms of brightness, although, the detailed evaluation is typically done on individual stones and it will commonly vary within a deposit. In general, the bright play of colour remained after the samples were extracted. The brightness of the samples from the "Bright Lights" locality appears strongly enhanced in humid or wet environments. The opal from this occurrence is probably hydrophane, a variety of common opal with a change in opacity and indirectly, intensity of colour, with a corresponding change in water content. Under transmitted light the precious opal typically appears cloudy brownish or greenish in the central portions of the vesicles and it may contain some dehydration. It appears isotropic under polarized light.

Based upon field observations, most of the stones extracted by the prospectors in 1998 may be described as matrix opal of specimen or gem quality. Some of the opal may be suitable for doublets and triplets. Material suitable for iusolid opalli cabochon-making is relatively rare. The stability of the opal from the Northern Lights claim remains to be assessed. Some of the opal is hydrophane, however, the owners of the claims indicate that precious opal cut two or three years ago did not craze (disintegrate) or undergo other undesirable changes. Test marketing of the precious opal jewelry from this deposit is in progress and several artists are determining if the opal is suitable for carving purposes

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PERS COMM Paul Wojdak, September 1998
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<http://www.bovagems.com>

DATE CODED: 1998/09/10
DATE REVISED: 1999/10/01

CODED BY: LDJ
REVISED BY: GJS

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 001**

NATIONAL MINERAL INVENTORY: 93F7 Cu1

NAME(S): **CHU**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 21 54 N
LONGITUDE: 124 34 36 W
ELEVATION: 1341 Metres

NORTHING: 5914033
EASTING: 395088

LOCATION ACCURACY: Within 500M
COMMENTS: Area of 1982 drilling.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Biotite
ALTERATION TYPE: Biotite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Unnamed/Unknown Formation	
Eocene			Unnamed/Unknown Informal

LITHOLOGY: Biotite Altered Argillite
Hornfels
Dacite
Andesite
Rhyolite
Graphitic Schist
Monzonite
Granodiorite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: GRADE: Hornfels

CAPSULE GEOLOGY

The Chu showing is located about 90 kilometres south-southwest of Vanderhoof.

The region in which the Chu showing occurs is underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Eocene Ootsa Lake Group intermediate to felsic volcanic rocks and Miocene Chilcotin Group plateau basalt. Intruding Lower Jurassic rocks in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude Lower and Middle Jurassic Hazelton strata.

The Chu property covers the contact zone between an Eocene granitic to granodioritic pluton and hornfelsed Hazelton Group rocks. The Hazelton Group in this area is a mixed assemblage of epiclastic and volcanoclastic sedimentary rocks, volcanic rocks and felsic intrusives. Drilling in 1985 intersected rocks of dacitic, andesitic and rhyolitic compositions along with argillite, graphitic "schist", and monzonite.

In outcrop mineralization consists of molybdenite with minor pyrite, pyrrhotite and chalcopyrite as disseminations and coatings along fractures in biotite altered argillite.

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RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 595
REPORT: RGEN0100

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EMPR GEM 1969-155; 1970-111
EMPR EXPL 1977-E186; 1979-215; 1980-322; 1982-291; 1992-69-106
EMPR FIELDWORK 1993, pp. 9-14
EMPR OF 1995-13; 1995-17
EMPR PF (Claim Map)
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/17

CODED BY: GSB
REVISED BY: RAL

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 002**

NATIONAL MINERAL INVENTORY: 093F5 Cu2

NAME(S): **TET**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 23 01 N
LONGITUDE: 125 34 38 W
ELEVATION: 1067 Metres

NORTHING: 5918041
EASTING: 328595

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Mafic Volcanic
Granodiorite
Alaskite

HOSTROCK COMMENTS: Host rock not specifically mentioned and Cretaceous age is probable.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nechako Plateau

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The region in which the Tet showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Tet showing consists of disseminated pyrite with chalcopyrite and molybdenite in an area underlain by Hazelton Group mafic volcanic rocks intruded by granodiorite and alaskite of probable Cretaceous age.

BIBLIOGRAPHY

EMPR GEM 1969-154; 1970-111
EMPR PF (Claim Map)
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
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GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 003**

NATIONAL MINERAL INVENTORY: 093F4 Cu1

NAME(S): **NAT**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 10 56 N
LONGITUDE: 125 52 07 W
ELEVATION: 1341 Metres

NORTHING: 5896384
EASTING: 308320

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

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			Unnamed/Unknown Informal

LITHOLOGY: Volcanic
Granite

HOSTROCK COMMENTS: Granite pluton probably Cretaceous in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the Nat showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Nat showing consists of chalcopyrite and molybdenite in volcanic rocks of the lower part of the Hazelton Group and in a granite pluton of probable Cretaceous age which has intruded these rocks.

In 1969, the group was owned by American Smelting and Refining Company. They conducted geological mapping and soil sampling.

BIBLIOGRAPHY

EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
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EMPR PF (Claim Map)
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120

DATE CODED: 1985/07/24
DATE REVISED: 1999/08/20

CODED BY: GSB
REVISED BY: JMR

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 004**

NATIONAL MINERAL INVENTORY: 093F8 Mo1

NAME(S): **C**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F07E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 53 21 10 N
LONGITUDE: 124 30 22 W
ELEVATION: 1113 Metres

NORTHING: 5912573
EASTING: 399753

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of 1970 drilling.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrrhotite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Rhyolite
Andesite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the C showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The C showing comprise molybdenite with minor chalcopyrite, pyrite and pyrrhotite in Jurassic Hazelton Group rhyolite and andesite near the contact with a Cretaceous granodiorite pluton.

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EMPR EXPL 1980-322; 1992-69-106
EMPR PF (Claim Map)
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 171-176, 193-197, 199-205
EMPR OF 1995-13; 1995-17
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **KO**

MINING DIVISION: **Omineca**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 59 53 N
LONGITUDE: 124 57 11 W
ELEVATION: 853 Metres

NORTHING: 5985071
EASTING: 371980

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of pit on KO 437.

COMMODITIES: Copper Zinc Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Molybdenite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Ko showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ko property is underlain by granodiorite of the Topley intrusive suite. Mineralization consists of minor disseminated chalcopyrite, sphalerite and molybdenite in fractures and quartz stringers cutting the Topley granodiorite.

BIBLIOGRAPHY

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EMPR AR 1963-36; 1964-63; 1965-138
EMPR PF (Fig. 24 Detailed Geology of Endako Area, Eastern Part; Fig. 22 Geology of the Endako Area)
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 006**

NATIONAL MINERAL INVENTORY: 093F15 Mo6

NAME(S): **TAN**, NORTH SHOWING

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 59 45 N
LONGITUDE: 124 49 56 W
ELEVATION: 1152 Metres

NORTHING: 5984612
EASTING: 379893

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Clay K-Feldspar Ferrimolybdate
ALTERATION TYPE: Argillic Potassic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
COMMENTS: Mineralized veins and veinlets commonly trend 065 degrees to 070 degrees.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite
Diorite
Alaskite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Tan showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

The showing is within well jointed Nithi quartz monzonite which is partially surrounded by Casey quartz monzonite to alaskite. Molybdenite mineralization occurs in quartz veinlets and veins which commonly trend 065 to 070 degrees. Argillic alteration of the host rock is moderate to intense while minor potassic alteration occurs adjacent to some of the veins.

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EMPR GEM 1970-112; 1972-348; 1973-327
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR AR 1964-64; 1965-133(fig. 24); 1966-118

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 601
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps)
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 007**

NATIONAL MINERAL INVENTORY: 093F15 Mo4

NAME(S): **NITHI**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 46 N
LONGITUDE: 124 48 19 W
ELEVATION: 1128 Metres

NORTHING: 5982743
EASTING: 381613

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz K-Feldspar Hematite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite
Porphyritic Quartz Monzonite
Granodiorite
Diorite
Alaskite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Nithi showing is underlain by felsic rocks of the Topley intrusive suite, mainly quartz monzonite which varies from non-porphyrific to porphyritic with phenocrysts of quartz and feldspar. Intruding the quartz monzonite is a granitic phase known as the Casey Granite which varies in composition from quartz monzonite to alaskite. Molybdenite mineralization occurs in sericitized Casey quartz monzonite in fractures and veinlets and as disseminations. The quartz monzonite has been highly oxidized and leached in areas of molybdenite mineralization. In some veinlets specular hematite is also present.

BIBLIOGRAPHY

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1992-69-106
EMPR GEM 1970-112; 1972-348; 1973-327
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170,
193-197
EMPR AR 1963-37; 1965-Figure 24; 1966-118
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K

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BIBLIOGRAPHY

General file, Endako Area Maps)
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 008**

NATIONAL MINERAL INVENTORY: 093F15 Mo2

NAME(S): **JEN - BEAVER**, TAN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:
LATITUDE: 53 59 13 N
LONGITUDE: 124 49 41 W
ELEVATION: 1311 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 5983616
EASTING: 380141

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Hematite Magnetite Molybdenite
ASSOCIATED: Quartz
ALTERATION: Hematite Sericite K-Feldspar Clay
ALTERATION TYPE: Argillic Potassic Sericitic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
DIMENSION: STRIKE/DIP: 065/85N TREND/PLUNGE:
COMMENTS: Mineralized fractures.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite
Porphyritic Quartz Monzonite
Alaskite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Stikine

CAPSULE GEOLOGY

The region in which the Jen-Beaver showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The property area is underlain by felsic rocks of the Topley Intrusive Suite, mainly quartz monzonite which varies from nonporphyritic to porphyritic with phenocrysts of quartz and feldspar. Intruding the quartz monzonite is a granitic phase known as the Casey Granite which varies in composition from quartz monzonite to alaskite. Fractures cutting the Casey granite strike at 65 degrees and dip 85 degrees north, and some host quartz veinlets up to 1.0 centimetres wide with specular hematite, magnetite and rare molybdenite. The wallrock has undergone weak argillic and potassic alteration.

BIBLIOGRAPHY

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1992-69-106
EMPR GEM 1970-112; 1972-348; 1973-327
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193-197
EMPR AR *1963-37; 1965-138, Figure 24; 1966-118
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps)

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GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **JEN 4**, NITHEX NORTH, CENTRAL

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 46 N
LONGITUDE: 124 49 32 W
ELEVATION: 1250 Metres

NORTHING: 5982777
EASTING: 380283

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz
ALTERATION: Clay K-Feldspar
ALTERATION TYPE: Argillic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Alaskite
Quartz Monzonite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Jen 4 showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

The showing is within Casey alaskite which is surrounded by Nithi quartz monzonite. A set of narrow northeast striking quartz-molybdenite veins occur in the hanging wall of a fault. Alteration of the wallrock consists of weak to strong argillic and potassic alteration assemblages.

BIBLIOGRAPHY

EMPR ASS RPT 5489, *5714, 8399, 8470, 9110, 9368, *10314
EMPR EXPL 1975-E132; 1976-E142; 1978-E202; 1980-323; 1982-292;
1992-69-106
EMPR GEM 1970-112; 1972-348; 1973-327
EMPR AR 1965-Figure 24; 1966-118
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170,
193-197
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps)
GSC P 90-1F, pp. 115-120

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BIBLIOGRAPHY

GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **JEN 10**, NITHEX SOUTH, SOUTH

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 14 N
LONGITUDE: 124 49 08 W
ELEVATION: 1082 Metres

NORTHING: 5981777
EASTING: 380695

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ALTERATION: Clay K-Feldspar
ALTERATION TYPE: Argillic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
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>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite
Alaskite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Jen 10 showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

The showing comprises disseminated molybdenite as fine to medium sized rosettes in highly altered Nithi quartz monzonite near the contact with Casey alaskite. Strong argillic wallrock alteration has occurred while narrow selvages of potassic alteration occur adjacent to joint surfaces.

BIBLIOGRAPHY

EMPR ASS RPT 2841, 2842, 2843, 3546, 5489, *5714, 8399, 8470, 9110, 9368, *10314
EMPR EXPL 1975-E132; 1976-E142; 1978-E202; 1980-323; 1982-292; 1992-69-106
EMPR GEM 1970-112; 1972-348; 1973-327
EMPR AR 1963-37; 1965-Figure 24; 1966-118
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K General file, Endako Area Maps)
GSC P 90-1F, pp. 115-120
GSC MEM 324

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BIBLIOGRAPHY

GSC MAP 1131A; 1424A

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REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
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REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 012**

NATIONAL MINERAL INVENTORY: 093F15 Mo1

NAME(S): **NITHI MOUNTAIN**, MOLLY, FRASER LAKE,
ABE, POLLYANNA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:
LATITUDE: 53 59 02 N
LONGITUDE: 124 51 47 W
ELEVATION: 1250 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 5983336
EASTING: 377837

COMMODITIES: Molybdenum Uranium

MINERALS

SIGNIFICANT: Molybdenite Torbernite Autunite Sabugalite
ASSOCIATED: Quartz
ALTERATION: Ferrimolybdite Clay K-Feldspar
ALTERATION TYPE: Argillic Potassic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F-type)
DIMENSION: 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Veins are up to 1 metre wide. Uraniferous zone is about 70 metres long.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite
Porphyritic Rhyolite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Stikine

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1955
SAMPLE TYPE: Grab
COMMODITY GRADE
Uranium 0.1400 Per cent
COMMENTS: A sample of a porphyry dike.
REFERENCE: Minister of Mines Annual Report 1955, page 28.

CAPSULE GEOLOGY

The region in which the Nithi Mountain showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley Intrusive Suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

Mineralization consists of molybdenite in quartz veins up to one metre wide in Nithi quartz monzonite. Also in the area is a northerly striking, westerly dipping rhyolite porphyry dike which hosts secondary uranium minerals of autunite, torbernite and sabugalite along its western margin. This uraniumiferous zone is about 70 metres long. A sample of the porphyry dike assayed 0.14 per cent

CAPSULE GEOLOGY

uranium (Minister of Mines Annual Report 1955, page 28). Molybdenite mineralization occurs in quartz monzonite along the eastern side of the dike in a 065 degree-striking fracture but the relationship of this molybdenite occurrence to the adjacent uranium mineralization is not known.

Wallrock alteration associated with molybdenite mineralization comprises intense argillic alteration and minor amounts of weak potassic alteration.

BIBLIOGRAPHY

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1992-69-106
EMPR GEM 1973-327
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1966-118
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193-197
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EMPR PF (Claim Map, 1955; Mineral Claim locations Nithi Mountain
Molybdenum area, 1963; Air Photo Nithi Mountain area, 1964;
Roberts, A.F. 1971, Report on Nithi Mountain Property; Nithex
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GSC OF 551
GSC MEM 324
GSC MAP 1131A; 1424A
Bell, P.T. (1985): Overview of Uranium in Volcanic Rocks of the
Canadian Cordillera; IAEA Vol. ST1/PUB/690, Uranium in Volcanic
Rocks, p. 329

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 013**

NATIONAL MINERAL INVENTORY: 093F15 Mo1

NAME(S): **MOLLY 8, WEST**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 37 N
LONGITUDE: 124 51 49 W
ELEVATION: 1250 Metres

NORTHING: 5982564
EASTING: 377780

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz
ALTERATION: Ferrimolybdate
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
DIMENSION:
COMMENTS: Quartz vein is 15 centimetres wide striking 67 degrees.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Molly 8 showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

The showing consists of a 15 centimetre wide quartz-molybdenite vein striking at 067 degrees within Nithi quartz monzonite.

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1992-69-106
EMPR GEM 1973-327
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170,
193-197
EMPR AR *1963-36; 1964-62; 1965-138, Figure 24; 1966-118
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps; Nithi Mountain geology sketch
1964; Molly #8 geology sketch 1964)
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 013**

MINFILE NUMBER: **093F 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOLLY 9**, SOUTHWEST

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 22 N
LONGITUDE: 124 51 13 W
ELEVATION: 1180 Metres

NORTHING: 5982084
EASTING: 378424

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz
ALTERATION: Clay K-Feldspar
ALTERATION TYPE: Argillic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
DIMENSION: 0600 x 0400 Metres STRIKE/DIP: 065/
COMMENTS: Veins striking 65 degrees occur over area 600 by 400 metres. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Molly 9 showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

Several quartz-molybdenite veins striking at 065 degrees occur within Nithi quartz monzonite over an area of about 400 by 600 metres. Argillic alteration of wallrock is moderate to strong and is accompanied by weak potassic alteration.

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1992-69-106
EMPR AR *1964-62; 1965-138, Figure 24; 1966-118
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170,
193-197
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps; Nithi Mountain geology sketch
1964; Molly #9 geology sketch 1964)
GSC P 90-1F, pp. 115-120
GSC MEM 324

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 616
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1131A; 1424A

DATE CODED: 1986/06/19
DATE REVISED: 1995/02/27

CODED BY: AFW
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **ENCO 3 FR.**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 02 N
LONGITUDE: 124 51 56 W
ELEVATION: 1134 Metres

NORTHING: 5981486
EASTING: 377624

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Kaolinite Feldspar
ALTERATION TYPE: Argillic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: STRIKE/DIP: 030/ TREND/PLUNGE:
COMMENTS: Mineralized fractures strike 020 to 040 degrees.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Enco showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

The showing consists of narrow quartz-molybdenite veins in fractures striking 020 to 040 degrees within Nithi quartz monzonite. Mineralization is accompanied by disseminated pyrite and slight kaolinization and feldspar alteration.

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EMPR GEM 1973-327
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193-197
EMPR AR *1963-36; 1965-138, Figure 24; 1966-118
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps; Nithi Mountain geology map 1964)
GSC P 90-1F, pp. 115-120
GSC MEM 324

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 618
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHRIS, NITHI, A-LINE,
LINDA 10**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 05 N
LONGITUDE: 124 51 11 W
ELEVATION: 1097 Metres

NORTHING: 5981557
EASTING: 378447

LOCATION ACCURACY: Within 500M

COMMENTS: Chris showing, in the southeastern portion of the Nithi claim
(Assessment Report 22194).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
ALTERATION: Clay K-Feldspar Sericite Hematite
ALTERATION TYPE: Argillic Potassic Sericitic Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1991
SAMPLE TYPE: Chip
COMMODITY GRADE
Molybdenum 0.1055 Per cent
COMMENTS: A 1.4 metre chip sample across the Chris extension showing.
REFERENCE: Assessment Report 22194.

CAPSULE GEOLOGY

The Chris showing is located about 9 kilometres south of Fraser Lake on the Nithi claim on the southern slopes of Nithi Mountain. In 1963, R and P Metals Corp. conducted soil sampling, trenching and diamond drilled 14 holes on Nithi Mountain. In 1975, Amax Potash Ltd. completed mapping, soil sampling and geophysical surveys on ground partly covered by the Nithi claim. In 1976, Amax completed 975 metres of percussion drilling before dropping their option on the property. In 1980, Rockwell Mining Corp. conducted soil and rock sampling, prospecting and trenching on the ground covered by the Nithi claim. In 1981, 1818 metres of drilling was completed, with 4 out of the 10 holes located on the Nithi claim near the Chris showing. In 1991, Equity Engineering Ltd. conducted prospecting and mapping and examined the 1963 drill core stored on the property. The region is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata. The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main

CAPSULE GEOLOGY

intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

Mineralization consists of quartz-molybdenite veins and molybdenite stringers within fractured quartz veins. The veins are up to 20 centimetres in width and strike 060 to 070 degrees. Disseminated molybdenite is rare but when present is often associated with quartz veins. Molybdenite occurs locally along the vein walls but more commonly fills later fractures within the quartz veins. Trace pyrite, iron staining and hematite, commonly lining fractures, are present. Mineralization is hosted within argillically altered Nithi quartz monzonite. Phyllic and potassic alteration are present to a much lesser degree.

The eastern extension of the Chris showing, located immediately to the east, consists of parallel veins containing molybdenite stringers. A 1.4 metre wide chip sample across this showing assayed 0.1055 per cent molybdenum (Assessment Report 22194). The A-line showing, about 1500 metres northwest of the Chris showing, resembles a stockwork and consists of quartz-molybdenite veins, 4 to 10 centimetres wide, and pods. A 4.0 metre chip sample across this showing assayed 0.0705 per cent molybdenum (Assessment Report 22194).

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*22194
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EMPR AR 1965-Figure 24; 1966-118
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193-197
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps)
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **EXO**

MINING DIVISION: Omineca

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 093F05E
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 24 53 N
 LONGITUDE: 125 42 28 W
 ELEVATION: 1189 Metres

NORTHING: 5921822
 EASTING: 320045

LOCATION ACCURACY: Within 500M
 COMMENTS:

COMMODITIES: Tungsten Copper Molybdenum Silver Zinc

MINERALS

SIGNIFICANT: Scheelite Chalcopyrite Molybdenite Sphalerite Pyrrhotite
 Pyrite
 ASSOCIATED: Quartz Garnet Diopside
 ALTERATION: Garnet Diopside Silica
 ALTERATION TYPE: Skarn Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
 CLASSIFICATION: Skarn Hydrothermal Replacement Epigenetic
 TYPE: K06 Sn skarn K07 Mo skarn
 DIMENSION: 0022 Metres STRIKE/DIP: TREND/PLUNGE:
 COMMENTS: Skarn mineralization exposed over 22 metres width.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
 Lower Jurassic Hazelton Undefined Formation

LITHOLOGY: Calc-silicate Skarn
 Hornfels
 Siliceous Hornfels
 Sediment/Sedimentary
 Volcanic
 Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
 TERRANE: Stikine
 METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: SKARN REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1985
 SAMPLE TYPE: Grab
 COMMODITY GRADE
 Copper 0.4400 Per cent
 Tungsten 0.5600 Per cent
 COMMENTS: Commodity is WO3. Sample over 2 metres. Skarn mineralization.
 REFERENCE: Assessment Report 15129.

ORE ZONE: STOCKWORK REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1989
 SAMPLE TYPE: Grab
 COMMODITY GRADE
 Silver 14.4000 Grams per tonne
 Copper 0.6200 Per cent
 Molybdenum 0.0500 Per cent
 Tungsten 0.0400 Per cent
 COMMENTS: Over 350 metre width in logging road cut.
 REFERENCE: George Cross Newsletter Jan.16, 1989.

CAPSULE GEOLOGY

The region in which the Exo showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary

CAPSULE GEOLOGY

Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Exo showing is underlain by sedimentary and volcanic rocks of the Lower Jurassic Hazelton Group, intruded by a granodiorite intrusion which outcrops about 800 metres to the east of the showing.

Two zones of mineralization comprise the showing. A steeply dipping mixed hornfels-calc-silicate skarn assemblage with bands of quartz-garnet-diopside-pyrrhotite skarn contains pyrite, scheelite, chalcopyrite and sphalerite. About 200 metres to the east a bleached and silicified hornfels zone hosts a stockwork of quartz-pyrite-chalcopyrite-scheelite-molybdenite veinlets. In the skarn showing mineralization is exposed over a width of 22 metres with a tungsten oxide grade of 0.25 per cent across the zone. Within this zone a two metre width averages 0.56 per cent tungsten oxide and 0.44 per cent copper (Assessment Report 15129). The stockwork mineralization sampled over a 350 metre width in a logging road cut in 1989 assayed 0.62 percent copper, 0.05 per cent molybdenum, 0.04 percent tungsten and 14.40 grams per tonne silver (George Cross Newsletter Jan. 16, 1989).

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EMPR EXPL 1986-C329; 1992-69-106
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170,
193-197
EMPR OF 1991-17; 2002-11
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120

DATE CODED: 1986/12/16
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **CALEDONIA**, BAT

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 55 58 N
LONGITUDE: 124 54 07 W
ELEVATION: 853 Metres

NORTHING: 5977718
EASTING: 375135

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of 1976 drilling.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Magnetite Pyrite
ASSOCIATED: Quartz
ALTERATION: K-Feldspar
ALTERATION TYPE: Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
DIMENSION: 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Veins are from 1 centimetre to 1.2 metres wide. Gouge zones also contain mineralization.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Quartz Monzonite
Dioritic Dike
Andesitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the Caledonia showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

The showing is underlain by quartz monzonite cut by dark green dioritic and andesitic dikes. Quartz-molybdenite veins occur from 1 centimetre to 1.2 metres wide in the quartz monzonite. Gouge zones in the area also contain molybdenite both in quartz veins cutting the gouge zones and in the gouge itself. This molybdenite mineralization is accompanied by minor amounts of magnetite, pyrite and chalcopyrite. Adjacent to quartz veins and gouge zones potassic alteration occurs.

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EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR PF (*Report by T. Schroeter; Group Sept. 1974; Correspondence between Ministry and Owner, 1974; See 093F General File, Nithi

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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PAGE: 624
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BIBLIOGRAPHY

Mountain Area Maps; See 093K General file, Endako Area Maps)
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
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REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 019**

NATIONAL MINERAL INVENTORY: 093F15 Mo3

NAME(S): **OWL**, NIT, BEE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 56 21 N
LONGITUDE: 124 50 20 W
ELEVATION: 899 Metres

NORTHING: 5978319
EASTING: 379292

LOCATION ACCURACY: Within 500M

COMMENTS: Boundary between Owl 3 and Owl 5.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: K-Feldspar
ALTERATION TYPE: Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
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>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Granodiorite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the Owl showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

The showing consists of minor amounts of molybdenite and chalcopyrite in thin quartz stringers cutting granodiorite and diorite. Slight potassic alteration occurs adjacent to these stringers.

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EMPR AR 1967-116; 1968-144
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EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 020**

NATIONAL MINERAL INVENTORY: 093F15 Mo7

NAME(S): **GEL**, SKIP

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 56 08 N
LONGITUDE: 124 49 00 W
ELEVATION: 969 Metres

NORTHING: 5977880
EASTING: 380741

LOCATION ACCURACY: Within 500M

COMMENTS: Corner of GEL 19, 20, 21, 22.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Pyrite Molybdenite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Silica K-Feldspar Kaolin Pyrite Epidote
ALTERATION TYPE: Silicific'n Potassic Argillic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic			Topley Intrusions

LITHOLOGY: Alaskite
Basalt
Andesite
Diorite
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the Gel showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite.

Numerous pyritic and epidotized inclusions of basalt or andesite occur in Casey alaskite. The alaskite is highly fractured and zones of silicification, potassic and kaolinitic alteration occur near these volcanic inclusions. Chalcopyrite, pyrite and minor molybdenite occur throughout the altered alaskite and in the volcanic inclusions. Molybdenite also occurs as smears along joint planes and as finely disseminated flakes in irregular quartz veinlets. About 1200 metres to the southeast, quartz diorite outcrops on the Skip 4 claim, contained minor visible chalcopyrite and about 2 per cent pyrite (Assessment Report 21587).

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EMPR AR 1967-116
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RUN TIME: 11:27:59

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PAGE: 627
REPORT: RGEN0100

BIBLIOGRAPHY

193-197
EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K
General file, Endako Area Maps)
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 021**

NATIONAL MINERAL INVENTORY: 093F6 Mo1

NAME(S): **CAP**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 19 25 N
LONGITUDE: 125 20 19 W
ELEVATION: Metres

NORTHING: 5910821
EASTING: 344243

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Covellite Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Porphyry
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous			Capoose Batholith

LITHOLOGY: Quartz Monzonite
Granodiorite

HOSTROCK COMMENTS: The Capoose Batholith is probably Cretaceous in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the Cap showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Cap showing is underlain by one of these plutons of probable Cretaceous age. Sulphide mineralization comprises chalcopyrite, molybdenite, covellite and pyrite along with malachite, along fracture planes cutting granodiorite and quartz monzonite. East-west trending dikes of probable Tertiary age occur proximal to mineralized fractures and may be associated with the mineralization.

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EMPR OF 1993-14; 1994-19
EMPR MIN POT MAP 1993-3
EMPR EXPL 1985-C291; 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAPOOSE PORPHYRY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 19 52 N
LONGITUDE: 125 16 01 W
ELEVATION: 1219 Metres

NORTHING: 5911501
EASTING: 349042

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Covellite Pyrite
ALTERATION: Malachite Clay
ALTERATION TYPE: Argillic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous			Capoose Batholith

LITHOLOGY: Granodiorite
Quartz Monzonite
Porphyritic Quartz Monzonite

HOSTROCK COMMENTS: The Capoose Batholith is probably Cretaceous in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: PIT

REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1992
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Copper		0.5600	Per cent
Molybdenum		0.0070	Per cent

COMMENTS: Best assay; sample taken from 1 of 14 blast pits on the property.
REFERENCE: Fieldwork 1992, page 66.

CAPSULE GEOLOGY

The region in which the Capoose showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

This showing, and the adjacent Cap showing (093F 022), are underlain by granitic rocks of the Capoose Batholith of probable Cretaceous age. Sulphide mineralization comprises chalcopyrite, molybdenite, covellite and pyrite along with malachite, along fracture planes cutting granodiorite and quartz monzonite. Chalcopyrite and malachite have also been reported as occurring as disseminations in porphyritic quartz monzonite. Minor amounts of argillic alteration occur in the intrusive rocks. The best assays reported are 0.56 per cent copper and 0.007 per cent MoS₂ from a grab sample taken from 1 of 14 blast pits on the property (Fieldwork 1992, p. 66).

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8515, 8550, 8557, 8731, 9735, 11607, 13805, 14675
EMPR EXPL 1985-C291; 1992-69-106
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pp. 167-170, 193-197
EMPR GEM 1969-155; 1970-110; 1971-158
EMPR MIN POT MAP 1993-3
EMPR OF 1993-14; 1994-19
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 023**

NATIONAL MINERAL INVENTORY: 093F9 Fe1

NAME(S): **FINGER LAKE**, IRON MOUNTAIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 35 21 N
LONGITUDE: 124 15 37 W
ELEVATION: 1280 Metres

NORTHING: 5938552
EASTING: 416580

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Iron

MINERALS

SIGNIFICANT: Hematite Magnetite Pyrite
ASSOCIATED: Quartz
ALTERATION: Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Replacement Industrial Min.
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0030 x 0001 Metres STRIKE/DIP:
COMMENTS: Mineralized shear zones are up to 0.6 metres wide and 30 metres long. 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: Volcanic Breccia
Felsite
Diabase
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Finger Lake showing is underlain by Lower Jurassic Hazelton Group volcanic breccia, felsite, diabase and andesite which, to the west, has been intruded by a pluton of the Topley intrusive suite. Shears in the volcanic rocks contain massive red hematite, specularite, magnetite and quartz in zones up to 0.6 metres wide and 30 metres long.

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GSC MAP 1131A; 1424A
GSC MEM 324, p. 53
GSC P 90-1F, pp. 115-120

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 023**

MINFILE NUMBER: **093F 024**

NATIONAL MINERAL INVENTORY: 093F5 Zn1

NAME(S): **TETACHUCK LAKE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 20 17 N
LONGITUDE: 125 45 13 W
ELEVATION: 899 Metres

NORTHING: 5913413
EASTING: 316671

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location from Geological Survey of Canada Map 1131A - probably now flooded.

COMMODITIES: Zinc Silver Gold

MINERALS

SIGNIFICANT: Sphalerite Pyrite

ASSOCIATED: Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1963

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

5.1420

Grams per tonne

Gold

0.1714

Grams per tonne

Zinc

26.8000

Per cent

COMMENTS: Selected sample.

REFERENCE: Geological Survey of Canada Memoir 324, page 53.

CAPSULE GEOLOGY

The region in which the Tetachuck Lake showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

This showing comprises a small (5 to 10 centimetres wide) sphalerite-calcite vein within Lower Jurassic Hazelton Group argillite. A selected sample in 1963 assayed 26.80 per cent zinc, 5.142 grams per tonne silver and 0.1714 grams per tonne gold (Geological Survey of Canada Memoir 324, page 53). In the area around Tetachuck Lake several pyritized zones were noted. Some are reported to carry low gold values.

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EMPR EXPL 1992-69-106
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GSC MEM 324, p. 53

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BIBLIOGRAPHY

GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 025**

NATIONAL MINERAL INVENTORY: 093F5 Mo3

NAME(S): **CHELASLIE ARM**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 29 55 N
LONGITUDE: 125 38 01 W
ELEVATION: 1036 Metres

NORTHING: 5930967
EASTING: 325318

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Granite
Volcanic

HOSTROCK COMMENTS: Granite probably Cretaceous in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Chelaslie Arm showing comprises molybdenite in a small quartz vein cutting granitic rocks of probable Cretaceous age which has intruded Lower Jurassic Hazelton Group volcanics.

BIBLIOGRAPHY

EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324, p. 54
GSC MAP 1131A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 026**

NATIONAL MINERAL INVENTORY: 093F13 PrI2

NAME(S): **UNCHA LAKE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F13E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 51 15 N
LONGITUDE: 125 38 16 W
ELEVATION: Metres

NORTHING: 5970522
EASTING: 326510

LOCATION ACCURACY: Within 1 KM
COMMENTS: North side of Dayeezcha Mountain.

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: R12 Volcanic glass - perlite
DIMENSION: 0023 Metres
COMMENTS: Perlite beds are 7.6 to 23 metres thick and dip 10 to 30 degrees south.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	

LITHOLOGY: Porphyritic Rhyolite
Felsic Volcanic
Epiclastic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the Uncha Lake showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ootsa Lake Group of Upper Cretaceous to Lower Tertiary age comprises mainly felsic volcanic rocks and their epiclastic derivatives. The Uncha Lake perlite showing occurs within rhyolite of this group on Dayeezcha Mountain. The perlite dips 10 to 30 degrees south and is 7.6 to 23.0 metres thick. The perlite is interbedded within light to dark grey porphyritic rhyolite layers 2.0 to 9.0 metres thick. The perlite is light grey to pale greenish-grey, some perlitic glass occurrences in the area are resinous brown.

BIBLIOGRAPHY

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EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44; 1994, pp. 167-170, 193-197; 2002, pp. 165-174
EMPR OF 1994-19
EMPR PF (Monthly Report, Smithers Office, Feb. 1979; Report on Uncha Lake Perlite, 1977)
GSC MAP 1131A; 1424A
GSC MEM 324, p. 54
GSC P 90-1F, pp. 115-120
GCNL #231, 1979

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 026**

MINFILE NUMBER: **093F 027**

NATIONAL MINERAL INVENTORY: 093F11 Pr11

NAME(S): **CHESLATTA LAKE**, PARK 1-8

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F11W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 53 42 30 N
LONGITUDE: 125 27 33 W
ELEVATION: Metres

NORTHING: 5953880
EASTING: 337693

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location on Geological Survey of Canada Map 1131A.

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: R12 Volcanic glass - perlite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	

LITHOLOGY: Rhyolite
Felsic Volcanic
Epiclastic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the Cheslatta Lake showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ootsa Lake Group of Upper Cretaceous to Lower Tertiary age comprises mainly felsic volcanic rocks and their epiclastic derivatives. The Cheslatta Lake perlite showing occurs within a rhyolitic sequence of this group.

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EMPR OF 1994-19
GSC MAP 1131A; 1424A
GSC MEM 324, p. 54
GSC P 90-1F, pp. 115-120

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 028**

NATIONAL MINERAL INVENTORY: 093F12 Pr11

NAME(S): **HENSON HILLS**, OOTSA LAKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F12E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 36 25 N
LONGITUDE: 125 39 25 W
ELEVATION: Metres

NORTHING: 5943073
EASTING: 324221

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location on Geological Survey of Canada Map 1131A.

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Volcanogenic 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>
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	

LITHOLOGY: Rhyolite
Felsic Volcanic
Epiclastic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ootsa Lake Group of Upper Cretaceous to Lower Tertiary age comprises mainly felsic volcanic rocks and their epiclastic derivatives. The Henson Hills perlite showing occurs within a rhyolitic sequence of this group.

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EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44; 1994, pp. 167-170, 193-197; 2002, pp. 165-174
EMPR OF 1994-19
GSC MAP 1131A; 1424A
GSC MEM 324, p. 54
GSC P 90-1F, pp. 115-120
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOLY CROSS, HC**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 47 13 N
LONGITUDE: 124 58 30 W
ELEVATION: 1310 Metres

NORTHING: 5961627
EASTING: 369887

LOCATION ACCURACY: Within 500M

COMMENTS: Location of trench 1, 2 kilometres west of Bentzi Lake, 23.5 kilometres south from the east end of Francois Lake (Assessment Report 19627).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Chalcedony Hematite Carbonate
ALTERATION: Silica Chalcedony Clay Hematite Malachite
ALTERATION TYPE: Silicific'n Argillic Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Epithermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	
Cretaceous	Skeena	Unnamed/Unknown Formation	

LITHOLOGY: Flow Banded Rhyolite
Rhyolite Breccia
Andesite
Andesitic Crystal Tuff
Plagioclase Phyric Flow
Lapilli Tuff
Crystal Tuff
Dacite
Chert Pebble Conglomerate
Biotite Quartz Monzonite

HOSTROCK COMMENTS: Sparse copper mineralization occurs in Hazelton Group rocks, possibly related to the biotite quartz monzonite intrusion (Francois Lake?).

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Overlap Assemblage

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 4.3000 Grams per tonne
Gold 0.5100 Grams per tonne

COMMENTS: Average assays from 8.5 metre section in Trench 1.
REFERENCE: Assessment Report 17807.

CAPSULE GEOLOGY

The Holy Cross epithermal precious metal prospect is located about 33 kilometres south of Fraser Lake. The area of interest includes a large part of the now lapsed HC claim group, an area that was the focus for exploration by Noranda Exploration Company, Limited during 1988 and 1989. The claims covered gold anomalies defined by rock chip samples of silica-flooded rhyolite. Exploration by Noranda included geochemical surveys, magnetometer and I.P. surveys, geological mapping and the excavation of 26 trenches. There is no record of exploration prior to Noranda's activity. The oldest rocks exposed in the area are dull green intermediate

CAPSULE GEOLOGY

volcanics of the Middle Jurassic Hazelton Group. They occur along the north-facing slopes and low-lying areas in the northern part of the area. Lithologies include reworked andesitic crystal tuffs and plagioclase-phyric flows. These rocks have been thermally metamorphosed to a fine-grained mottled pale pink and green rock with relict plagioclase phenocrysts where they are intruded by a biotite quartz monzonite plug. The intrusion is salmon coloured, medium grained and contains from 3 to 4 per cent weakly chloritized biotite. It may be correlative with the Jura-Cretaceous Francois Lake suite of intrusions that crops out predominantly to the north of the area. Grey chert pebble conglomerates (Cretaceous Skeena Group equivalents?) overlie Jurassic Hazelton Group rocks. Locally they are weakly silicified and are cut by veinlets of quartz-pyrite. The conglomerates are in turn overlain by pale grey-green hornblende phyric dacite to andesite flows that may be correlative with the Cretaceous Kasalka Group.

Maroon to cream-coloured, hematite-stained and variably argillically altered plagioclase phyric andesite to dacite flows, flow-banded rhyolites, rhyolite breccias, and associated felsic to intermediate lapilli and crystal tuffs, unconformably overlie all older rock units. These rocks are considered to be part of the Ootsa Lake Group. The flow-banded rhyolite forms a ridge that trends northwesterly across the area. This unit appears to be part intrusive and part extrusive; it cuts all older stratified rocks in the area and in part overlies the argillically altered andesite flows. It is interpreted to be part of a flow dome complex. Epithermal style mineralization occurs in several areas on the property; all are hosted by altered Ootsa Lake Group rocks. The best gold values came from trench 1 at the main showing area. An 8.5-metre section of brecciated and intensely silicified rhyolite with 1 to 2 per cent very fine grained, disseminated pyrite averaged 0.51 grams per tonne gold and 4.3 grams per tonne silver (Assessment Report 17807). A 2-metre interval graded 2.64 grams per tonne gold and 9.7 grams per tonne silver (Assessment Report 17807). Manganese, limonite and hematite typically coat fracture surfaces in the massive grey crystalline silica.

Other anomalous areas (i.e. trench 17) contain banded hematitic and/or comb quartz veins and stockworks hosted by flow-banded rhyolite. Barren or weakly anomalous quartz-stockwork zones are commonly associated with weakly to moderately argillically altered wallrock, reflecting a less intense, possibly more protracted event. Sulphide mineralization in these areas is very weak or absent. Pervasive hematitic alteration has stained andesites and rhyolites dark maroon or purple. Sulphidization appears to be a post-hematite event and has resulted in the development of up to 4 per cent disseminated cubic pyrite euhedra. Pyrite cubes are commonly enveloped by bleached zones 1 to 3 times the size of the pyrite grain.

Sparse copper mineralization, consisting of trace to 1 per cent chalcopyrite in quartz-carbonate veinlets is hosted in Hazelton Group volcanics. The mineralization may be genetically related to the biotite quartz monzonite intrusion. However, chalcopyrite also occurs in quartz-carbonate veins in younger rocks spatially unrelated to the quartz monzonite.

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- EMPR ASS RPT *17807, 19005, 19278, *19627
- EMPR EXPL 1988-C158; 1992-69-106
- EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, *177-191, 193-197
- GSC MAP 1131A; 1424A
- GSC MEM 324
- GSC P 90-1F, pp. 115-120
- PR REL Bard Ventures Ltd., November 21, 2002
- STOCKWATCH Nov.15, 2001

DATE CODED: 1989/08/31
DATE REVISED: 1995/01/23

CODED BY: GO
REVISED BY: RAL

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093F 030**

NATIONAL MINERAL INVENTORY: 093F3 Cu1

NAME(S): L

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F03E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 53 10 26 N
LONGITUDE: 125 08 39 W
ELEVATION: Metres

NORTHING: 5893761
EASTING: 356692

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately 3 kilometres North of the east end of Laidman Lake.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
COMMENTS: Assumed minerals - not specifically mentioned.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

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

HOSTROCK COMMENTS: Host rock type not specified, mapped as Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

Although little is known about the L showing, copper and molybdenum mineralization is reported to occur in an area which, on Geological Survey of Canada Map 1131A, is underlain by Lower Jurassic rocks of the Hazelton Group. A short distance to the west is a granitic intrusion of probable Cretaceous age.

BIBLIOGRAPHY

EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-44; 1994, pp. 167-170, 193-197
EMPR GEM 1970-110
EMPR OF 1994-2; 1994-9; 1994-10; 1994-18; 1994-19
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 031**

NATIONAL MINERAL INVENTORY: 093F5 Mo2

NAME(S): **WT**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 28 25 N
LONGITUDE: 125 32 52 W
ELEVATION: 1097 Metres

NORTHING: 5927980
EASTING: 330911

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Bornite Pyrrhotite Magnetite

Pyrite Epidote Chlorite Diopside

ALTERATION: Skarn

ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Hydrothermal Porphyry Skarn Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Jurassic
Cretaceous

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Hornblende Diorite
Biotite Diorite
Quartz Diorite
Hornfels
Skarn
Latite

HOSTROCK COMMENTS: Diorite is probably Cretaceous in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nechako Plateau

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The WT showing is underlain mainly by a Cretaceous felsic pluton comprising hornblende diorite to quartz diorite to the north and nonporphyritic to porphyritic latite to the south. At the contact of the intrusion with the enclosing rocks of the Hazelton Group, hornfels and skarn have developed.

Pyrite, chalcopyrite, molybdenite, minor bornite, pyrrhotite and magnetite are variably dispersed throughout the plutonic rocks and the hornfels-skarn unit. Chalcopyrite occurs mainly as disseminations along fracture planes along with epidote and chlorite, and as veinlets and stringers associated with magnetite, in both biotite-rich diorite and the hornfels-skarn unit. Molybdenite occurs in association with very fine-grained dark coloured biotite-rich inclusions within the biotite diorite.

BIBLIOGRAPHY

EMPR ASS RPT 3254, *3810, 4403
EMPR GEM 1971-158; 1972-347
EMPR PF (Report to Minister of Mines and Petroleum Resources, Noranda

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 642
REPORT: RGEN0100

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1971)
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193-197
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 032**

NATIONAL MINERAL INVENTORY: 093F13 Cu1

NAME(S): **BOSS**, WEE MCGREGOR, DANSKIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 59 05 N
LONGITUDE: 125 47 33 W
ELEVATION: 884 Metres

NORTHING: 5985432
EASTING: 316908

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately 0.8 kilometres south of Danskin.

COMMODITIES: Copper Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Pyrite Fluorite
ALTERATION: Quartz Carbonate
ALTERATION TYPE: Quartz-Carb. Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0106 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Zone of veining occurs over about 106 metres.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite
Rhyolite
Cherty Pebble Conglomerate
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine

INVENTORY

ORE ZONE: SHEAR REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 19.2000 Grams per tonne
Gold 0.6856 Grams per tonne
Copper 1.7000 Per cent

COMMENTS: Sample from shear zone 0.76 metres wide, from footwall seam 0.15 metres wide.

REFERENCE: Minister of Mines Annual Report 1930, page A146.

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude Lower and Middle Jurassic Hazelton strata. In the northwestern part of the map sheet, near Danskin, the Boss copper-lead-zinc showing comprises a number of small subparallel veins within shears cutting andesitic rocks of the Hazelton Group. This zone of veining occurs over a width of about 100 metres. Mineralization consists of chalcopyrite, galena and sphalerite which occurs in quartz veins and along small fractures and as disseminations in quartz carbonate altered zones along northwest trending shears in andesitic rocks. Silicification and the presence of fluorite are associated with the quartz veining. A sample from a

CAPSULE GEOLOGY

0.76 metre wide shear zone across the footwall seam 0.15 metres wide assayed 1.7 per cent copper, 19.20 grams per tonne silver and 0.6856 grams per tonne gold (Minister of Mines Annual Report 1980, page A146). Samples taken in 1987 from the Boss claims assayed lower than the 1980 sample and no soil anomalies were outlined (Assessment Report 16797).

About 1.5 kilometres to the northeast, a bed of pyritized rhyolite is exposed. A sample disclosed only trace silver and gold.

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EMPR OF 1994-19
EMPR ASS RPT 16797
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 033**

NATIONAL MINERAL INVENTORY: 093F15 Ag1

NAME(S): **HIDDEN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 28 N
LONGITUDE: 124 32 57 W
ELEVATION: 762 Metres

NORTHING: 5981789
EASTING: 398394

LOCATION ACCURACY: Within 5 KM
COMMENTS: Six miles south of Fort Fraser.

COMMODITIES: Silver Lead Gold

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0008 Metres STRIKE/DIP: 025/60W TREND/PLUNGE:
COMMENTS: Vein is 8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Granodiorite
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite in the northeastern part of the map sheet is host to a number of mineral occurrences, mainly molybdenite. The Hidden occurrence, however, consists of pyrite-galena mineralization within an 8 metre wide quartz vein in sheared Topley granodiorite. The vein, which strikes 025 degrees and dips 60 degrees west, is oxidized in places. Anomalous gold and silver values accompany the sulphide mineralization.

BIBLIOGRAPHY

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EMPR PF (Claim Map, Fraser Lake Project Feb. 1978)
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 034**

NATIONAL MINERAL INVENTORY: 093F9 Cu1

NAME(S): **TAT**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F09E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 30 21 N
LONGITUDE: 124 12 13 W
ELEVATION: 1322 Metres

NORTHING: 5929217
EASTING: 420174

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ASSOCIATED: Magnetite Garnet Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
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: Andesite
Basalt
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Tat showing is underlain by volcanic and sedimentary rocks of the lower part of the Hazelton Group which has been intruded by a small granite stock of the Topley intrusive suite. Chalcopyrite and rare bornite occur as disseminations and fracture plane coatings in Hazelton mafic volcanic rocks. Often associated with the mineralization are blebs and discontinuous stringers of magnetite, garnet and epidote.

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EMPR GEM 1971-158
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 035**

NATIONAL MINERAL INVENTORY: 093F5 Cu1

NAME(S): **GODOT**, CHELASLIE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F05E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 24 40 N
LONGITUDE: 125 38 19 W
ELEVATION: 1189 Metres

NORTHING: 5921248
EASTING: 324626

LOCATION ACCURACY: Within 500M

COMMENTS: Approximately centre of Godot claim block.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Igneous-contact

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Volcanic

HOSTROCK COMMENTS: Granodiorite is probably Cretaceous in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

In the same area as the Tet and Exo showings (093F 002 and 17), the Godot showing consists of disseminated chalcopyrite and molybdenite in granodiorite which has intruded volcanic rocks of the Hazelton Group.

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EMPR EXPL 1983-417; 1992-69-106
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR GEM 1971-158; 1972-347
EMPR PF (Noranda Magnetometer and JEM Survey, 1971; Report to Minister of Mines and Petroleum Resources, Noranda 1971)
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 036**

NATIONAL MINERAL INVENTORY: 093F10 Cu1

NAME(S): **H**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 43 00 N
LONGITUDE: 124 31 26 W
ELEVATION: 1128 Metres

NORTHING: 5953077
EASTING: 399436

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claim group.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
COMMENTS: Assumed minerals.
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>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Diorite
Granodiorite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the H showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

Although little is known of this showing, molybdenum and copper mineralization occur within mainly diorite but also in granodiorite and granite of the Topley intrusive suite. This occurrence is probably similar to a number of occurrences which occur to the northwest within similar rock types.

BIBLIOGRAPHY

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EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR PF (093F General File - Geological and Drilling Report, Nechako Project, 1979, E & B Explorations Ltd.)
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACKWATER-DAVIDSON**, PEM, SILVER,
GOLD, MT. DAVIDSON

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093F02W
BC MAP:
LATITUDE: 53 10 22 N
LONGITUDE: 124 51 29 W
ELEVATION: 1559 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Diamond drillhole collar (DAV-19), 3.5 kilometres north-northeast of the summit of Mount Davidson, 14 kilometres west from the west end of Kuyakuz Lake (Assessment Report 17032).

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 5893103
EASTING: 375810

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Sphalerite Pyrite Pyrrhotite Galena Arsenopyrite
Chalcopyrite Tetrahedrite Boulangerite Marcasite
COMMENTS: Unidentified black sulphide mineral.
COMMENTS: Possible arsenopyrite.
ALTERATION: Quartz Sericite Chlorite Kaolinite
ALTERATION TYPE: Sericitic Argillic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Breccia
CLASSIFICATION: Epithermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Ootsa Lake Undefined Formation

LITHOLOGY: Rhyolite Tuff
Rhyolite Flow
Dacite Tuff
Rhyodacite Tuff
Andesitic Lapilli Tuff
Andesite Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Overlap Assemblage

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Gold 14.2800 Grams per tonne
COMMENTS: Gold zone, sample across 6.3 metres (Diamond-drill hole DAV-19).
REFERENCE: Assessment Report 17032.

ORE ZONE: SILVER REPORT ON: Y
CATEGORY: Inferred YEAR: 1992
QUANTITY: 6000000 Tonnes
COMMODITY GRADE
Silver 37.0000 Grams per tonne
Gold 0.0500 Grams per tonne
COMMENTS: Estimated reserves for the Silver zone; at a shallow depth.
REFERENCE: Fieldwork 1993, page 52.

CAPSULE GEOLOGY

The Pem property is located about 7 kilometres northeast of Mount Davidson, about 160 kilometres south of Vanderhoof. The property comprises 22 claims totalling 304 claim units that are wholly owned by Granges Inc.
The Pem claim was staked in 1977. Intermittently from 1977 to 1984, Granges conducted geophysical and soil geochemistry surveys. A

CAPSULE GEOLOGY

total of 31 core holes and 34 reverse circulation holes were drilled between 1985 and 1987. They identified 2 areas of mineralization, the Gold and Silver zones. Additional claims were staked in 1985, 1987, 1991 and in 1992. Granges conducted detailed geological mapping, geochemical sampling, geophysical surveys (IP, magnetic and VLF-EM) and drilled 5 core holes on the Pem claim.

The claims are primarily underlain by Jurassic Hazelton Group rocks consisting of an interbedded succession of argillite, siltstone and sandstone as well as an intercalated sequence of rhyolitic to dacitic and andesitic to trachyandesitic tuffs, lapilli tuffs, breccias and flows. Possible Upper Cretaceous to Oligocene Ootsa Lake Group rhyolitic lapilli tuff crops out in the south and southwest of the property. Tertiary Endako Group amygdaloidal andesite flows unconformably overlie Hazelton Group strata in the northwest corner of the claim group. The rocks are commonly highly altered and brecciated, possibly reflecting faulting or fracturing. The rock units are variably oxidized, clay altered, silicified and highly brecciated. Limonite and chlorite occur as fracture-fillings.

The Gold zone has been interpreted as a structurally controlled, easterly trending steeply dipping zone up to 70 metres across with a strike length of about 300 metres. Disseminated and shear-hosted mineralization occur in felsic lapilli tuffs, breccias and flows that have been affected by mainly phyllic (quartz-sericite-chlorite) and argillic (kaolinite) alteration over a minimum strike length of 900 metres and an undefined width. Mineralization does not appear to be lithologically controlled. There is an apparent correlation of higher gold content with the presence of pyrite with or without pyrrhotite. The most encouraging diamond-drill hole intersections include: hole DAV-11, 14.28 grams per tonne gold across 6.3 metres and 48.3 grams per tonne gold across 1.3 metres and hole BD-92-35, 0.72 gram per tonne gold across 47.5 metres. A 17-metre intersection from hole BD-92-33 contains a texture and mineralogy similar to the Capoose deposit (093F 040). Sulphides also occur in several massive (mainly pyrite) zones, in breccias, along fractures, in quartz-lined amygdules and as replacements of garnet (?) and lapilli up to 1 centimetre in diameter, and in late cross-cutting stringers of sphalerite-galena(+/- carbonate). Total sulphide content is estimated at about 5 per cent and includes 3 to 4 per cent sphalerite, 1 to 2 per cent pyrite and pyrrhotite and traces of galena, arsenopyrite, chalcopyrite, tetrahedrite, boulangerite and marcasite(?).

The Silver zone is about 500 metres northwest of the Gold zone. It is interpreted to be a relatively flat lying body up to 70 metres thick and is open to the northwest. The Silver zone contains an estimated reserve of 6 million tonnes grading 37 grams per tonne silver and 0.05 gram per tonne gold at a shallow depth.

BIBLIOGRAPHY

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EMPR ASS RPT 6384, 7803, 11051, 14242, *17032, *22654
EMPR EXPL 1977-E185; 1979-214; 1980-321; 1982-288,289; 1985-C290;
1988-C155; 1992-69-106; 1998-B-3
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44, *45-55;
1994, pp. 167-170, 171-176, 193-197, 199-205
EMPR OF 1994-19; 1995-10; 1995-16
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120
WWW <http://www.infomine.com/index/properties/BLACKWATER.html>
EMPR OF 1998-10

DATE CODED: 1989/08/31
DATE REVISED: 1995/02/13

CODED BY: GO
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093F 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **CABIN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F14E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 53 07 N
LONGITUDE: 125 02 52 W
ELEVATION: 1067 Metres

NORTHING: 5972701
EASTING: 365409

LOCATION ACCURACY: Within 500M

COMMENTS: Five subparallel mineralized quartz veins occur in a 500 metre wide zone and are up to 1 metre wide.

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena Pyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION: 0500 x 0001 Metres

STRIKE/DIP: 325/75W

TREND/PLUNGE:

COMMENTS: Attitude of mineralized veins.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Jurassic

Hazelton

Undefined Formation

Lower Jurassic

Topley Intrusions

LITHOLOGY: Quartz Monzonite
Andesitic Tuff
Tuffaceous Breccia
Porphyritic Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

SAMPLE TYPE: Drill Core

YEAR: 1972

COMMODITY

GRADE

Silver

2715.0000

Grams per tonne

Lead

5.0500

Per cent

Zinc

8.6000

Per cent

COMMENTS: Best intersection over 0.65 metres.

REFERENCE: Assessment Report 13537.

CAPSULE GEOLOGY

The region in which the Cabin showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The area of the showing is underlain by mafic to intermediate volcanic rocks of the Hazelton Group, intruded by a Lower Jurassic quartz monzonite pluton. The volcanic rocks consist of andesitic tuff and tuff breccia and porphyritic andesite which, along with the quartz monzonite, have been cut by northwest-trending faults. Occupying fault zones in quartz monzonite are five subparallel quartz-calcite veins occurring over a 500 metre wide zone and which contain pyrite, sphalerite, chalcopyrite and galena. Silver values

CAPSULE GEOLOGY

have been reported with the sulphide mineralization. Individual veins are up to one metre wide and have a strike of 325 degrees dipping 075 degrees west.

Drilling in 1972 intersected mineralization in several holes of which the best was 0.65 metres at 2714.98 grams per tonne silver, 8.6 per cent zinc and 5.05 per cent lead (Assessment Report 13537).

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EMPR ASS RPT 5983, 6279, *13537
EMPR EXPL 1976-E142; 1977-E186; 1978-E202; 1985-C294; 1992-69-106;
2002-13-28
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44; 1994, pp.
167-170, 193-197
EMPR OF 1994-19
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120
GCNL Mar.23, 1978

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **NED**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F06E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 18 03 N
LONGITUDE: 125 14 35 W
ELEVATION: 1280 Metres

NORTHING: 5908083
EASTING: 350527

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Cretaceous

GROUP

ISOTOPIC AGE: 67 +/- 2.3 Ma

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Capoose Batholith

LITHOLOGY: Biotite Quartz Diorite
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1978

COMMODITY

GRADE

COMMODITY	GRADE	
Copper	0.0300	Per cent
Molybdenum	0.0460	Per cent

COMMENTS: Chip sample across 5 metres, negligible gold and silver.
REFERENCE: Fieldwork 1993, page 53.

CAPSULE GEOLOGY

The Ned showing is located about 115 kilometres southwest of Vanderhoof and is centred 3 kilometres southeast of Capoose Lake. Granges Inc. last conducted field work on the property in 1979 and the claims have been allowed to lapse.

The region in which the showing occurs is underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Oligocene Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ned showing is underlain by the Cretaceous Capoose batholith comprising biotite quartz diorite and quartz monzonite. Mineralization consists of disseminated and vein pyrite, molybdenite and trace chalcopyrite.

The best assay was obtained from a chip sample across 5 metres which contained 0.046 per cent molybdenite and 0.03 per cent copper with negligible gold and silver (Fieldwork 1993, pp. 53).

BIBLIOGRAPHY

EMPR ASS RPT 5934, 6367, *6869, *7226, 7504
EMPR EXPL 1976-E141; 1977-E185; 1978-E198; 1979-214; 1980-321;
1983-417; 1992-69-106
EMPR FIELDWORK 1992, pp. 57-67, 475-481; 1993, pp. 9-14, 39-44,

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 654
REPORT: RGEN0100

BIBLIOGRAPHY

*45-55; 1994, pp. 167-170, 193-197
EMPR OF 1993-14; 1994-19
EMPR MIN POT MAP 1993-3
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAPOOSE**, CAPOOSE LAKE, D,
E

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093F06E
BC MAP:
LATITUDE: 53 17 10 N
LONGITUDE: 125 09 37 W
ELEVATION: 1829 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 5906276
EASTING: 355993

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Chalcopyrite Arsenopyrite
ASSOCIATED: Quartz Garnet Calcite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L01 Subvolcanic Cu-Ag-Au (As-Sb) L02 Porphyry-related Au
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Upper Cretaceous

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Quanchus Intrusives

LITHOLOGY: Garnet Rhyolite Sill
Mafic Volcanic Flow
Felsic Tuff
Argillite
Lithic Wacke

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: CAPOOSE

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 28301520 Tonnes

YEAR: 1987

COMMODITY

COMMODITY	GRADE	
Silver	36.0000	Grams per tonne
Gold	0.3000	Grams per tonne

COMMENTS: Drill indicated.

REFERENCE: Granges Exploration Ltd. Form 10-K, December 31, 1987.

CAPSULE GEOLOGY

The Capoose deposit was discovered in 1970 by Rio Tinto Canadian Exploration Ltd. Granges Ltd. explored the property from 1976 to 1985.

The region is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous-Eocene Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Late Triassic-Early Jurassic Topley Intrusions. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The deposit is hosted by Late Cretaceous garnetiferous rhyolite sills known as the Quanchus Intrusives, which have intruded Hazelton Group rocks. In the vicinity of the deposit these rocks comprise mafic volcanic flows, felsic tuff, argillite and lithic wacke. Rhyolite sills occur as a sequence of 10 to 400 metres thick,

CAPSULE GEOLOGY

flow-banded, spherulitic, garnetiferous quartz rhyolite dipping about 30 degrees to the southwest. Mineralization hosted by these sills comprises pyrite, sphalerite, galena, chalcopyrite and arsenopyrite occurring mainly as disseminations but also as fracture-fillings. Precious metals occur as inclusions within the sulphides.

Mineralized zones are overprinted by pervasive sericitic alteration. Peripheral to the sills, quartz and calcite veins occur in the Hazelton Group.

Drill indicated reserves are 28,301,520 tonnes grading 36 grams per tonne silver and 0.30 gram per tonne gold (Granges Exploration Ltd. Form 10-K, December 31, 1987).

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- EMPR ASS RPT 6007, 6458, *6868, 6988, 7504, 8515, 11607, 13805, 14675
EMPR EXPL 1976-E141; 1977-E185; 1978-E198; 1979-214; 1980-321; 1983-417; 1985-C291; 1992-69-106; 1998-B-3
EMPR FIELDWORK 1979, p. 123; 1980, pp. 121-123; 1981, pp. 109-112; 1986, pp. 53-56; 1992, pp. 57-67, 475-481; 1993, pp. 9-14, 39-44; 1994, pp. 167-170, 193-197
EMPR GEOLOGY 1977-1981, pp. 110-112
EMPR MAP 65 (1989)
EMPR MIN POT MAP 1993-3
EMPR OF 1992-1; 1992-3; 1993-14; 1994-19
EMPR PF (Granges Exploration Ltd., Review of Major Projects, 1986)
EMR MIN BULL MR 223 B.C. 220
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120
GCNL #213, 1983
N MINER Mar.5, 1981; Nov.10, 1983
Andrew, K.P.E. (1988): Geology and Genesis of the Wolf precious metal epithermal prospect and the Capoose base and precious metal porphyry-style prospect, Capoose Lake Area, Central British Columbia, unpublished M.Sc. Thesis, University of British Columbia
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 041**

NATIONAL MINERAL INVENTORY: 093F2 Pum1

NAME(S): **TSACHA LAKE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F02W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 00 14 N
LONGITUDE: 124 52 48 W
ELEVATION: Metres

NORTHING: 5874356
EASTING: 373850

LOCATION ACCURACY: Within 1 KM

COMMENTS: In valley of Creek entering south side of Tsacha Lake, 2.4 kilometres from southwest end.

COMMODITIES: Diatomite Pumice

MINERALS

SIGNIFICANT: Diatomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R11 Volcanic ash - pumice

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	

LITHOLOGY: Diatomite
Sediment/Sedimentary
Felsic Tuff
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ootsa Lake Group, in the southern part of the mapsheet, is preserved in a fault angle depression now partly covered by Tsacha Lake. In this area the Ootsa Lake Group is predominantly a volcanic assemblage. In this assemblage sedimentary horizons are intercalated with felsic tuffs. The Tsacha Lake showing consists of diatomite and pumice hosted within these sediments.

BIBLIOGRAPHY

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EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44;
1994, pp. 167-170, 171-176, 193-197, 199-205
EMPR OF 1994-19; 1995-10; 1995-16
GSC MAP 1131A; 1424A
GSC MEM 324, p. 55
GSC P 90-1F, pp. 115-120
GSC PROG RPT 1875-1876, p. 256; 1876-1877, p. 79

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/27

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **KLUSKOIL LAKE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F01E 093G04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 10 35 N
LONGITUDE: 124 00 13 W
ELEVATION: 1341 Metres

NORTHING: 5892363
EASTING: 432923

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on surface trace of limestone belt south of Kluskoil Lake, as shown on Geological Survey of Canada Maps 1131A and 49-1960.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Upper Triassic

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 6400 x 1300 Metres
COMMENTS: Limestone belt trends northeast.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Conglomerate
Argillite
Greywacke
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

An Upper Triassic aged belt of massive to banded grey limestone extends northeastward for 6.4 kilometres, 2.5 to 6.5 kilometres south of Kuskoil Lake. The belt varies up to 1300 metres wide, averaging 800 metres in width. The limestone is bounded to the northwest by conglomerate, shale and greywacke of the Upper Triassic Takla Group. To the southeast it lies in fault contact with Jurassic argillite, greywacke and conglomerate of the Hazelton Group.

BIBLIOGRAPHY

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EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170, 193-197
EMPR IND MIN FILE (McCammon, J.W., (1973): Limestone Occurrences in B.C., p. 23 (in Ministry Library))
GSC MAP 49-1960; 1131A; 1424A
GSC MEM 324, pp. 17-18
GSC P 90-1F, pp. 115-120

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/15

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **FAWN, GRAN, GIVER,
GIVERMORE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 12 27 N
LONGITUDE: 125 08 58 W
ELEVATION: 1520 Metres

NORTHING: 5897510
EASTING: 356452

LOCATION ACCURACY: Within 500M
COMMENTS: Location of the Giver showing.

COMMODITIES: Gold Silver Zinc

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Sphalerite Pyrargyrite
ASSOCIATED: Chalcedony Quartz Barite Dolomite Specularite
ALTERATION: Silica Sericite Clay Chlorite Epidote
Calcite Hematite K-Feldspar

ALTERATION TYPE: Silicific'n Argillic Sericitic Propylitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Disseminated Stockwork Breccia
CLASSIFICATION: Epithermal Epigenetic Hydrothermal
TYPE: H05 Epithermal Au-Ag: low sulphidation

SHAPE: Tabular
DIMENSION: 160 x 50 x 20 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: The Giver zone is east trending and dips steeply to the north.
The dimensions given are approximate.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic Jurassic-Cretaceous	Hazelton	Unnamed/Unknown Formation	Capoose Batholith

LITHOLOGY: Brecciated Lapilli Tuff
Lapilli Tuff
Plagioclase Phyric Andesite Flow
Andesite
Dacite
Crystal Tuff
Argillaceous Sediment/Sedimentary
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1994
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 25.2000 Grams per tonne
Gold 2.0200 Grams per tonne
COMMENTS: Sample from 8.1 metre intercept in diamond drill hole FWN94-02.
REFERENCE: Assessment Report 23531.

CAPSULE GEOLOGY

The Fawn property is located in the Fawnie Creek map area of the Nechako Plateau approximately 120 kilometres southwest of Vanderhoof. The property covers the eastern portion of the Entiako Spur which comprises part of a regional uplift that exposes Jurassic basement rocks. The Fawnie Creek area is underlain predominantly by Middle Jurassic Hazelton Group intermediate to felsic flow and volcaniclastic rocks, and intravolcanic sedimentary rocks, of the informal Naglico formation (Fieldwork 1993, pp. 15-26). Hazelton Group rocks have been intruded by the Jura-Cretaceous Capoose Batholith. The main phase of the Capoose Batholith, exposed both north and south of Entiako Spur, is quartz monzonite; subordinate

CAPSULE GEOLOGY

phases include quartz diorite plugs and stocks and quartz porphyry dikes and plugs.

Thermal effects on Jurassic strata are widespread especially in the central part of the Entiako Spur where Hazelton Group rocks form a broad thin skin (an erosional remnant) over the Capoose batholith. The alteration mineral assemblage consists of epidote, chlorite, quartz and calcite. A mineral assemblage consisting primarily of garnet, diopside, epidote and biotite has developed where contact metasomatism has been most intense.

Eocene felsic to intermediate flows and pyroclastics of the Ootsa Lake Group unconformably overlie Hazelton Group rocks. They form isolated exposures in areas to the southeast near Mt. Davidson and to the west at the Wolf epithermal prospect. Miocene plateau lavas of the Chilcotin Group unconformably overlie all other rocks, although none occur in the immediate vicinity.

Felsic plutons of probable Late Cretaceous age cut Hazelton Group strata to the north at the Capoose prospect (093F 040). A variety of felsic dikes, suspected to be feeders to Eocene Ootsa Lake Group volcanic rocks, cut all lithologies on the property and locally are spatially and genetically associated with epithermal style vein mineralization (Assessment Report 21927).

The Giver epithermal gold-silver zone is hosted by dark green plagioclase-phyric andesite flows and green to maroon andesite to dacite flows, lapilli and crystal lithic tuffs and minor argillaceous sedimentary rocks. Mineralization occurs in sericite and clay-altered volcanic rocks that host auriferous, chalcadonic breccia and silica stockwork zones. An 8.2 metre chip sample across the zone graded 0.6 grams per tonne gold, 7.1 grams per tonne silver and 0.0914 per cent As (Assessment Report 21927).

In 1994, Western Keltic Mines Inc. conducted a six-hole, 617-metre drilling program to test Giver zone mineralization, and VLF-EM and arsenic-zinc-lead-silver soil anomalies that were outlined during exploration programs carried out in 1991 and 1993. Diamond drilling confirmed the presence of an east-trending, steeply north dipping zone of pervasively clay and sericite-altered andesite. Significant widths of siliceous breccia and stockwork mineralization occur within the alteration; an 8.1-metre intercept in one hole assayed 2.02 grams per tonne gold and 25.2 grams per tonne silver (Assessment Report 23531).

Breccia zones consist of grey, intensely silicified and brecciated lapilli tuff. Sulphide content is about 1 per cent and consists mostly of very fine grained pyrite that occurs as wispy coatings on angular clasts and as 2-millimetre and smaller irregular patches distributed throughout matrix and clasts. Traces of fine-grained acicular arsenopyrite partly replace clasts. Sphalerite and specularite occur in trace amounts. Chalcadonic quartz is the dominant gangue mineral and is cut by comb quartz and late calcite veinlets. Quartz-lined drusy cavities commonly contain rhombs of white dolomite, clusters of subhedral to euhedral barite, rare grains of sphalerite and possibly pyrrargyrite.

Cascadia International Resources Inc. and Western Keltic Mines Inc. drilled the property in 1998.

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EMPR FIELDWORK 1993, pp. 15-26, 45-55; 1994, pp. 177-191
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120
GCNL #160 (Aug.20) 1998
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/02

CODED BY: GSB
REVISED BY: RAL

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093F 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **TROUT**, COPLEY LAKE, CUTOFF,
CUT

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093F10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 39 09 N
LONGITUDE: 124 44 26 W
ELEVATION: 853 Metres

NORTHING: 5946267
EASTING: 384965

LOCATION ACCURACY: Within 500M
COMMENTS: Coordinates of Discovery Zone.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold Argentite Pyrite
ASSOCIATED: Quartz Adularia Chalcedony
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Disseminated Stockwork
CLASSIFICATION: Epithermal Hydrothermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 300 x 60 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Silicified breccia zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	
Cretaceous	Kasalka	Unnamed/Unknown Formation	

LITHOLOGY: Polymictic Conglomerate
Andesite Breccia Black Tuff
Andesitic Porphyry Flow
Porphyritic Felsic Dike

HOSTROCK COMMENTS: Rocks belong to either the Ootsa Lake Group or the Kasalka Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Channel
COMMODITY: Gold GRADE: 19.5000 Grams per tonne
COMMENTS: Average grade across 5 metres of banded quartz-chalcedony-adularia veining and stockwork in polymictic conglomerate.
REFERENCE: Assessment Report 16539.

CAPSULE GEOLOGY

The Trout deposit is located 90 kilometres southwest of Vanderhoof, on the Cutoff property.
Precious metals were first discovered in 1984 when gold and silver values within a 60 by 300 metre zone were reported. Subsequent exploration including drilling in 1985, 1987 and 1990, targeted mainly on the Discovery zone, failed to trace the mineralization. In 1992, Cogema Resources Inc. staked the ground and an airborne geophysical survey (VLF-EM, magnetics and resistivity) was flown in 1993. Eleven diamond drillholes totalling 1221 metres were completed in 1994.
The region is underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group, the Cretaceous Kasalka Group and Miocene plateau basalt. Intruding Lower Jurassic rocks in the northeastern part of

CAPSULE GEOLOGY

the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Trout prospect is underlain dominantly by Upper Cretaceous to Lower Tertiary Ootsa Group (or possibly Kasalka Group) volcanics. These rocks consist of red to brown andesitic porphyry flows, tuff and breccias, intruded by porphyritic felsic dikes.

The Discovery or Main zone crops out southwest of Swanson Creek and south of the camp in a swampy valley bottom. The exposure is a northeast-trending ridge of rock, 50 metres long, 12 metres across and about 4 metres high. It consists mainly of pyroclastic breccia and overlying polymictic conglomerate of the Ootsa Lake Group or the Kasalka Group. The shallow southwest-dipping contact between the breccia and conglomerate acted as a conduit channelling mineralizing hydrothermal fluids. The hangingwall is flooded with silica and the footwall is pervasively silicified for about a metre below the contact.

Minor white to greenish quartz veining, finely banded chalcedonic infillings of voids and quartz-adularia veins occur within this zone. Fine, disseminated pyrite occurs in silicification zones. Native gold and argentite occurs in a quartz-adularia vein.

Trench sampling on the Discovery zone averaged 19.5 grams per tonne gold over 5 metres of banded quartz-chalcedony-adularia veining and stockwork in polymictic conglomerate (Assessment Report 16539). This zone is bounded on the south by an east striking, 65 degree north dipping fault. Rotary drilling of the Discovery zone resulted in an assay of 3.7708 grams per tonne gold over 20 metres and trench samples south of the Discovery zone assayed 8.2272 grams per tonne gold over 7 metres (Assessment Report 16733).

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GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1424A
GCNL #174, 1983; #36, 1985; #115, 1987; #22, 1990
PR REL Southern Rio Resources, Mar.6, 2003

DATE CODED: 1986/03/12
DATE REVISED: 1995/03/13

CODED BY: AFW
REVISED BY: RAL

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093F 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **WOLF, RIDGE, LOOKOUT,
POND, BLACKFLY**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093F03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 12 30 N
LONGITUDE: 125 28 06 W
ELEVATION: 1260 Metres

NORTHING: 5898290
EASTING: 335162

LOCATION ACCURACY: Within 500M
COMMENTS: Coordinates of the Ridge Zone.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold Silver Electrum Pyrite Chalcopyrite
Aguilarite Naumannite Acanthite
ASSOCIATED: Quartz
ALTERATION: Sericite Adularia Silica Kaolinite
ALTERATION TYPE: Sericitic Silicific'n Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Breccia Vein
CLASSIFICATION: Epithermal Hydrothermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Ootsa Lake	Fraser Bend	

ISOTOPIC AGE: 48 +/- 2 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Whole rock

LITHOLOGY: Tuff
Felsic Volcanic Breccia
Flow
Rhyolite Sub Volcanic Porphyry
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: TRENCHES

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1993
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	42.2100 Grams per tonne
Gold	8.4900 Grams per tonne

COMMENTS: Trenching across 7.5 metres of the Ridge zone.
REFERENCE: Fieldwork 1993, page 47.

CAPSULE GEOLOGY

The Wolf prospect is located about 130 kilometres southwest of Vanderhoof and consists of 198 claim units in 13 claim blocks between Cow Lake to the south and Entiako Lake to the northwest.

The claims were staked in 1983 to cover prominent knobs of hydrothermally altered felsic volcanic rocks that crop out east of a silver-zinc-arsenic-molybdenum lake-sediment anomaly. The property is currently explored by Metall Mining Corp. under option from Lucero Resource Corporation.

The region in which the showing occurs is underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Oligocene Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower

CAPSULE GEOLOGY

and Middle Jurassic Hazelton strata.

The Wolf occurrence is hosted by Mid-Eocene Ootsa Lake Group felsic flows, tuffs and subvolcanic porphyries. Poorly consolidated mid-Miocene sedimentary rocks, intersected in drilling, unconformably overlie the volcanic succession. The palynomorph assemblage in these rocks correlates closely with the Fraser Bend Formation. Mineralization and alteration are structurally controlled.

Mineralization occurs in northerly trending quartz (carbonate) veins (Lookout and Pond zones), siliceous stockworks (Blackfly, Chopper Pad and East zones) and hydrothermal breccia zones (Ridge zone) and as a stratabound unit of pervasively silicified and brecciated rhyolite and tuffaceous sediments (Ridge zone) capped by a maroon quartz feldspar porphyry sill. Chalcedonic colloform banding, comb structures, drusy cavities and bladed quartz textures (silica replacement of original calcite or barite) are common.

The geological setting, vein and breccia textures, alteration and metal distribution patterns resemble those of a low sulphur, adularia-sericite type hot-spring or silicified stockwork deposit. Native gold and electrum of micron size are associated with pyrite, chalcopyrite, aguilarite, naumannite and acanthite in silicified zones. At least 8 distinct phases of repeated, episodic and explosive stockwork veining and brecciation are recognized in the silicified zones (Andrew, 1988). Fluid inclusion studies indicate that the veins are epithermal, deposited at depths of less than a kilometre by low salinity, low carbon dioxide boiling fluids at temperatures from 170 to 270 degrees Celsius. Oxygen and hydrogen isotope compositions imply that water to rock ratios at Wolf were high (0.3 to 0.9).

The highest grades of mineralization appear to occur in zones that have undergone repeated episodes of brecciation and silicification. Better gold grades are associated with grey to brown banded chalcedonic silica and very fine grained disseminated pyrite. The most encouraging results to date have been at the Ridge zone, where trenching across the zone yielded 8.49 grams per tonne gold and 42.21 grams per tonne silver over 7.5 metres (Fieldwork 1993, p. 47). Diamond drilling by Minnova in 1992 outlined a zone of continuous mineralization with a minimum strike length of 300 metres, down-dip extension of at least 270 metres and true thickness of about 7 metres.

In 1996, Lucero Resources Corporation conducted a 9-hole diamond drilling program on the property.

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EMPR PF (Andrew, K.P.E. (1988): Epithermal Precious Metal Mineralization in the Ootsa Lake Group, Wolf Prospect, Central B.C.)
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120
Andrew, K.P.E. (1988): Geology and Genesis of the Wolf Precious-Metal Epithermal Prospect and the Capoose Base and Precious-Metal Porphyry-style Prospect, Capoose Lake Area, Central British Columbia, unpublished M.Sc. Thesis, University of British Columbia, 334 pages

DATE CODED: 1986/03/12
DATE REVISED: 1995/02/13

CODED BY: AFW
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093F 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **L NORTH**, LIMIT LAKE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 56 17 N
LONGITUDE: 124 41 01 W
ELEVATION: 823 Metres

NORTHING: 5977943
EASTING: 389481

LOCATION ACCURACY: Within 1 KM
COMMENTS: Immediately west of Limit Lake.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Assumed copper mineral.
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>
Lower Jurassic			Topley Intrusions

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The L North showing consists of copper mineralization (the type is not stated) within medium-grained granodiorite of the Topley intrusive suite. No other information on this showing is available.

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GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1986/06/11
DATE REVISED: 1995/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **NORTHWEST**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 59 11 N
LONGITUDE: 124 52 23 W
ELEVATION: 1122 Metres

NORTHING: 5983631
EASTING: 377189

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: K-Feldspar Limonite
ALTERATION TYPE: Potassic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mesozoic			Topley Intrusions

LITHOLOGY: Diorite
Quartz Monzonite
Alaskite

HOSTROCK COMMENTS: Diorite is informally known as the Simon Bay diorite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Northwest showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Topley intrusive suite ranges in composition from diorite to alaskite but consists mainly of quartz monzonite and diorite. In the area of the showings two main intrusive phases have been recognized, the Nithi quartz monzonite and the Casey quartz monzonite to alaskite. In addition a dioritic phase known informally as the Simon Bay diorite is present. It is this intrusive phase which hosts the molybdenite and pyrite mineralization. Mineralization occurs within quartz veins as fine disseminations and in shears where secondary oxidation of sulphides has occurred. Minor amounts of potassic alteration are also present.

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EMPR PF (See 093F General File, Nithi Mountain Area Maps; See 093K General file, Endako Area Maps)
GSC P 90-1F, pp. 115-120
GSC MEM 324

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 667
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1131A; 1424A

DATE CODED: 1986/06/19
DATE REVISED: 1995/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **I, CAP**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 17 23 N
LONGITUDE: 125 16 52 W
ELEVATION: Metres

NORTHING: 5906928
EASTING: 347952

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
Disseminated
Porphyry
Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous			Capoose Batholith

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Age of informally named Capoose Lake Batholith could be either Upper Jurassic or Lower Cretaceous.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the T showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The showing is underlain by a Lower Cretaceous (Upper Jurassic?) pluton, known informally as the Capoose Lake batholith. Mineralization consists of molybdenite in quartz veinlets and as disseminations in granodiorite.

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EMPR OF 1993-14; 1994-19
EMPR MIN POT MAP 1993-3
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1986/06/20
DATE REVISED: 1989/01/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 049**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT GREER, EN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 51 40 N
LONGITUDE: 124 28 46 W
ELEVATION: Metres

NORTHING: 5969084
EASTING: 402704

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Oligocene

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A02 Lignite
SHAPE: Tabular
COMMENTS: The coal bearing strata are subhorizontal with regional dips towards the east.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Oligocene	Endako	Undefined Formation	

LITHOLOGY: Coal
Shale
Siltstone
Sandstone
Conglomerate
Bentonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Lowland
RELATIONSHIP: Post-mineralization
GRADE: Lignite

CAPSULE GEOLOGY

The region in which the Mount Greer showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

Underlying Late Tertiary andesite and plateau basalt in the northeastern part of mapsheet 93F are sedimentary beds, possibly of Oligocene age which have been correlated with the Endako Group. These sedimentary beds comprise shale, siltstone, bentonite and sandstone with interbedded lignite horizons. These sediments rest unconformably on rocks of the Ootsa Lake Group. The lignite outcrops as stringers and lenses usually less than 45 centimetres thick, although a thickness of 80 centimetres has been intersected in a drill hole. The lignite comprises 36.99 per cent volatile matter, 34.72 per cent ash, 28.29 per cent fixed carbon and 0.74 per cent sulphur, estimated from the analysis of one sample only (on a dry basis).

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EMPR COAL ASS RPT 26
EMPR PF (Claim Map, Fraser Lake Project, Feb. 1978; In 093F General File - Geological and Drilling Report, Nechako Project, 1979, E & B Explorations Ltd.)
EMPR FIELDWORK 1988, pp. 189-193; 1992, pp. 475-481; 1993, pp. 9-14;

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 670
REPORT: RGEN0100

BIBLIOGRAPHY

1994, pp. 167-170, 193-197
EMPR EXPL 1992-69-106
GSC P 89-4; 90-1F, pp. 115-120
GSC MAP 1424A
GSC MEM 324

DATE CODED: 1986/05/15
DATE REVISED: 1995/02/27

CODED BY: EVFK
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUCK** RUTT, CHRISTMAS CAKE,
 ROCKS

MINING DIVISION: Cariboo

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093F03E
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 11 46 N
 LONGITUDE: 125 03 40 W
 ELEVATION: 1280 Metres

NORTHING: 5896070
 EASTING: 362314

LOCATION ACCURACY: Within 500M
 COMMENTS:

COMMODITIES: Silver Zinc Lead Gold Copper

MINERALS

SIGNIFICANT: Sphalerite Pyrite Pyrrhotite Chalcopyrite Galena
 ASSOCIATED: Quartz
 ALTERATION: Clay Sericite Chlorite Silica
 ALTERATION TYPE: Argillic Sericitic Silicific'n
 MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Vein Breccia Stockwork
 CLASSIFICATION: Volcanogenic Syngenetic Porphyry
 TYPE: * Unknown
 SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Lapilli Tuff
 Tuffaceous Siltstone
 Argillite
 Ankerite Breccia
 Rhyolite Tuff
 Rhyolite Breccia
 Rhyolite
 Augite Phyric Andesite
 Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
 TERRANE: Stikine
 METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1994
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	721.0000 Grams per tonne
Gold	0.1300 Grams per tonne
Copper	0.1900 Per cent
Lead	3.8000 Per cent
Zinc	12.1000 Per cent

COMMENTS: Sample is from the Christmas Cake sulphide-rhyolite breccia showing.
 REFERENCE: Unpublished data (Lane and Schroeter, 1994).

CAPSULE GEOLOGY

The Buck property comprises 80 claim units that straddle Fawnie Creek and the Kluskus-Ootsa forest service road about 120 kilometres southwest of Vanderhoof.

In 1982, the area, known as the Rocks claims, was investigated by BP Minerals Ltd. They conducted geological mapping, soil and rock geochemistry and trenching focussing on sulphide-bearing ankeritic breccias. There was no recorded work on this ground between 1983 and 1990. The claims were re-staked in 1991, and are currently owned by Western Keltic Mines Inc. In 1992, exploration consisted of geological mapping, prospecting and geochemical sampling. New zones of sulphide mineralization, including the Rutt zone, were discovered.

CAPSULE GEOLOGY

In early 1994, the company completed a program that included soil sampling, mapping, prospecting, and magnetic and VLF surveys.

The Buck claims are underlain by Lower to Middle Jurassic Hazelton Group felsic to intermediate flows and lapilli tuffs and fine to coarse-grained, locally fossiliferous volcaniclastics (Fieldwork 1994). Regionally, these units are broadly folded. On the property, bedding typically strikes north-northeast and dips gently to the east. Post-Early Jurassic intrusions crop out in the south and northeast parts of the property.

The main area of interest is underlain by a mixed succession of Hazelton Group mafic and felsic volcanic and sedimentary rocks that generally strike northerly with gentle to moderate easterly dips. Exposures of pyritic, rusty weathering, dark grey argillites and siltstones are conformably overlain by rhyolitic tuffs and tuff breccias that resemble those that occur west of the Fawn (093F 043) property. However, the breccias on the Buck property contain abundant clasts of the underlying argillite and siltstone as well as clasts of rhyolite and porphyry. Fine to coarse-grained clastic sedimentary rocks conformably overlie the rhyolite package. Dikes and sills of augite-phyric andesite cut the sedimentary and felsic volcanics and may be feeders to augite-phyric andesite flows that are exposed up-section on both the Fawn and Buck properties.

The Rutt zone crops out discontinuously and is exposed in several hand-excavated trenches along a northerly trend for about 450 metres. Mineralization occurs in clay, sericite, chlorite and silica-altered lapilli tuffs, tuffaceous siltstones and argillites that overlie flow-banded rhyolite. Disseminated sphalerite, pyrite and pyrrhotite are present within the altered tuff; traces of chalcopyrite were also noted. Sphalerite also occurs as a cement or matrix to discrete layers of lapilli. The width of the mineralized horizon is not known but a 3.0-metre chip sample within the zone yielded 2.01 per cent zinc and 0.0306 per cent copper; precious metal values were negligible.

Float boulders, containing conformable bands of disseminated pyrrhotite and sphalerite, are exposed in a roadcut along the Kluskus-Ootsa forest service road. They are presumably derived from the west-facing hillside west of the Rutt showing (West Slope) and expand the size of the exploration target.

The L14S Trench zone is centred about 1 kilometre due south of the Rutt zone and consists of ankerite breccia with weakly anomalous zinc, lead, copper, gold and silver geochemical values.

The Christmas Cake showing, discovered during the 1994 exploration program, is approximately 300 metres southeast of the Rutt zone. It consists of stockwork and semimassive to massive sulphide mineralization exposed in two shallow trenches. Mineralization consists of intergrowths of sphalerite, pyrite, chalcopyrite, pyrrhotite and galena that are the matrix for angular clasts of rhyolite tuff. The same sulphides are disseminated throughout vuggy fine-grained milky white quartz-flooded zones. A grab sample from one of the trenches assayed 541 grams per tonne silver, 7.38 per cent zinc and 2.25 per cent lead (Assessment Report 23513). Outcrop exposure is poor in the area of the showing and the trend of the mineralization is not known. The Christmas Cake showing is less than 100 metres west of a quartz feldspar porphyry intrusion. Its genetic relationship to the intrusion and to the Rutt zone is unknown.

Pacific Star Resources Ltd. drilled 7 holes totalling 918 metres near the Rutt zone in 1998.

BIBLIOGRAPHY

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EMPR EXPL 1992-69-106; 1998-41,43
EMPR FIELDWORK 1993, p. 9-44, 45-55; 1994, p. 177-191
EMPR OF 1994-9; 1994-10; 1994-18; 1994-19
GSC MEM 324
GSC P 90-1F, pp. 115-120
GCNL #33, (Feb.15), 1996
WWW <http://www.infomine.com/>

DATE CODED: 1993/11/29
DATE REVISED: 1995/03/09

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093F 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **OOTSA 1**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F11E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 31 41 N
LONGITUDE: 125 10 27 W
ELEVATION: 975 Metres

NORTHING: 5933214
EASTING: 355887

LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Ootsa 1 claim.

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite
ASSOCIATED: Quartz Pyrite Calcite
ALTERATION: Epidote K-Feldspar Hematite
ALTERATION TYPE: Propylitic Potassic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
SHAPE: Irregular
MODIFIER: Folded
DIMENSION: 0300 x 0100 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralized zones average 75 to 100 metres in width and 300 metres in length.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Paleocene
GROUP: Ootsa Lake
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Andesite
Rhyolite
Tuff
Breccia
Basalt
Andesite
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ootsa 1 mineral occurrence is underlain by Paleocene and Miocene volcanics and sediments of the Ootsa Lake Group and Endako Group. The Paleocene Ootsa Lake Group rocks are characterized by rhyolitic and dacitic tuff, breccia, shales, sandstone and conglomerate. The Miocene Endako Group is characterized by basalts, andesites, tuffs, breccias, minor shales and greywackes. All the volcanic and sedimentary rock groups of this area are folded to some degree and practically all folds have a northwest trend.

The mineralization and alteration consists of a zone of quartz and fluorite with potash feldspar and specular hematite alteration. These zones average 75 to 100 metres in width and 300 metres long. The quartz and fluorite generally occur together in veins wider than 5 centimetres, with fluorite occupying the centre of the vein. The fluorite is either cubic or octahedral with individual crystals up to 2 centimetres across. The only sulphide mineralization consists of disseminated pyrite, which occurs in a fine-grained, flow banded and

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 674
REPORT: RGEN0100

CAPSULE GEOLOGY

locally brecciated rhyolite. The host rock is an andesite which has undergone propylitic alteration and contains calcite veins which are proximal to the quartz-fluorite vein.

BIBLIOGRAPHY

EMPR ASS RPT 16581
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44; 1994, pp.
167-170, 193-197
EMPR OF 1992-16; 1994-19
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1988/03/22
DATE REVISED: 1995/01/27

CODED BY: GSA
REVISED BY: GP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 052**

NATIONAL MINERAL INVENTORY:

NAME(S): **PAW**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 08 50 N
LONGITUDE: 125 20 57 W
ELEVATION: 1070 Metres

NORTHING: 5891226
EASTING: 342896

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrops investigated were at end of Kluskus-Malaput Forest Service Road in clear cut area (Fieldwork 1993, pp. 45-55).

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic-Cretaceous			Capoose Batholith

LITHOLOGY: Granodiorite
Diorite

HOSTROCK COMMENTS: The age of the Capoose Batholith is uncertain.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Paw showing is located at the end of the Kluskus-Malaput Forest Service road approximately 5 kilometres southeast of the Wolf property.

The showing is covered by the Paw 1 sixteen-unit claim block owned by Perry Grunenberg. The claim was staked for the first time in July, 1992.

The occurrence consists of a single outcrop of medium-grained, equigranular granodiorite to diorite of the Jurassic to Cretaceous(?) Capoose Batholith. Fracture controlled and disseminated sulphide mineralization consists of 3 to 4 per cent pyrite and traces of molybdenite and chalcopyrite. Apparently there has been no work done on the property.

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 173-184
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1993, pp. 9-44, *45-55; 1994, pp. 167-170, 193-197
EMPR OF 1994-2; 1994-9; 1994-10; 1994-18; 1994-19
GSC MEM 324
GSC P 90-1F, pp. 115-120

DATE CODED: 1993/11/29
DATE REVISED: / /

CODED BY: RAL
REVISED BY:

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093F 053**

NATIONAL MINERAL INVENTORY:

NAME(S): **FAWN 5**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 12 37 N
LONGITUDE: 125 12 10 W
ELEVATION: 1525 Metres

NORTHING: 5897928
EASTING: 352900

LOCATION ACCURACY: Within 500M

COMMENTS: Location of skarn mineralization.

COMMODITIES: Iron Copper Gold

MINERALS

SIGNIFICANT: Magnetite Chalcopyrite Pyrite Pyrrhotite Arsenopyrite

ASSOCIATED: Epidote Diopside Biotite Chlorite Actinolite

Garnet Pyroxene

COMMENTS: Major skarn minerals present.

ALTERATION: Epidote Diopside Biotite Chlorite Actinolite

Garnet Pyroxene

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Jurassic-Cretaceous

ISOTOPIC AGE: circa 140 Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Hornblende; biotite

DEPOSIT

CHARACTER: Podiform Massive

CLASSIFICATION: Skarn

TYPE: K03 Fe skarn K04 Au skarn K01 Cu skarn

SHAPE: Tabular

DIMENSION: 300 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Age of mineralization is the suspected age of contact metasomatism and, therefore, the age of intrusion of the Capoose Batholith.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Andesitic Pyroclastic
Biotite Hornfels
Tuffaceous Volcaniclastic

HOSTROCK COMMENTS: Formation is the informal Naglico Formation of Diakow and Webster (1993).

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Nechako Plateau

TERRANE: Stikine

METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE:

CAPSULE GEOLOGY

Magnetite skarn mineralization occurs in Middle Jurassic Hazelton Group andesitic pyroclastic rocks on the Fawn 5 claim block at an elevation of approximately 1525 metres. Several outcrops of massive magnetite define an arcuate, generally southeast-trending band of magnetite-rich skarn that appears to be relatively flat lying.

Massive to semimassive magnetite, with traces of chalcopyrite, is exposed over a width of at least 20 metres and the zone may reach 300 metres in apparent width. Calc-silicate mineralogy includes garnet, pyroxene, epidote and actinolite. Up-slope and to the south, epidote-chlorite alteration (plus/minus magnetite, garnet and pyroxene) of the host pyroclastics is moderate to intense and widespread. Locally, epidote-rich bands have developed along a trend of 070 degrees, dipping 75 degrees north. These bands mimic bedding and are probably replacements of tuffaceous layers.

Approximately 5 kilometres west of the claim boundary the westerly extension of the Van-Tine Forest Service road has exposed limy tuffaceous, fossil-bearing sedimentary and intermediate pyroclastic breccias and lapilli tuffs of the Hazelton Group. Locally well-developed zones of garnet-pyroxene-epidote infiltration skarn are flanked by dark brown to black biotite hornfels that is all but completely devoid of its original texture. Weak to moderate hornfelsing is widespread.

CAPSULE GEOLOGY

Sulphide mineralization is sparse and averages less than 0.5 per cent of the rock by volume. Pyrite, pyrrhotite, arsenopyrite and traces of chalcopyrite occur as fracture fillings and as disseminations in biotite hornfels and skarn. Locally, remnant lapilli have been partly replaced by pyrrhotite. These new outcrops extend the known thermal effect of the Capoose batholith a minimum of 5 kilometres farther to the west of the magnetite skarn showing on the Fawn 5 claim.

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 173-184
EMPR ASS RPT 12668, 13530
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1993, p. 9-14, 15-26, 27-44, 45-55
EMPR OF 1994-9; 1994-10; 1994-18; 1994-19
GSC MEM 324
GSC P 90-1F, pp. 115-120

DATE CODED: 1993/11/29
DATE REVISED: 1995/03/09

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093F 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **RHUB**, RHUB 8, RHUB 1-13,
BARB 1, SILVER DISCOVERY, MAR 11,
J ANOMALY, SILVER ZONE

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 5944576
EASTING: 333951

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F12E 093F11W
BC MAP:
LATITUDE: 53 37 25 N
LONGITUDE: 125 30 39 W
ELEVATION: 1005 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of the Silver Zone on the Rhub 8 claim
(Assessment Report 21952).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Marcasite
ASSOCIATED: Silica Chalcedony
ALTERATION: Kaolinite Silica
ALTERATION TYPE: Argillic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Stockwork
CLASSIFICATION: Epithermal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Ootsa Lake	Unnamed/Unknown Formation	

LITHOLOGY: Rhyolite
Rhyolite Flow
Rhyolite Tuff
Brecciated Rhyolite
Siliceous Rhyolite Breccia

HOSTROCK COMMENTS: The Ootsa Lake Group is Upper Cretaceous to Lower Tertiary.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Rhub showings are located 70 kilometres south of Burns Lake, on the north side of Intata Reach.

In 1980, Guichon Exploration Ltd. carried out silt and soil sampling in the claim area. In 1985, Hudson Bay Exploration conducted a reconnaissance exploration program on the old Mar 11 claims and discovered boulders of chalcedonic quartz. In 1986, Mingold carried out extensive soil sampling and VLF-EM surveys. In 1987, Mingold drilled 1,189 metres of reverse circulation drilling. In 1988, Mingold drilled 1036.9 metres focussed on the Silver Zone. In 1989, an induced polarization survey, 128 metres of trenching and rock chip sampling was conducted over the Silver Zone and area. In 1991, Equity Silver drilled 5 holes on the J Anomaly which is proximal to and on trend with the Silver Zone.

The region is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

Gold-bearing boulders were initially discovered and subsequently several zones of silica flooding and argillic alteration were delineated. These zones occur within rhyolite and rhyolite tuff of the Upper Cretaceous to Lower Tertiary Ootsa Lake Group. A felsic flow unit is distinguished by the presence of perlite. The zones comprise brecciated rhyolite healed by amorphous silica, a series of stockwork veins or amorphous silica with varying amounts of pyrite and marcasite. The main controls on mineralization appear to be

MINFILE NUMBER: **093F 054**

CAPSULE GEOLOGY

fracture intensity and the porosity of the hostrock, rhyolite flows and tuffs being preferable.

The Barb zone is 10 kilometres to the west of the discovery boulder area at the west end of the property. Veins are up to 1 metre wide. The main vein system here trends 140 degrees and a secondary set trends 045 degrees. Siliceous rhyolite breccia with pyrite and black silica was encountered in several drillholes. The best intersection was 2.16 grams per tonne gold over 1.52 metres (Property File - Alta Ventures Inc. Prospectus, Oct. 25, 1989).

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EMPR FIELDWORK 1993, pp. 9-14, 39-44; 1994, pp. 167-170, 193-197
EMPR OF 1994-19
EMPR PF (Alta Ventures Inc. Prospectus, Oct. 25, 1989)
GSC MEM 324
GSC P 90-1F, pp. 115-120
PR REL Southern Rio Resources, Mar.6, 2003
Placer Dome File

DATE CODED: 1994/01/04
DATE REVISED: 1995/01/02

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **TSACHA, TOMMY, LARRY, JOHNNY, IAN, BOBBY, BARNEY, GOOFY, ALF, BILLY**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093F03E
BC MAP:

MINING DIVISION: Omineca

LATITUDE: 53 01 28 N
LONGITUDE: 125 01 59 W
ELEVATION: 1150 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5876923
EASTING: 363646

LOCATION ACCURACY: Within 500M

COMMENTS: Largest vein (Fieldwork, 1993). Located in the Naglico Hills area of the southern Nechako Plateau. 125 kilometres southwest of Vanderhoof, BC.

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Gold Stephanite Electrum Argentite Pyrite
Chalcopyrite Tetrahedrite
ASSOCIATED: Quartz Calcite Barite Adularia Chalcedony
Amethyst
ALTERATION: Silica Hematite Malachite Clay Sericite
Carbonate Montmorillonite
ALTERATION TYPE: Silicific'n Oxidation Argillic Sericitic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epithermal
TYPE: H05 Epithermal Au-Ag: low sulphidation
DIMENSION: 650 x 150 x 8 Metres STRIKE/DIP: 175/ TREND/PLUNGE:
COMMENTS: Tommy vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Entiako	
Upper Cretaceous			Capoose Batholith

ISOTOPIC AGE: 73.8 +2.9/-0.1 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Sill sample

LITHOLOGY: Rhyolite Flow
Rhyolite
Rhyolite Tuff
Ash Flow Tuff
Quartz Felsic Crystal Tuff
Lithic Tuff
Augite Porphyritic Basalt
Augite Porphyritic Andesite
Microdiorite

HOSTROCK COMMENTS: Informal Naglico Formation. Slash.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine

INVENTORY

ORE ZONE: TOMMY REPORT ON: Y
CATEGORY: Indicated YEAR: 1997
QUANTITY: 478600 Tonnes
COMMODITY GRADE
Gold 8.7000 Grams per tonne
Silver 82.3000 Grams per tonne
COMMENTS: Cut-off: 3 grams per tonne gold. Calculation based on 27 drill and 9 trench intersections.
REFERENCE: MEG Talk, February 19, 1997 and Exploration in BC 1998, page B-8.

INVENTORY

ORE ZONE: VEIN	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1994
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Silver	292.5000 Grams per tonne
Gold	61.9000 Grams per tonne

COMMENTS: Values consistently over 1 gram per tonne gold were obtained along the entire exposure of the vein, with a maximum value of 61.9 grams per tonne gold and 292.5 grams per tonne silver over 1.5 metres from a trench sample.

REFERENCE: Assessment Report 23881.

CAPSULE GEOLOGY

The Tsacha gold-silver-copper prospect consists of several, at least eight, quartz vein and stockwork veinlet occurrences found in the vicinity of Tommy Lakes, about 125 kilometres southwest of Vanderhoof. The veins occur in welded rhyolitic flows and lesser ash-flow tuff of the Middle Jurassic Hazelton group (Entiako Formation).

Dark green feldspar and augite-phyric basaltic andesite flows of the Naglico formation conformably overlie the welded tuff. A medium-grained augite porphyry plug, is probably cogenetic with the flows. Minor volcanic-derived calcareous siltstone, sandstone and conglomerate, with abundant plagioclase grains and local argillaceous beds, crop out immediately north of the augite porphyry plug. They are derived primarily from the felsic volcanic rocks of the Entiako formation, but also contain clasts of augite porphyry. Sills and dikes of microdiorite intrude the Jurassic rocks and crosscut the epithermal vein system. A sample of the sill yielded a U-Pb zircon date of 73.8±2.9/-0.1 Ma, indicating latest Cretaceous emplacement (R.M. Friedman, personal communication, 1996).

The occurrences were discovered during regional mapping by crews from the B.C. Geological Survey Branch in 1993. The Tsacha 16-unit claim block was staked by Teck Corporation in 1994 to cover these showings. Teck conducted soil geochemistry, prospecting, trenching and rock chip sampling in 1994. Work confirmed 4 veins and a vein-stockwork zone.

The main vein (Tommy) strikes approximately 020 degrees, dips vertical to steeply west and has been traced over 650 metres and remains open along strike. The vein has an average width of 4 metres and is continuous down dip to a diorite sill at 120 metres. The quartz is white, finely crystalline to massive, rarely banded along vein margins with drusy crystals growing inward toward the centre of some anastomosing veinlets. Sparry calcite sometimes occupies a void at the centre of the banded veins. Vein mineralogy includes native gold, stephanite, electrum and argentite in quartz, adularia, carbonate and montmorillonite. Pyrite is present in trace amounts. Alteration consists of silicification, hematization with clay and sericite occurring distally. In 1993, a grab sample from the main (largest) vein assayed 34.8 grams per tonne silver and 3.3 grams per tonne gold (Open File 1994-2). Values greater than 1 gram per tonne gold have been obtained along the entire exposure of the vein (Cordilleran Roundup Abstracts Feb. 7-10, 1995).

Stockwork veinlets are exposed on a knoll due south of the easternmost of the Tommy Lakes. Prominent fractures and brecciated vein material trend northeast. Another system of stockwork veinlets crop out on a knoll near the centre of a recent forest burn, northeast of Tommy Lakes. These quartz veins are similar to others south of Tommy Lakes, however, they also contain crystalline barite.

In 1994, Teck conducted geological mapping (1700 hectares); rock (207 samples), silt (11 samples) and soil (413 samples) geochemistry; and trenching (17 trenches). Values consistently over 1 gram per tonne gold were obtained along the entire exposure of the vein, with a maximum value of 61.9 grams per tonne gold and 292.5 grams per tonne silver over 1.5 metres from a trench sample (Assessment Report 23881). A resource calculation for the Tommy vein is 478,600 tonnes grading 8.7 grams per tonne gold and 82.3 grams per tonne silver, using a 3 grams per tonne cut off (MEG talk, February 19, 1997); calculation based on 27 drill and 9 trench intersections (Exploration in BC 1998, page B-8).

The adjacent Tam and Taken claim groups (093F 068) (west and northwest respectively) host mineralized quartz veins of the same character as the Tsacha veins i.e. all related to the same system (approximately 2 kilometres wide).

In 1995, with Explore B.C. Program support, Teck Exploration Ltd. completed 1970 metres of diamond drilling in 20 holes, 240 metres of excavator trenching and a program of rock and bark

CAPSULE GEOLOGY

geochemistry. This work traced the Tommy vein 590 metres along strike and 100-200 metres downdip, leaving it open in all directions. The work also determined that the Larry vein has potential of having the same continuity as the Tommy, with possibility of economic ore shoots. This property has good potential for a bonanza-style epithermal deposit of the adularia-sericite type (Explore B.C. Program 95/96 - M110).

In 1996, Teck completed approximately 3365 metres of diamond drilling in 23 holes. Drilling focussed on veins other than the Tommy. Trenching was also done across 2 kilometres of veins in an east-west direction; at least 8 veins have been identified. Drilling also tested the Johnny vein (discovered in 1995), located approximately 600 metres west of the Tommy vein, the Barney (1996) located east of the Tommy vein near the property boundary, and the Larry and Billy veins. All vein systems strike north-south and have a near-vertical dip.

As of January 1997, work completed consisted of 1600 metres of trenching (40 trenches) and 8300 metres of diamond drilling (58 holes), resulting in the discovery of 7 veins (Tommy, Larry, Johnny, Ian, Bobby, Barney, Goofy and Alf).

In October 1997, Corona Gold Corporation entered into an agreement with Teck Corporation to earn a 50 per cent interest in the property. Corona drilled 15 holes, totalling 5926.5 metres in 1998.

Deep diamond drilling in 1998 traced the Tommy Vein along strike, below the sill, for over hundred seventy metres, and down dip for over a hundred metres. The true width of the subsill vein intersections range from 0.7 to 9.35 metres. Gold assays are fairly consistent in the 1 to 10 grams per tonne range (EMPR Exploration 1998, B1-B10).

Southern Rio Resources Ltd. released an inferred mineral resources estimate in 2002 of 470,700 tonnes grading 7.40 grams per tonne gold and 65.22 grams per tonne silver. This estimate is based on a 4 gram per tonne gold cut-off grade and it meets National Instrument 43-101 standards.

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MEG Talk - Tsacha Project, an Epithermal Gold Occurrence in the
Nechako Plateau, B.C., by Jean Pautler, Vancouver, Feb. 19, 1997
(notes by T. Schroeter).
N MINER Oct. 20, 1997; Dec.2, 2002
PR REL Corona Gold Corporation, Feb.18, 1999; Southern Rio Resources
Ltd., Oct.23, 2002; Jan.23, 2003
WWW <http://www.infomine.com/>; <http://www.southernrio.com/s/home.asp>

DATE CODED: 1994/05/10
DATE REVISED: 1996/11/28

CODED BY: IW
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093F 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **MALAPUT**, FAWN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 10 18 N
LONGITUDE: 125 07 03 W
ELEVATION: Metres

NORTHING: 5893461
EASTING: 358467

LOCATION ACCURACY: Within 500M

COMMENTS: Discovery by BC Geological Survey in 1993.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica Sericite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epithermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic	Hazelton	Unnamed/Unknown Formation	

LITHOLOGY: Lapilli Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Malaput occurrence is in a gently sloping logged area accessed by a secondary road off of the Kluskus-Malaput Forest Service road. The occurrence consists of pervasively silicified rocks that crop out sporadically through apparently thin glacial drift in a zone measuring approximately 125 by 75 metres. Outcrops of the Capoose batholith occur about 1 kilometre to the northwest and comparatively unaltered green and maroon volcanic rocks, tentatively assigned to unit MJN1, are exposed about 50 metres to the east.

The altered rocks are composed mainly of fine-grained silica, in places accompanied by sericite and rare, crystalline barite. The texture of these rocks is typically massive with some irregular open cavities lined by drusy quartz. Finely disseminated pyrite, present in trace quantities, is generally oxidized resulting in a limonitic coating on weathered surfaces. About 50 metres to the east a solitary exposure of layered volcanic rocks contains bedding-parallel pyritiferous laminae.

The altered mineral assemblage is suggestive of a low-temperature, oxidized, epithermal setting. At present this alteration zone is poorly exposed; it requires additional work to assess its precious metal potential. A relatively flat site and the nature of alteration are amenable to an exploration program involving mechanized trenching and an induced polarization survey.

Cascadia International Resources Inc. and Western Keltic Mines Inc. drilled 7 holes totalling 744 metres in 1998.

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EM EXPL 1998-41,43
EMPR FIELDWORK *1993, pp. 15-26
GCNL #160 (Aug.20), 1998

DATE CODED: 1998/10/06
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093F 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **UDUK LAKE, DUK**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093F12W 093E09E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 36 17 N
LONGITUDE: 125 59 40 W
ELEVATION: 1200 Metres

NORTHING: 5943713
EASTING: 301887

LOCATION ACCURACY: Within 500M

COMMENTS: Showings and trenches about 2 kilometres west of a new extension to the Ootsa Chief logging road.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Chalcedony Clay
ALTERATION: Clay Silica
ALTERATION TYPE: Argillic Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork Breccia Vein
CLASSIFICATION: Epithermal
TYPE: H05 Epithermal Au-Ag: low sulphidation
DIMENSION: 600 x 200 Metres
COMMENTS: Dimensions of mineralized zone in float and outcrop. STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Ootsa Lake	Undefined Formation	

LITHOLOGY: Rhyolite
Brecciated Rhyolite
Dacite
Tuff
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: TRENCH
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Gold
GRADE: 0.4100 Grams per tonne
COMMENTS: Average grade over a continuous 42-metre length in trench 94-4.
REFERENCE: D.S. Dunn, personnel communication, 1994.

CAPSULE GEOLOGY

The Uduk Lake epithermal gold-silver prospect is located on the Duk claims about 70 kilometres south-southwest of Burns Lake.

The Duk claims are underlain by a greater than 2 kilometre square area of hydrothermally altered rhyolitic to dacitic flows, tuffs and breccias of the Eocene Ootsa Lake Group.

Outcrop on the property is sparse, however, bedrock is commonly within 1 or 2 metres of the surface. A zone of clay and silica-altered rhyolite in angular float and outcrop, measuring about 600 by 200 metres, occurs in the southwestern part of the property. Past exploration, including trenching and diamond drilling, focussed on a quartz-chalcedony (+/-pyrite) stockwork that locally grades into a more sulphide-rich, black matrix breccia. Host rocks are typically moderately to intensely clay-altered and locally moderately silicified. Pyrite is the only visible sulphide and is present in trace amounts ranging up to 5 per cent locally. It occurs mainly as fracture fillings and disseminations in vein, stockwork and breccia zones.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 685
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 14557, 18882, 22906, 23154
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EMPR OF 2002-11
GSC MEM 324
GSC P 90-1F, pp. 115-120
WWW <http://www.infomine.com/>

DATE CODED: 1994/12/30
DATE REVISED: 1995/02/20

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093F 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **YELLOW MOOSE**, GUS, ARROW,
WHITE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F06E 093F11E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 30 10 N
LONGITUDE: 125 04 56 W
ELEVATION: 1000 Metres

NORTHING: 5930220
EASTING: 361899

LOCATION ACCURACY: Within 500M

COMMENTS: Location is the central point between the showings.

COMMODITIES: Gold

MINERALS

SIGNIFICANT:	Arsenopyrite	Stibnite	Pyrite	Marcasite	Cinnabar
ASSOCIATED:	Quartz	Chalcedony			
ALTERATION:	Clay	Silica			
ALTERATION TYPE:	Argillic		Silicific'n		
MINERALIZATION AGE:					

DEPOSIT

CHARACTER:	Vein	Stockwork	Breccia	
CLASSIFICATION:	Epithermal	Epigenetic		
TYPE:	H05	Epithermal Au-Ag: low sulphidation		
DIMENSION:		Metres	STRIKE/DIP:	TREND/PLUNGE: /
COMMENTS:	The zones are northeasterly trending and dip moderately to the east.			

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary	Ootsa Lake	Unnamed/Unknown Formation	

LITHOLOGY: Rhyolite
Rhyolite Breccia
Crystal Lapilli Tuff
Arkose

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Two known showings, the Gus and Arrow, comprise the Yellow Moose property. All occur south of Arrow Lake, approximately 9 kilometres west of Kenney Dam and are accessible by logging roads to within about 1 kilometre. The showings are marked by anomalous antimony, arsenic and mercury soil anomalies.

The property is underlain predominantly by Late Cretaceous-Eocene Ootsa Lake Group felsic volcanic and related sedimentary rocks. Miocene Endako Group basalt unconformably overlies these rocks and occurs throughout the region along major valleys and in areas of high relief. Basement rocks, consisting of Jurassic Hazelton Group andesitic volcanic rocks, are exposed west of the property and are intruded by quartz monzonite stocks of Cretaceous or Tertiary age.

The Arrow showing, located on the south shore of Arrow Lake, consists of drusy quartz veins and chalcedonic quartz flooding in siliceous rhyolite and arkosic sandstone. Mineralization consists of coarse-grained stibnite, pyrite, marcasite and traces of cinnabar.

The Gus showing consists of diffuse silicification and minor quartz chalcedony veining in brecciated rhyolite and crystal lapilli tuff. Mineralized zones trend northeast and consist of narrow veins, stockworks and breccias. Mineralization consists of 1 to 2 per cent fine-grained disseminated arsenopyrite, stibnite and pyrite in intensely fractured and pervasively clay-altered rhyolite.

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GSC MEM 324

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 687
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 90-1F, pp. 115-120

DATE CODED: 1994/12/23
DATE REVISED: 1995/02/27

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093F 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEN, HOOTER, SHAWN, CREEK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 19 23 N
LONGITUDE: 124 33 09 W
ELEVATION: 1290 Metres

NORTHING: 5909332
EASTING: 396594

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Lead Zinc Copper
Molybdenum

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite Pyrrhotite Chalcopyrite Galena
Sphalerite Molybdenite
ASSOCIATED: Quartz Biotite
ALTERATION: Silica Biotite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epithermal
TYPE: H04 Epithermal Au-Ag-Cu: high sulphidation
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic Hazelton Unnamed/Unknown Formation Unnamed/Unknown Informal
Eocene

LITHOLOGY: Felsic Tuff
Tuffaceous Siltstone
Intermediate Flow
Intermediate Pyroclastic
Biotite Hornblende Granodiorite
Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1992
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 95.0000 Grams per tonne
Gold 0.7000 Grams per tonne
Lead 0.2000 Per cent

COMMENTS: A 3 metre chip sample from the Hooter showing.
REFERENCE: Assessment Report 22727.

CAPSULE GEOLOGY

The Ben occurrence, comprising the Hooter, Shawn and Creek showings, is located about 5 kilometres north of Tatelkuz Mountain. Mineralized outcrops were discovered during reconnaissance exploration for volcanogenic massive sulphide deposits in 1991. Exploration focussed on quartz-sulphide zones that are hosted by the Hazelton Group.

Middle Jurassic Hazelton Group intermediate flows, related pyroclastics and tuffaceous siltstones are the oldest rocks exposed in the area and host the Ben occurrence. These rocks are intruded by plutons of two ages: a Jura-Cretaceous(?) monzonite stock to the west of the showings and an east-trending body of Eocene biotite hornblende granodiorite truncates the older rocks. A northwesterly trending, steeply southwest dipping foliation cuts the older rocks, but is not observed in the Eocene intrusion. Hazelton Group rocks

CAPSULE GEOLOGY

are commonly hornfelsed near contacts with the intrusions and contain up to several per cent biotite, which gives the rock a brown to purplish cast.

Precious and base metal mineralization occurs along a north-facing slope within foliated rocks 200 to 300 metres south of the contact with Eocene granodiorite. The showings, the Hooter, Shawn and Creek showings, crop out along a trend of about 150 degrees. The showings crop out over a strike length of 80 metres within a zone of quartz-biotite-altered felsic tuff. Mineralization appears to parallel the foliation at 140 to 150 degrees. Disseminated to locally semimassive quartz-sulphide veins or seams contain arsenopyrite, pyrite, pyrrhotite and traces of chalcopyrite, galena and sphalerite.

A 3.0-metre chip sample across the Hooter showing assayed 0.7 grams per tonne gold, 95 grams per tonne silver and 0.2% lead; a 10-centimetre arsenopyrite-pyrite-quartz vein in biotite monzonite assayed 3.7 grams per tonne gold and 5.2 grams per tonne silver (Assessment Report 22727). These zones are also anomalous in arsenic, zinc, antimony and bismuth.

Molybdenum occurs in trace amounts throughout the altered monzonite, as disseminations and coatings on fractures. It is commonly accompanied by traces of pyrite, pyrrhotite and arsenopyrite.

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EMPR FIELDWORK 1994, pp. 177-191
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324

DATE CODED: 1994/12/30
DATE REVISED: 1995/02/27

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093F 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **APRIL**, CH

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093F07E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 21 10 N
LONGITUDE: 124 31 57 W
ELEVATION: 1220 Metres

NORTHING: 5912610
EASTING: 397997

LOCATION ACCURACY: Within 500M

COMMENTS: The showing occurs on the CH claim group and is accessible by a partly overgrown mining road that extends north-northwest from about the 101 kilometre point on the Kluskus forest service road.

COMMODITIES: Gold Silver Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena Arsenopyrite

ASSOCIATED: Chalcopyrite Quartz Chlorite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Epithermal
TYPE: H04 Epithermal Au-Ag-Cu: high sulphidation

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 15 x 2 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Vein or lens of massive to semi-massive sulphide which dips vertically and strikes at 320 degrees.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic
Eocene

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Tuffaceous Limestone
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Silver	4.0000	Grams per tonne
Gold	2.9500	Grams per tonne
Zinc	0.7700	Per cent

COMMENTS: Assay is from a 0.57 metre interval at a depth of 37.19-37.76 metres in diamond drillhole 84-2.

REFERENCE: Assessment Report 14281.

CAPSULE GEOLOGY

The April occurrence is located 101 kilometres southwest of Vanderhoof.

The occurrence is hosted by Middle Jurassic Hazelton Group rocks about 1 kilometre north of an east-trending body of Eocene granodiorite. The hostrock is a grey-weathering, thinly bedded tuffaceous limestone that strikes 305 degrees and dips steeply to the northeast. Mineralization consists of a lens or vein of massive to semi-massive sulphide that dips vertically and strikes at 320 degrees. The vein is exposed discontinuously over a 15-metre strike length and varies in width up to a maximum of 1.8 metres. It pinches out abruptly, or is faulted off, to the north and is covered by overburden to the south.

Subcrop of narrow quartz-pyrite-chalcopyrite veins occurs along strike to the south. Sulphide minerals present, in order of abundance, are: sphalerite, pyrrhotite, pyrite, galena, arsenopyrite

CAPSULE GEOLOGY

and chalcopyrite.

The most recent work was a three-hole, 157-metre diamond drilling project conducted by Granges Exploration Ltd. in 1984. The best assays from diamond drilling were 2.95 grams per tonne gold, 4.0 grams per tonne silver and 0.77 per cent zinc over 0.57 metre; and 1.4 grams per tonne gold, 573.5 grams per tonne silver, 15.96 per cent zinc and 15.83 per cent lead over 0.3 metre (Assessment Report 14281).

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EMPR FIELDWORK 1994, pp. 177-191
GSC MEM 324
GSC P 90-1F, pp. 115-120
Chevron File
Placer Dome File

DATE CODED: 1994/12/30
DATE REVISED: 1994/12/30

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093F 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOON**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093F12W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 37 39 N
LONGITUDE: 125 59 10 W
ELEVATION: 1220 Metres

NORTHING: 5946223
EASTING: 302545

LOCATION ACCURACY: Within 500M
COMMENTS: Location of the Main zone.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Chalcedony
ALTERATION: Clay Silica
ALTERATION TYPE: Argillic Silicific'n
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Epithermal
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Eocene

GROUP

Ootsa Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Rhyolite
Dacite
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1994

COMMODITY

GRADE

Silver	29.7000	Grams per tonne
Gold	4.2500	Grams per tonne

COMMENTS: From DDH94-4 across 2.35 metres.
REFERENCE: Explore BC Application 1995-96.

CAPSULE GEOLOGY

The Loon property is located about 70 kilometres south of Burns Lake in the Windfall Hills area, north and east of Uduk Lake near the eastern boundary of Tweedsmuir Park.

Felsic to intermediate flows and tuffs of the Eocene Ootsa Lake Group underlie most of the prospect area. Ootsa Lake rhyolitic rocks including welded and spherulitic flows and breccias, have a gentle westerly dip and are underlain by andesitic rocks of unknown age. Oligocene to Miocene Endako Group andesitic to basaltic flows, dikes and plugs locally overlie or intrude Ootsa Lake Group rocks. Middle Jurassic Hazelton Group rocks, consisting of andesites and sedimentary rocks, are exposed to the southeast of the showing area and are intruded by quartz monzonite of suspected Cretaceous or Tertiary age.

In 1988, Mingold Resources discovered silicified and brecciated Ootsa Lake Group rhyolitic rocks which contained up to 1026 grams per tonne silver and 5.4 grams per tonne gold. In 1994, Hudson Bay Mining and Smelting completed 773.4 metres of diamond drilling in 5 holes, testing IP anomalies. In 1996, a further 6 holes, totalling 1610 metres were completed, testing deeper IP targets.

Trenching exposed cream coloured rhyolite to dacite that is variably silicified and argillically altered. Silica occurs as quartz-chalcedony veinlets, lenses and drusy cavities in clay altered volcanic rock. Pyrite (and marcasite?) is the only observable

CAPSULE GEOLOGY

sulphide and is present in trace amounts to 5 per cent. Sulphides vary from coarsely crystalline to very fine grained and locally exhibit colloform banding. Gold and silver mineralization appears to be related to the presence of dark grey chalcedony.

A 2-metre channel sample from trench 89-9 assayed 0.22 grams per tonne gold and 4.5 grams per tonne silver (Assessment Report 20123). In 1994, a sample across 2.35 metres in DD94-4 assayed 4.25 grams per tonne gold and 29.7 grams per tonne silver (Explore BC 1995-96 application).

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EMPR OF 2002-11
GSC MEM 324
GSC P 90-1F, pp. 115-120
Placer Dome File

DATE CODED: 1995/02/27
DATE REVISED: 1995/02/27

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **SWAN 1**, SWAN 1-4

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F06E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 20 50 N
LONGITUDE: 125 14 20 W
ELEVATION: 1190 Metres

NORTHING: 5913234
EASTING: 350966

LOCATION ACCURACY: Within 500M

COMMENTS: Location of altered rhyolite outcrop from which anomalous sample #484986 was taken (Assessment Report 22522).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite
ALTERATION: Chlorite Clay Goethite Jarosite
ALTERATION TYPE: Chloritic Argillic Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Jurassic-Cretaceous

GROUP

Hazelton

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Capoose Batholith

LITHOLOGY: Quartzitic/Quartzose Rhyolite
Argillite
Andesite
Andesitic Lapilli Tuff
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1992

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	114.2000	Grams per tonne
Gold	0.7500	Grams per tonne
Copper	1.7800	Per cent

COMMENTS: Sample taken across 2.0 metres of chloritized rhyolite with 2-3 per cent pyrrhotite and trace chalcopyrite.

REFERENCE: Assessment Report 22522.

CAPSULE GEOLOGY

The Swan 1 showing is located about 120 kilometres southwest of Vanderhoof.

Stream and lake sediment surveys were conducted in this area in the 1960s by Rio Tinto. In 1970, Rio Canex completed geochemical surveys. In 1983, BP Minerals Ltd. carried out geological mapping and soil sampling on their Swan 1-4 claims. In 1991, the Swan 1 claim was staked by Bull Pine Explorations Ltd. over the lapsed Swan 1-4 claims. In 1992, Equity Engineering completed limited mapping and sampling for Bull Pine Explorations Ltd.

The region in which the showing occurs is underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Oligocene Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of uncertain age intrude both Lower and Middle Jurassic Hazelton strata.

CAPSULE GEOLOGY

The area of the showing is underlain by volcanic and sedimentary rocks of the Hazelton Group. These comprise rhyolite, andesite and argillite. Biotite quartz diorite and quartz monzonite of the Jurassic-Cretaceous(?) Capoose batholith occur to the south. Mineralization consists of 2 to 3 per cent pyrrhotite and trace chalcopyrite in altered (chlorite, clay, goethite and jarosite) quartz eye rhyolite.

A grab sample across 2 metres assayed 0.75 grams per tonne gold, 114.2 grams per tonne silver and 1.78 per cent copper (Assessment Report 22522).

BIBLIOGRAPHY

EMPR ASS RPT *22522, 23521
EMPR FIELDWORK 1992, pp. 57-67, 475-481; 1993, pp. 9-14, 39-44,
45-55; 1994, pp. 167-170, 193-197
EMPR OF 1993-14; 1994-19
EMPR MIN POT MAP 1993-3
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1995/02/16
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 063**

NATIONAL MINERAL INVENTORY:

NAME(S): **BULL 4**, BULL 1-4, MR,
PRECIOUS METALS

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 26 35 N
LONGITUDE: 125 31 01 W
ELEVATION: 1035 Metres

NORTHING: 5924509
EASTING: 332837

LOCATION ACCURACY: Within 500M
COMMENTS: Location of sample #463762 (Assessment Report 22535).

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: 20 x 2 Metres
STRIKE/DIP: I05 Polymetallic veins Ag-Pb-Zn±Au
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Jurassic
Eocene

GROUP

Hazelton
Ootsa Lake

FORMATION

Unnamed/Unknown Formation
Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Mafic Tuff
Mafic Breccia
Rhyolite Dike
Volcaniclastic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1992

COMMODITY

COMMODITY	GRADE	
Silver	22.0000	Grams per tonne
Gold	2.1000	Grams per tonne
Lead	0.2730	Per cent

COMMENTS: Across 30 centimetres of quartz vein stockwork containing 1 per cent galena and 5 per cent pyrite.

REFERENCE: Assessment Report 22535, sample #463762.

CAPSULE GEOLOGY

The Bull 4 showing is located about 90 kilometres south of Burns Lake on the north shore of Chelaslie Arm.

Stream and lake sediment surveys were conducted in this area in the 1960s by several different companies. In 1973, Placer Developments Ltd. staked their MR claims (now the Bull 1 claim) and completed reconnaissance mapping and sampling. In 1980, Prism Resources staked the Precious Metal claims to cover the MR claim and conducted reconnaissance mapping and sampling. In 1992, Sleeping Gold Ltd. conducted geological mapping, prospecting and sampling on the Bull 1-4 claims.

The region in which the showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite

CAPSULE GEOLOGY

plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Bull claims are underlain by Lower to Middle Jurassic Hazelton Group rhyolitic and andesitic volcanics with minor epiclastic sediments. These are intruded by Eocene Ootsa Lake Group rhyolite dikes which are in turn cut by diabase dikes. A quartz vein stockwork and breccia zone, hosted in mafic tuff and breccia, contains up to 5 per cent pyrite, 3 per cent galena and 1 per cent sphalerite. The veining is exposed over a strike length of 20 metres and the width of the zone is between 2 and 4 metres. The vein system is open along strike to the west but to the east mineralization appears to be cut off by rhyolite dikes. There appears to be at least 2 vein structures striking east-west with near vertical dips.

The best sample was a grab sample taken across 30 centimetres of a quartz vein stockwork with 1 per cent galena and 5 per cent pyrite which assayed 2.1 grams per tonne gold, 22 grams per tonne silver and 0.273 per cent lead (Assessment Report 22535, sample #463762).

BIBLIOGRAPHY

EMPR ASS RPT 4610, 9653, 10323, *22535
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14; 1994, pp. 167-170,
193-197
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120
WWW <http://www.infomine.com/>

DATE CODED: 1995/02/21
DATE REVISED: 1995/02/22

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 064**

NATIONAL MINERAL INVENTORY:

NAME(S): **PARK 14**, PARK 8, PARK 13-16,
PARK 1-8

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F11W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 53 42 40 N
LONGITUDE: 125 26 06 W
ELEVATION: 915 Metres

NORTHING: 5954134
EASTING: 339298

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample # 110009, taken at the western boundary of the
Park 14 claim (Assessment Report 18979).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
COMMENTS: Molybdenite assumed.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous-Tertiary

Ootsa Lake

Unnamed/Unknown Formation

LITHOLOGY: Brecciated Ash Tuff
Brecciated Banded Rhyolite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1988

SAMPLE TYPE: Grab

COMMODITY

GRADE

Molybdenum

0.0656

Per cent

COMMENTS: Selected grab sample from brecciated ash tuff/banded rhyolite.

REFERENCE: Assessment Report 18979.

CAPSULE GEOLOGY

The Park 14 showing is located about 60 kilometres south of Burns Lake on the south shore of Cheslatta Lake.

In 1988, VLF-EM and geochemistry surveys were completed on the Park claims by Geotronics Surveys Ltd. for International Pacific Cypress Minerals.

The region in which the Cheslatta Lake showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The claims are dominantly underlain by rocks of the Ootsa Lake Group. These comprise felsic to intermediate flows and tuffs. A selected grab sample of brecciated ash tuff/banded rhyolite assayed 0.0656 per cent molybdenum (Assessment Report 18979). No sulphides were identified.

BIBLIOGRAPHY

EMPR ASS RPT *18979
EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44; 1994,
pp. 167-170, 193-197

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 699
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1994-19
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324
GSC MAP 1131A; 1424A

DATE CODED: 1995/02/22
DATE REVISED: 1995/02/24

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **GUSTY, BARB-GUSTY, BARB,
GUSTY 2-3, BARB 1-4, GUS FR.,
MAR**

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 5940716
EASTING: 339096

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F11W 093F11E
BC MAP:
LATITUDE: 53 35 26 N
LONGITUDE: 125 25 52 W
ELEVATION: 1128 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of Gusty discovery subcrop (Assessment Report 18092).

COMMODITIES: Gold Silver Molybdenum

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite
COMMENTS: Possibly the telluride calaverite is present.
ASSOCIATED: Chalcedony Quartz Amethyst
ALTERATION: Kaolinite Silica Sericite Chlorite
ALTERATION TYPE: Argillic Silicific'n Sericitic Potassic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork Shear Disseminated
CLASSIFICATION: Epithermal Epigenetic
DIMENSION: 175 x 125 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Dimensions of area comprising the Gusty showing.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Ootsa Lake Unnamed/Unknown Formation

LITHOLOGY: Rhyolite
Dacite
Felsic Tuff
Andesite
Basalt
Ash Tuff
Lapilli Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Stikine

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 1.8000 Grams per tonne
Gold 0.9550 Grams per tonne
COMMENTS: Highest values from samples taken across 0.5 metres.
REFERENCE: Assessment Report 18092.

CAPSULE GEOLOGY

The Gusty showing is located about 75 kilometres southeast of Burns Lake on the north shore of Intata Reach. In 1986, a stream and silt sediment sampling survey was completed by Newmont Exploration of Canada. During 1987 to 1988, Newmont conducted geological mapping, soil sampling, stream sediment sampling, rock chip sampling, hand trenching and geophysical surveys. The region is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

CAPSULE GEOLOGY

The claims are dominantly underlain by rocks of the Ootsa Lake Group. These comprise rhyolite, dacite, felsic tuffs, ash tuffs, lapilli tuffs with minor basalt and andesite.

Gold and silver mineralization on the Barb-Gusty claim group is associated with north to northeasterly trending fracture/shear zones. These zones contain translucent to milky white quartz and/or dark grey to black cherty chalcedonic quartz. Stockwork quartz or intense silica replacement zones rarely exceed several metres in width. Significant mineralization occurs in close proximity to major northeast trending fault lineaments.

The Gusty showing, which covers a 125 by 175 metre area, consists of numerous, subparallel, north-northeast trending fracture sets. The discovery subcrop consists of cross-cutting 1 to 5 millimetre wide silica veinlets hosted in a platy, siliceous, flow-banded rhyolite. Mineralization consists of pyrite and arsenopyrite and possibly a telluride mineral (calaverite?). Alteration includes potassic, argillic, silicification, sericite, chlorite and fine sulfides. Multiple generations of quartz veining are locally restricted within the rhyolite host. The rhyolite unit has a strike length of 800 meters before being faulted off and may be up to 125 metres wide. The best values were up to 0.955 grams per tonne gold and 1.8 grams per tonne silver over 0.5 metres and these coincide with a narrow zone of intense fracturing and small scale brecciation (Assessment Report 18092).

At the Barb showing, about 4 kilometres to the northeast of the Gusty showing, at least 6 en echelon vein systems are exposed in an area 100 metres across by 200 metres along strike. Finely disseminated pyrite occurs in grey to black chalcedony veins with traces of amethyst and rose quartz. Other zones display banded, cream-grey to varicolored chalcedony veins up to 0.2 to 0.3 metres wide in north-northeast trending subvertical shears. Tiny fracture coatings contain arsenopyrite and pyrite. Narrow, fracture controlled chalcedony veins are straddled by barren stockwork quartz veinlet haloes up to 1.5 metres wide. A chip sample across a 0.15 metre wide shear zone assayed 0.360 grams per tonne gold and 1.6 grams per tonne silver (Assessment Report 18092).

Just west of the Barb showing, a 1.5 metre wide zone (the Barb fault zone) of friable gouge, dark chalcedonic quartz breccia and heterogeneous lithic quartz breccia was exposed in trenching. The high angle, 015 degree trending structure marks the contact between a light green tuffaceous andesite and a siliceous rhyolite. In the brecciated matrix, 1 to 3 per cent sulfides, mainly cubic pyrite, form irregular pods and clusters. Samples showed anastomotic milky white to grey quartz veinlets, 1 to 5 millimetres wide, hosted in both the bleached andesite and rhyolite. Assays ranged between 0.001 to 0.092 grams per tonne gold, 0.1 to 9.3 grams per tonne silver and 0.0003 to 0.0520 per cent molybdenum (Assessment Report 18092).

BIBLIOGRAPHY

EMPR ASS RPT *18092
EMPR FIELDWORK 1993, pp. 9-14, 39-44; 1994, pp. 167-170, 193-197
EMPR OF 1994-19
EMPR EXPL 1992-69-106
GSC P 90-1F, pp. 115-120
GSC MEM 324

DATE CODED: 1995/02/23
DATE REVISED: 1995/02/23

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 702
REPORT: RGEN0100

MINFILE NUMBER: **093F 066**

NATIONAL MINERAL INVENTORY:

NAME(S): **STUBB**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F10W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 34 00 N
LONGITUDE: 124 48 56 W
ELEVATION: 850 Metres

NORTHING: 5936843
EASTING: 379765

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Unknown

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stockwork Breccia
CLASSIFICATION: Hydrothermal Epithermal Volcanogenic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Ootsa Lake	Unnamed/Unknown Formation	

LITHOLOGY: Altered Rhyolite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

BIBLIOGRAPHY

PERS COMM Vic Levson
Chevron File

DATE CODED: 1996/03/29
DATE REVISED: / /

CODED BY: VL
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093F 066**

MINFILE NUMBER: **093F 067**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAIMAN, CR**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F03E 093F03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 09 40 N
LONGITUDE: 125 14 32 W
ELEVATION: 1234 Metres

NORTHING: 5892541
EASTING: 350095

LOCATION ACCURACY: Within 500M

COMMENTS: Rock sample site about 3.5 kilometres north-northwest from the west end of Laidman Lake, 120 kilometres south-southwest of the community of Vanderhoof (Assessment Report 23751).

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Jurassic-Cretaceous

DEPOSIT

CHARACTER: Shear Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I01 Au-quartz veins
COMMENTS: Fieldwork 1999, pp. 173-183.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous			Capoose Batholith
Cretaceous			Laidman Lake Batholith

ISOTOPIC AGE: 148.1 +/- .6 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: zircon

LITHOLOGY: Granite
Quartz Monzonite

HOSTROCK COMMENTS: Same age as Capoose batholith. Correlated with Endako phase of the Francois Lake Suite.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: ROAD

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1994

COMMODITY	GRADE	
Silver	25.5000	Grams per tonne
Gold	2.4600	Grams per tonne

REFERENCE: Assessment Report 23751.

CAPSULE GEOLOGY

The Laidman showing is underlain by generally undeformed and unaltered granite (quartz monzonite) of a phase of the Cretaceous Capoose Batholith. A shear containing quartz and pyrite cuts the granite, in a 075 degree azimuth, parallel to a forestry road and poorly outcrops on the roadbed and on a landing. Rock samples from here analyze up to 2.54 grams per tonne gold and 25.5 grams per tonne silver. At another location, a quartz stockwork zone about 15 to 20 metres wide contains one to two metre thick quartz veins in intensely sericitized and silicified granite; gold and silver grades are low, but at least one sample is anomalous in lead and zinc (Assessment Report 23751).

BIBLIOGRAPHY

EMPR ASS RPT *23751, 24234
EMPR FIELDWORK 1999, pp. 173-183
EMPR OF 1994-2; 1994-9; 1994-10; 1994-18; 1994-19
GSC MAP 1131A; 1424A
GSC MEM 324

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 704
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 90-1F, pp. 115-120
PR REL Bard Ventures Ltd., Nov.21, 2002
STOCKWATCH Nov.15, 2001

DATE CODED: 1996/06/14
DATE REVISED: 2003/03/03

CODED BY: GO
REVISED BY: MPS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093F 068**

NATIONAL MINERAL INVENTORY:

NAME(S): **TAM**, TAKEN, MINT,
TED, BLACKWATER RIVER

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093F03E 093F02W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 29 N
LONGITUDE: 125 00 49 W
ELEVATION: 1067 Metres

NORTHING: 5876917
EASTING: 364951

LOCATION ACCURACY: Within 500M

COMMENTS: Rock sample sites about 5 kilometres west from the west end of Tsacha Lake, 130 kilometres south-southwest of Vanderhoof (Assessment Report 23746).

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Bornite
ASSOCIATED: Quartz Pyrite Malachite
ALTERATION TYPE: Carbonate Argillic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epithermal Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 8 Metres
COMMENTS: Quartz veins at the Mint showing.

STRIKE/DIP: 030/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Middle Jurassic
Eocene

GROUP

Hazelton

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Rhyolite Tuff
Andesite
Rhyolite
Rhyolite Breccia
Felsite Dike
Felsite Sill

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SHOWING

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1994

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver	483.0000	Grams per tonne
Gold	5.3000	Grams per tonne
Lead	0.7000	Per cent
Zinc	1.3000	Per cent

COMMENTS: Mint showing.
REFERENCE: Assessment Report 23764.

CAPSULE GEOLOGY

The Tam property is underlain by andesites and rhyolites of the Middle Jurassic Hazelton Group cut by dikes and sills of an Eocene felsite. The rhyolite has been carbonate and argillically altered with development of fine quartz veinlets. Two showings, the Mint and Ted veins, have been discovered and are about 500 metres apart.

The Mint showing consists of a series of quartz veins up to 8-10 metres wide, in a zone of abundant quartz stockwork at least 100 metres wide. The veins strike mostly 030 to 040 degrees and are essentially vertical. The quartz is white to grey, fine grained, occasionally with fine colloform banding and almost chalcedonic; it contains irregularly distributed wispy patches of grey sulphides, mainly galena and sphalerite with minor pyrite. Rock samples from this showing analysed up to 5.3 grams per tonne gold, 483 grams per

CAPSULE GEOLOGY

tonne silver, 1.3 per cent zinc and 0.7 per cent lead (Assessment Report 23746).

The Ted vein showing consists of a 50-metre wide zone of small outcrops and subcrop of altered rhyolite and abundant quartz stockwork including wider veins. One of these is at least 15 metres wide and massive. The quartz is fine grained, white to grey and contains occasional disseminated pyrite and galena; it is sometimes brecciated. The veins are subvertical and trend 150 to 170 degrees. Rock samples from this showing analysed up to 1.5 grams per tonne gold, 82 grams per tonne silver, 0.1 per cent zinc and 0.3 per cent lead (Assessment Report 23746).

Phelps Dodge Corporation of Canada Ltd. drill-tested the property in 1996. The best results were encountered from the Ted vein, which has been traced along strike for 300 metres and over an average width of 10 metres. Paramount Ventures & Finance Inc. conducted surveys on the Taken 1 in 1998. Trenching uncovered 20 metres of rhyolite breccia with traces of bornite and malachite.

Southern Rio Resources Ltd. drilled 3 core holes on the Ted vein in 2002.

BIBLIOGRAPHY

EM EXPL 1998-43,B-1; 2002-13-28
EMPR ASS RPT *23746, 23758, 24203, 24215, 24710, 25810
EMPR INF CIRC 1997-1, p. 28
EMPR OF 1994-2; 1994-9; 1994-10; 1994-18; 1994-19
GSC MAP 1131A; 1424A
GSC MEM 324
GSC P 90-1F, pp. 115-120
PR REL Southern Rio Resources Ltd., Oct.31, Nov.21, 2002; Jan.23,
Mar.6, 2003
WWW <http://www.infomine.com/>; <http://www.southernrio.com>

DATE CODED: 1996/06/14
DATE REVISED: 1997/03/25

CODED BY: GO
REVISED BY: GP

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093G 001**

NATIONAL MINERAL INVENTORY: 093G16 Cu1

NAME(S): **NOOK, LOON, FU - HU,**
WILLOW CREEK, TAPAI

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G16E
BC MAP:
LATITUDE: 53 50 35 N
LONGITUDE: 122 05 34 W
ELEVATION: 945 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of 1984 drilling.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5966442
EASTING: 559691

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite
COMMENTS: Very low values for gold, silver, molybdenum, lead and zinc.
ALTERATION: Malachite Silica Chlorite
ALTERATION TYPE: Silicific'n Chloritic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated
CLASSIFICATION: Hydrothermal Porphyry
DIMENSION: 0001 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Mississippian Slide Mountain Undefined Formation

LITHOLOGY: Quartz Feldspar Porphyritic Dacite
Black Graphitic Argillite
Arkose
Siltstone
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Slide Mountain

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1969
SAMPLE TYPE: Grab
COMMODITY GRADE
Copper 0.0800 Per cent
Lead 0.0220 Per cent
Zinc 0.0250 Per cent

COMMENTS: Sample L-6527: Minor molybdenum and trace gold and silver.
REFERENCE: Property File - Rpt. to Minister of Mines & Petroleum Res., 1974.

CAPSULE GEOLOGY

The Nook showing is underlain by volcanic and sedimentary rocks of the Upper Mississippian Slide Mountain Group. The units strike north to northwest and dip moderately to steeply west. In one drill hole a massive sulphide zone about one metre wide was intersected at the contact between black graphitic argillite and a quartz feldspar porphyritic dacite. Chalcopyrite, pyrrhotite and pyrite were identified. Other holes did not intersect economic mineralization. Most holes encountered arkose, siltstone, argillite and limestone overlying quartz feldspar porphyry dacite.

Quartz feldspar porphyry dacite exhibits silicification and chloritization. Malachite staining occurs on outcrops. In 1969, a grab sample assayed 0.08 per cent copper, 0.25 per cent zinc, 0.22 per cent lead and 0.001 per cent molybdenum with trace gold and silver (Property File - Report to Minister of Mines and Petroleum Resources, 1974).

BIBLIOGRAPHY

EM EXPL 1999-65-77
EMPR ASS RPT 1633, 1952, 2615, 8015, 8160, 10706, 11573, *13136

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 708
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1969-160; 1970-199
EMPR EXPL 1980-325; 1982-294; 1983-424; 1984-311
EMPR PF (Noranda Geology Map, 1969; Report to Minister of Mines and
Petroleum Resources, 1974)
GSC MAP 3-1969; 1424A
N MINER Apr.12,Sept.20, 1984
GCNL #49, 1982; #158,#161, 1983; #62,#63,#94,#181, 1984
Placer Dome File
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 002**

NATIONAL MINERAL INVENTORY: 093G11 Ni1

NAME(S): **RAY**, BOBTAIL MOUNTAIN

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G11W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 37 27 N
LONGITUDE: 123 27 40 W
ELEVATION: 1158 Metres

NORTHING: 5941806
EASTING: 469503

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximately centre of Ray claim block.

COMMODITIES: Asbestos Nickel

MINERALS

SIGNIFICANT: Chrysotile
COMMENTS: Nickel silicates are associated with veinlets.
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Unknown	Cache Creek	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Peridotite
Serpentinite
Ultramafic

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region is underlain to the west by the Mississippian to Triassic Cache Creek terrane and to the east by the Quesnellia Terrane and the Omineca Belt. Younger volcanic and sedimentary rocks of Middle Jurassic and Tertiary age overlie the Cache Creek Group. The boundary between the Quesnellia Terrane and the Cache Creek Terrane is probably the southern extension of the Pinchi fault system.

Tectonically emplaced within the Cache Creek Group are ultramafic rocks of ophiolitic affinity which are now variably deformed and metamorphosed.

The Ray showing is underlain by one of these ultramafic bodies which, here, is composed of dark green, variably serpentinized peridotite. Small occurrences of cross fibre asbestos with fibres up to 1.3 centimetres long are found in widely spaced veinlets. These veinlets also have associated nickel silicate mineralization.

BIBLIOGRAPHY

EMPR ASS RPT 2557, 10828, 15160
EMPR GEM 1970-199
EMPR AR 1961-139
EMPR OF 1995-25
GSC MAP 3-1969; 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 003**

NATIONAL MINERAL INVENTORY: 093G1 Cu2

NAME(S): **MOUSE MOUNTAIN, WANDA**

MINING DIVISION: Cariboo

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G01W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 00 N
LONGITUDE: 122 19 16 W
ELEVATION: 975 Metres

NORTHING: 5878048
EASTING: 545508

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of 1970 drilling.

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Tetrahedrite
ALTERATION: Chlorite Epidote Feldspar
ALTERATION TYPE: Propylitic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Mouse Mountain Stock

LITHOLOGY: Andesitic Breccia
Basaltic Breccia
Felsic Breccia
Monzonite
Feldspar Porphyry
Augite Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Mouse Mountain showing is located within the Central Quesnel Belt. The Upper Triassic to Lower Jurassic Quesnel Belt consists of sedimentary and volcanic rocks considered to be the northern equivalents of the Nicola Group. Intruding these rocks are small felsic to intermediate calc-alkaline plutons of Lower to Middle Jurassic age which are comagmatic with the volcanic rocks of the upper part of the Nicola stratigraphy.

Mouse Mountain is underlain by three small plutons of feldspar porphyry. The Mouse Mountain stock intrudes Upper Triassic basaltic rocks and Lower Jurassic felsic to mafic polyolithologic breccias.

Mineralization consists mainly of chalcopyrite, bornite and minor tetrahedrite. Mineralization occurs within felsic to intermediate breccias as disseminations and fracture fillings. Disseminated copper mineralization also occurs within the feldspar porphyry stock. Associated alteration in the volcanic rocks is mainly argillic and propylitic with some potassic alteration of the stock.

BIBLIOGRAPHY

EMPR ASS RPT 5127, 5531, 10506, 12742, 13436, 13872
EMPR EXPL 1974-248; 1975-E133; 1981-311; 1984-311
EMPR GEM 1970-200
EMPR AR 1956-A47,33; 1966-120
EMPR OF 1989-20
EMPR BC METAL MM00455
EMPR FIELDWORK 1989, pp. 167-172
EMPR PF (Map of Trenches and Samples, Granlay Mining Co., 1966; See 93G General File - 1W Area and Quesnel Area)
GSC MAP 49-1960
GSC MAP 3-1969; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 003**

MINFILE NUMBER: **093G 004**

NATIONAL MINERAL INVENTORY: 093G8 Cu1

NAME(S): **JO**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 20 11 N
LONGITUDE: 122 26 33 W
ELEVATION: 1036 Metres

NORTHING: 5909837
EASTING: 537122

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately 1.6 kilometre west of Yardley Lake.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Takla	Undefined Formation	

LITHOLOGY: Basalt
Mafic Volcanic
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Jo showing is located within the Quesnellia Terrane, underlain by mafic volcanic and sedimentary rocks of the Upper Triassic Takla Group. The Takla group is correlative with similar lithologies of the Nicola Group to the south.

The Jo showing consists of chalcopyrite mineralization within sheared basalt of the Takla Group.

BIBLIOGRAPHY

EMPR GEM 1970-200; 1971-161
EMPR ASS RPT 12211, 13212, 14266, 15926
EMPR EXPL 1983-421; 1984-311; 1985-C298; 1987-C284
GSC MAP 49-1960; 1424A
EMPR PF (Geology Map, Canadian Superior, 1970; See 93G General File - 8W Area and Quesnel Area)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 005**

NATIONAL MINERAL INVENTORY: 093G1 Cu3

NAME(S): **M**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G01W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 02 20 N
LONGITUDE: 122 20 47 W
ELEVATION: 914 Metres

NORTHING: 5876796
EASTING: 543824

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of 1970 grid, 8 miles northeast of Quesnel.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
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>
Triassic-Jurassic	Nicola	Undefined Formation	
Jurassic			Mouse Mountain Stock

LITHOLOGY: Gabbro
Basalt
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The M showing is located within the Central Quesnel Belt. The Quesnel Belt consists of Upper Triassic to Lower Jurassic sedimentary and volcanic rocks considered to be northern equivalents of the Nicola Group. Intruding these rocks are small felsic to intermediate alkalic plutons of Lower to Middle Jurassic age which are comagmatic with the volcanic rocks of the upper part of the Nicola stratigraphy.

Mouse Mountain is underlain by one of these alkalic plutons (the Mouse Mountain Stock). The stock here is composed of syenite, syenodiorite and monzonite, with minor gabbro. The stock has intruded Upper Triassic basaltic rocks and Lower Jurassic mafic to felsic polyolithologic breccias.

The M showing is underlain by gabbro which has intruded Upper Triassic basalt. Chalcopyrite mineralization is reported to occur within the gabbro.

BIBLIOGRAPHY

EMPR GEM 1970-200
EMPR ASS RPT 13436, 13872, 16513
EMPR EXPL 1984-309; 1985-C296; 1987-C278
EMPR PF (Report on the "M" Group; See 93G General File - 1W Area and Quesnel Area)
EMPR FIELDWORK, 1989, pp. 167-172

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 006**

NATIONAL MINERAL INVENTORY: 093G8 Mo1

NAME(S): **ICE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 20 05 N
LONGITUDE: 122 18 14 W
ELEVATION: 914 Metres

NORTHING: 5909733
EASTING: 546354

LOCATION ACCURACY: Within 5 KM

COMMENTS: Sixteen kilometres east-northeast of Strathnaver.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
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>
Triassic-Jurassic	Takla	Undefined Formation	
Cretaceous			Naver Intrusion

LITHOLOGY: Granodiorite
Basaltic Rock
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The region is underlain by the Upper Triassic to Lower Jurassic Takla Group. The Takla Group has been intruded by Lower Cretaceous granodioritic to quartz monzonitic plutons known as the Naver Intrusions.

The Ice showing is underlain by Upper Triassic Takla Group basaltic rocks and part of a Naver Intrusion which has intruded the basalt. Mineralization consists of molybdenite within granodiorite of the intrusion.

BIBLIOGRAPHY

EMPR GEM 1970-200
EMPR ASS RPT 12211, 13212, 16088
EMPR EXPL 1983-421; 1984-311
EMPR PF (See 93G General File - 8W Area and Quesnel Area)
GSC MAP 49-1960; 3-1969; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 007**

NATIONAL MINERAL INVENTORY: 093G1 Au4,Cu1

NAME(S): **G-SOUTH, G. THUNDER,
KIM, MIKE, AHBANU CREEK,
DISCOVERY**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093G01W
BC MAP:
LATITUDE: 53 11 53 N
LONGITUDE: 122 21 24 W
ELEVATION: 838 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Midpoint of the Main and East showings, approximately 30 kilometres north of Quesnel.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5894496
EASTING: 542976

COMMODITIES: Gold Copper Zinc Lead Silver

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Arsenopyrite Sphalerite Chalcopyrite
Galena
ASSOCIATED: Quartz Calcite Epidote Chlorite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork Breccia Massive
CLASSIFICATION: Hydrothermal Volcanogenic Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Fractured Faulted
DIMENSION: 72 x 70 x 1 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Discovery zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Triassic Takla Undefined Formation

LITHOLOGY: Augite Porphyry
Basaltic Breccia
Argillite
Rhyolite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Indicated YEAR: 1986
QUANTITY: 45355 Tonnes
COMMODITY GRADE
Gold 10.2000 Grams per tonne
COMMENTS: Drill indicated.
REFERENCE: Gabriel Resources Inc. Annual Report, April 14, 1988.

CAPSULE GEOLOGY

The G-South occurrence occurs within the Quesnel Belt, located approximately 30 kilometres north of Quesnel. The area is underlain by Upper Triassic Takla Group mafic to intermediate flows, pyroclastic volcanics and argillaceous sedimentary rocks. These are intruded by coeval plutonic rocks of the Naver Intrusive Suite.

The G-South deposit is mainly underlain by augite porphyry, basaltic breccias and argillites which have been intruded by several rhyolite dikes. Sulphide mineralization occurs disseminated in the country rocks and in stockworks and breccia infillings with quartz, calcite, epidote and chlorite. There are two main types of mineralization: 1) disseminated and fracture-controlled pyrite, pyrrhotite and rare chalcopyrite in volcanics or along contacts with rhyolite dikes and 2) massive sulphide mineralization within gouge zones up to 1.9 metres wide consisting of pyrite, arsenopyrite and sphalerite and occasionally chalcopyrite and galena.

CAPSULE GEOLOGY

High gold and silver values are not coincident and do not appear to be associated with the percentage of sulphides present. The best mineralization is suggested to occur at or near the intersection of regional fault structures that trend 170 to 180 and 130 to 140 degrees.

The Discovery zone (type 2 mineralization), is exposed on the surface for 70 metres, is 1.2 to 1.5 metres wide and has been tested to a depth of 72 metres. Several new potential zones along the BL fault have been tested and one sample from drilling assayed 7.6 grams per tonne over 4.6 meters (Assessment Report 17309).

Drill indicated reserves are 45,355 tonnes grading 10.2 grams per tonne gold (Gabriel Resources Inc. Annual Report, April 14, 1988).

Doublestar Resources Ltd. acquired an interest in the property in 1998.

BIBLIOGRAPHY

EMPR AR 1968-151
EMPR ASS RPT 627, 2212, *3385, 11061, *12211, 13211, 13712, 15084, 15744, *15927, 16503, 16645, *17309, 21740
EMPR EXPL 1984-310; 1985-C297; 1986-B53,C333-334; 1987-C281
EMPR FIELDWORK 1989, pp. 167-172
EMPR GEM 1969-161; 1971-161; 1972-349
EMPR INF CIRC 1989-1, p. 20
EMPR MAP 65 (1989)
EMPR OF 1992-1
EMPR PF (Topographical Map; See 93G General File - 1W Area and Quesnel Area)
EMR MIN BULL MR 223 B.C. 221
GSC MAP 49-1960; 1424A
GCNL #73,#109,#186, 1986; #5,#35,#69,#79,#189, 1987; #111(June 10), #230(Nov.29), 1991; #105(June 2), 1998
N MINER Feb. 16, 1987

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **VANDERHOOF LIMESTONE**, NECHAKO, LOT 5415

STATUS: Developed Prospect

MINING DIVISION: Omineca

REGIONS: British Columbia

NTS MAP: 093G13W

BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 59 35 N

LONGITUDE: 123 44 55 W

ELEVATION: 823 Metres

NORTHING: 5983008

EASTING: 450921

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone outcrop on Lot 5415, 19 kilometres east-southeast of Vanderhoof (Geological Survey of Canada Map 49-1960).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Quartz Dolomite

COMMENTS: Occur as veinlets in the limestone.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform Massive

CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

DIMENSION: 400 x 240 x 37 Metres

STRIKE/DIP: 025/90

TREND/PLUNGE:

COMMENTS: Limestone strikes north to northeast and dips 80 to 90 degrees.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

HOSTROCK COMMENTS: The Cache Creek Group is Carboniferous to Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: VANDERHOOF

REPORT ON: Y

CATEGORY: Unclassified

YEAR: 1977

QUANTITY: 5000000 Tonnes

COMMODITY

GRADE

Limestone

95.9300 Per cent

COMMENTS: Grade is from average of samples of cuttings from 25 percussion holes.

REFERENCE: Industrial Minerals File - Smedley, A.G. Letter, 1989.

CAPSULE GEOLOGY

Several outcrops of limestone, of the Carboniferous to Jurassic Cache Creek Group, project above the surrounding cover of fluvioglacial sediments on Lot 5415, 3 kilometres north of the Nechako River and 19 kilometres east-southeast of Vanderhoof.

The largest exposure outcrops over a 300 by 140 metre area. Drilling in 1977, indicated that the deposit continues to the south and west under a layer of sand and gravel, up to 15 metres thick. Together, the limestone outcrop and subcrop, cover a total area of 400 by 240 metres. Drilling on outcrop has encountered continuous limestone to a vertical depth of at least 36.6 metres. Bedding strikes north to northeast and dips 80 to 90 degrees.

The deposit is comprised of massive, white to dark grey limestone containing minor quartz veinlets a few millimetres to a few centimetres thick that are randomly distributed throughout the limestone. A few veinlets of yellow carbonate (dolomite?) are also present.

One grab sample contained 55.17 per cent CaO, 0.59 per cent MgO, 0.44 per cent SiO₂, 0.52 per cent Al₂O₃, 0.14 per cent Fe₂O₃, 0.01 per cent P₂O₅, 0.05 per cent SO₃ and 43.00 per cent ignition loss (Industrial Mineral File - A. Smedley, 1989). Samples of cuttings from 25 percussion holes, drilled in a 13 by 5.5-metre area on the south side of the main outcrop, averaged 53.75 percent CaO (95.93 per cent CaCO₃) and 2.83 per cent SiO₂ (Industrial Mineral File - A.

CAPSULE GEOLOGY

Smedley, 1989). The excess silica is reported to be due to surface contamination. The deposit is estimated to contain at least 5 million tonnes of limestone (Industrial Mineral File - A. Smedley, 1989)

The limestone was periodically sampled, trenched and drilled by Albert Smedley until 1988.

BIBLIOGRAPHY

EMPR PF (*Hora, Z.D., 1978, Letter to A.G. Smedley;
*Smedley, A.G., 1989, Letter, Maps and Assays)
GSC MAP 49-1960; 630A; 907A; 1424A
GSC MEM 252 pp. 32-36
GSC OF 3203
Placer Dome File

DATE CODED: 1989/10/24
DATE REVISED: 1989/10/24

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 009**

NATIONAL MINERAL INVENTORY: 093G1 Au1

NAME(S): **HANNADOR**, LIGHTNING CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G01E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 14 N
LONGITUDE: 122 01 27 W
ELEVATION: Metres

NORTHING: 5875002
EASTING: 565457

LOCATION ACCURACY: Within 1 KM

COMMENTS: On Lightning Creek at junction with Angus Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Auriferous quartz veins in greenschist facies Omineca Belt rocks are considered to be the source of the placer gold.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The region is underlain to the west by Mesozoic sedimentary and volcanic rocks of the Quesnellia Terrane and to the east by Proterozoic to Paleozoic dominantly metasedimentary rocks of the Omineca Belt. Quartz veins in greenschist facies rocks of the Omineca Belt are commonly auriferous and erosion and subsequent reworking has undoubtedly contributed to the rich gold placers of the region.

The Hannador deposit occurs on Lightning Creek at the junction of Angus Creek in the southeastern corner of the map area. This deposit is one of several past placer gold producers on Lightning and other creeks draining the Omineca Belt. These placer deposits occur in late Tertiary (Miocene) gravels.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

In July 1992, Gallery Resources Ltd. conducted a testing program in the area of Placer Mining Lease 5743. The program consisted of reverse circulation drilling, seismic surveying and bulk testing from excavated pits. The 1992 test program of the Lightning bench on the Hannador property has outlined a reserve of 790,000 cubic yards with an average indicated value of \$7.48 (Cdn) per cubic yard. The reserve as outlined is overlain by lower grade material especially along its southern limits. Preliminary calculations suggest a 1.24:1 stripping ratio for reported reserves (Report by C.K. Ikona and R.J. Darney).

In 1993, 55,150 cubic yards (42,134 cubic metres) were processed from bedrock to 9.1 metres above bedrock yielding 1855.1 ounces (57,693 grams) of raw gold; 26,750 cubic yards (20,437 cubic metres) of material from 9.1 to 12.1 metres above bedrock yielded 264.1 ounces (8213 grams) gold. An additional 9900 cubic yards (7563 cubic metres) of gravel above this level was washed to determine grades and 17.7 ounces (550 grams) of gold was produced (Explore B.C. Program 94/95 - A4).

In 1995, with Explore B.C. Program support, Gallery Resources

CAPSULE GEOLOGY

Ltd. carried out refraction seismic, topographic and geological surveys and 730 metres of auger drilling in 8 holes. The drilling intersected thick sections of glacial clays. The refraction seismic survey and sampling of existing trenches identified the Bonanza Bench as an area of stacked auriferous channels with values up to \$29 per yard (Explore B.C. Program 95/96 - M134).

Gallery Resources Ltd. announced that gold production will begin in early May 1997. Reserves were estimated at 400,000 tons (362,840 tonnes). The initial production goal is scheduled at 2500 tons (2267 tonnes) per day with recoverable gold value of a minimum of \$10 per ton (T. Schroeter, personal communication, 1997).

BIBLIOGRAPHY

EMPR AR 1960-123; 1961-132; 1962-141
EMPR EXPL 1989, pp. 147-169; 1998-37
EMPR Explore B.C. Program 94/95 - A4; 95/96 - M134
EMPR FIELDWORK 1989, pp. 167-172; 1990, pp. 331-356; 1992, pp. 463-473
EMPR GEM 1969-376; 1970-484; 1972-568; 1974-360
EMPR PF (See 93G General File - Quesnel Area; *Ikona, C.K. and Darney, R.J. (1992): Summary Report on the 1992 Placer Testing Program, Lightning Bench, Hannandor Project)
GSC MAP 1424A
GCNL #182(Sept.21), 1992; #87(May 6), 1997
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1997/08/25

CODED BY: GSB
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FIELD CHECK: N
FIELD CHECK: Y

RUN DATE: 26-Jun-2003
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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 720
REPORT: RGEN0100

MINFILE NUMBER: **093G 010**

NATIONAL MINERAL INVENTORY: 093G7 Mn1

NAME(S): **CHARLESON CREEK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G07W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 16 50 N
LONGITUDE: 122 57 53 W
ELEVATION: Metres

NORTHING: 5903481
EASTING: 502352

LOCATION ACCURACY: Within 1 KM
COMMENTS: Geological Survey of Canada Map 49-1960.

COMMODITIES: Manganese

MINERALS

SIGNIFICANT: Psilomelane
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Chert

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Psilomelane occurs in fractures in cherts of the Mississippian to Triassic Cache Creek Group.

BIBLIOGRAPHY

GSC MAP 49-1960; 3-1969; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 010**

MINFILE NUMBER: **093G 011**

NATIONAL MINERAL INVENTORY: 093G4 Mn1

NAME(S): **NAZKO**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 32 N
LONGITUDE: 123 37 29 W
ELEVATION: 853 Metres

NORTHING: 5875296
EASTING: 458100

LOCATION ACCURACY: Within 1 KM

COMMENTS: Lot 2144 near the confluence of Nazko River and Redwater Creek.

COMMODITIES: Manganese

MINERALS

SIGNIFICANT: Wad
ALTERATION: Limonite Wad
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: B07 Bog Fe, Mn, U, Cu, Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Recent			Unnamed/Unknown Informal

LITHOLOGY: Soil

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The Nazko manganese showing consists of manganese dioxide in the form of wad as a bog deposit. The wad lies beneath 0.5 centimetres to 1 metre of dark soil with admixed black oxide and is underlain by soil, sand and gravel, some of which is limonite stained.

BIBLIOGRAPHY

EMPR AR 1955-30
EMPR PF (Memorandum by J.S. Stevenson, 1949)
EMR MR MN 301.00-1942
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 012**

NATIONAL MINERAL INVENTORY: 093G7 Asb1

NAME(S): **TELEGRAPH RANGE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 24 56 N
LONGITUDE: 123 30 25 W
ELEVATION: Metres

NORTHING: 5918619
EASTING: 466306

LOCATION ACCURACY: Within 1 KM
COMMENTS: Geological Survey of Canada Map 49-1960.

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile Serpentine
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Triassic	Cache Creek	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Serpentinite
Serpentinized Peridotite
Ultramafic

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region is underlain to the west by the Mississippian to Triassic Cache Creek Terrane and to the east by the Quesnellia Terrane and the Omineca Belt. Middle Jurassic and Tertiary volcanic and sedimentary rocks overlie the Cache Creek Group. The boundary between the Quesnellia and Cache Creek terranes is probably the southern extension of the Pinchi fault system.

Ultramafic rocks of ophiolitic affinity, now variably deformed and metamorphosed, were tectonically emplaced within the Cache Creek Group. The Telegraph Range occurrence consists of chrysotile asbestos within serpentinized peridotite of one of these ultramafic bodies.

BIBLIOGRAPHY

EMPR OF 1995-25
EMPR AR 1961-139
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 013**

NATIONAL MINERAL INVENTORY: 093G7 Pb1

NAME(S): **PIONEER**, RUSH

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G07E
BC MAP:

Underground

MINING DIVISION: Cariboo

LATITUDE: 53 27 35 N
LONGITUDE: 122 31 40 W
ELEVATION: 739 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Old workings.

UTM ZONE: 10 (NAD 83)

NORTHING: 5923517
EASTING: 531353

COMMODITIES: Silver Lead Zinc Gold

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
COMMENTS: Vein strikes north and dips northeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Carbonaceous Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Pioneer deposit occurs within carbonaceous shale of Upper Triassic age which forms part of the Takla Group. The Takla Group forms part of the Quesnellia Terrane which is bounded to the east by rocks of the Omineca Belt and to the west by the Cache Creek Group.

The mineralization consists mainly of argentiferous galena and sphalerite within a northerly striking northeast dipping quartz vein. In 1927 four tonnes of ore was mined producing 809 grams of silver, 126 kilograms of lead and 2 kilograms of zinc. Anomalous gold values have also been recorded from the vein.

BIBLIOGRAPHY

EMPR AR 1926-166; 1927-C119,C165
EMPR BC METAL MM00454
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 014**

NATIONAL MINERAL INVENTORY: 093G8 Au1

NAME(S): **CAYENNE**, CAYANNE, BELMONT,
HIXON TERRY, HQ, HIXON QUARTZ,
RAVEN

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G07E

UTM ZONE: 10 (NAD 83)

BC MAP:
LATITUDE: 53 26 30 N
LONGITUDE: 122 30 22 W
ELEVATION: 777 Metres

NORTHING: 5921518
EASTING: 532806

LOCATION ACCURACY: Within 500M
COMMENTS: Adit on Cayenne 2, on Hixon Creek.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Quartz Sericite Schist
Argillaceous Sediment/Sedimentary
Basaltic Volcanic Rock

HOSTROCK COMMENTS: It is not certain which terrane hosts this showing.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

Barkerville

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: TUNNEL REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1929
SAMPLE TYPE: Grab
COMMODITY _____ GRADE _____
Silver 13.7100 Grams per tonne
Gold 8.2200 Grams per tonne
COMMENTS: Sample from tunnel.
REFERENCE: Minister of Mines Annual Report 1929-189.

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Channel
COMMODITY _____ GRADE _____
Gold 7.2000 Grams per tonne
COMMENTS: Trenching over a 5 metre sample interval.
REFERENCE: Northern Miner, June 7, 1984.

CAPSULE GEOLOGY

The Cayenne showing occurs in an area in which elements of the Omineca Belt and the Quesnellia Terrane both occur. The two terranes are separated from each other by a fault which is probably the northern extension of the Eureka Thrust. The area is largely covered by Pleistocene glacial and fluvioglacial deposits. The Quesnellia Terrane consists of dark grey, generally fine grained argillaceous sedimentary rocks with interbedded basaltic volcanic rocks (generally altered). The Omineca Belt consists of quartz bearing metasedimentary rocks which, in this area, probably form part of the Barkerville Terrane.

The Cayenne showing consists of a 0.6 to 1.2 metre wide quartz vein and several smaller quartz stringers which cut highly altered

CAPSULE GEOLOGY

and weathered quartz sericite schist. Gold values have been reported from both the quartz veins and from the schist. The wallrock is quartz sericite schist and this would seem to indicate that this showing is underlain by the Barkerville Terrane. However, due to the lack of detailed mapping in this area, it is not clear in which terrane the showing occurs.

A grab sample in 1929 assayed 8.22 grams per tonne gold and 13.71 grams per tonne silver (Energy, Mines and Petroleum Resources Annual Report 1929 p. 189).

Trenching in 1984 produced a best assay from the Raven claim, at the Cayenne, of 7.20 grams per tonne gold over a 5 metre interval (Northern Miner, June 7, 1984).

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GSC MEM 118, p. 105
EMPR ASS RPT 3484, *8343, 7787, 9322, 12129, 15926
GCNL #13, 1984
N MINER Jun.7, 1984
GSC MAP 49-1960; 1424A
EMPR EXPL 1983-422; 1987-C284
EMPR INF CIRC 1989-1, p. 20
EMPR PF (Claim Map; Davidson, E.G., (1930): Preliminary Mining Report; Geology Map, 1933; Claim Map, 1933; See 93G General File - Quesnel Area)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 015**

NATIONAL MINERAL INVENTORY: 093G7,8 Au1

NAME(S): **QUESNEL QUARTZ, HIXON CREEK, CARIBOO LODE,
WASHBURN, MILLSITE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G07E
BC MAP:
LATITUDE: 53 26 33 N
LONGITUDE: 122 31 17 W
ELEVATION: 747 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Main Shaft.

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5921604
EASTING: 531790

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold Silver Galena Sphalerite Chalcopyrite
Molybdenite Arsenopyrite Pyrrhotite Pyrite
ALTERATION: Quartz Kaolinite Siderite
ALTERATION TYPE: Carbonate Silicific'n Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Greenstone-schist contact, veins strike northeast with a steep dip and are up to 1.8 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Greenstone
Quartz Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The deposit is associated with a highly sheared and hydro-thermally altered, northwest trending zone in which greenstones are in contact with quartz sericite schists. The greenstones and schists likely belong to the Upper Triassic/Lower Jurassic Takla Group. In the vicinity of the contact the greenstones have been hydrothermally altered and exhibit carbonatization and, especially toward the surface, kaolinization. A large number of fairly closely spaced quartz veins striking mainly northeasterly with a steep dip also occur in the greenstone near the contact. The veins, which vary from a few centimetres up to about 1.8 metres in width, terminate against the contact. Gold mineralization occurs in the veins and to a lesser extent in the greenstone. Mineralization includes native gold, native silver, galena, sphalerite, chalcopyrite, molybdenite, arsenopyrite, pyrrhotite and pyrite.

Total recorded production for the Quesnel Quartz past producer is 6,438 grams gold and 8,553 grams silver from 2,048 tonnes mined. The mine has recorded production for 1932 and 1939.

BIBLIOGRAPHY

EMPR ASS RPT 3484, 7787, 8343, 9322, *12129, 15926
EMPR AR 1878-374; 1886-236,237; 1918-128; 1929-189; 1930-161;
1933-119; *1934-C19; *1935-C2,G44; 1936-C38; 1937-C33
EMPR EXPL 1979-216; 1980-325; 1983-422; 1987-C284
EMPR BC METAL MM00456
EMPR PF (Mine plans, Geology Maps - Various dates; Petersen, E.P., (1934): Report on the Mining Property of the Quesnelle Quartz Mining Co. Ltd., (1936): Report on the Quesnelle Quartz Mining Co. Ltd., Summary Report on the Mining Property of the Quesnelle Quartz Mining Co. Ltd.; General Correspondence - 1933, 1934, 1936,

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 727
REPORT: RGEN0100

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1937, 1938)
GSC MEM 118, p. 101
GSC MAP 49-1960
Petersen, E.M., (1933): Report on the Mining Property of the
Quesnelle Quartz Mining Co. Ltd.; (1937): Progress Report on the
Mining Properties of the Quesnelle Quartz Mining Co. Ltd.
Norrie-Louenthal, W.G., (1935): Report on the Property of the
Quesnelle Quartz Mining Co. Ltd.

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **BALDY HUGHES**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G11E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 37 37 N
LONGITUDE: 123 05 30 W
ELEVATION: Metres

NORTHING: 5942021
EASTING: 493938

LOCATION ACCURACY: Within 1 KM
COMMENTS: Geological Survey of Canada Map 49-1960.

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile Serpentine
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Serpentinized Peridotite
Serpentinite
Ultramafic

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region is underlain to the west by the Mississippian to Triassic Cache Creek Terrane and to the east by the Quesnellia Terrane and the Omineca Belt. Middle Jurassic and Tertiary volcanic and sedimentary rocks overlie the Cache Creek Group. The boundary between the Quesnellia and Cache Creek terranes is probably the southern extension of the Pinchi fault system.

Ultramafic rocks of ophiolitic affinity, now variably deformed and metamorphosed, were tectonically emplaced within the Cache Creek Group. Chrysotile asbestos occurs within serpentinized peridotite at this locality.

BIBLIOGRAPHY

EMPR OF 1995-25
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **NAZKO PERLITE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 30 N
LONGITUDE: 123 12 10 W
ELEVATION: Metres

NORTHING: 5875071
EASTING: 486399

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: R12 Volcanic glass - perlite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Eocene

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Rhyolite
Perlite
Volcanic Glass

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The Nazko perlite occurrence was found, in 1994, during a cursory examination of large rhyolite outcrops and an adjacent bank of glacial outwash exposed in a cut on the road from Quesnel to Nazko.

While no bedrock outcrops containing volcanic glass are known in the area, abundant clasts of perlitic rock can be found throughout the outwash deposit. The large size of many of the perlite boulders (50 centimetres in diameter), low physical strength of the rock and proximity to a large exposure of Eocene rhyolites (Rouse and Mathews, 1988; Tipper, 1961), points to a nearby source, most probably associated with the adjacent rhyolite outcrops.

The perlite rock is black to dark green, with microfractures resulting in platy, rod-like and isometric fragments. Four distinct types of volcanic glass were collected for expansion tests.

A sample of each of the four types was crushed to less than 1-centimetre size fragments, which were then placed under a propane torch flame for about 1 minute. All types expanded, increasing the volume of individual particles from approximately two to four times their original size.

The significance of this perlite occurrence is that it is the logistically best-located and accessible site in the British Columbia interior, and the authors (Hora and Hancock) believe that prospecting will locate the bedrock source of perlite rock in nearby Eocene rocks.

According to Peter Read (personal information, 1997) the bedrock source has been found nearby.

BIBLIOGRAPHY

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CJES Rouse, G.E. and Mathews, W.H. (1988): Palynology and Geochronology of Eocene Beds from Cheslatta Falls and Nazko Areas, Central British Columbia; Volume 25, pages 1268-1276
GSC MAP 49-1960

DATE CODED: 1998/07/28
DATE REVISED: 1998/07/28

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 018**

NATIONAL MINERAL INVENTORY: 093G13 Asb1

NAME(S): **SINKUT MOUNTAIN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 48 33 N
LONGITUDE: 123 58 22 W
ELEVATION: 1311 Metres

NORTHING: 5962729
EASTING: 435945

LOCATION ACCURACY: Within 1 KM

COMMENTS: Geological Survey of Canada Map 49-1960.

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile Anthophyllite

ALTERATION: Serpentine

ALTERATION TYPE: Serpentin'zn

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Serpentinized Peridotite
Serpentinite
Ultramafic

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The region is underlain to the west by the Mississippian to Triassic Cache Creek Terrane and to the east by the Quesnellia Terrane and the Omineca Belt. Middle Jurassic and Tertiary volcanic and sedimentary rocks overlie the Cache Creek Group. The boundary between the Quesnellia and Cache Creek terranes is probably the southern extension of the Pinchi fault system.

Ultramafic rocks of ophiolitic affinity, now variably deformed and metamorphosed, were tectonically emplaced within the Cache Creek Group. The Sinkut Mountain occurrence consists of chrysotile asbestos within serpentinitized peridotite. Fibrous anthophyllite also occurs in the area, in a road cut 0.8 kilometres west of the forestry lookout on Sinkut Mountain.

BIBLIOGRAPHY

EMPR PF (Tipper, H.W., Geology Maps)
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GSC MEM 324, p. 54
GSC MAP 49-1960; 1424A
GSC OF 3203

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 019**

NATIONAL MINERAL INVENTORY:

NAME(S): **TABOR**, BURMAH

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 56 07 N
LONGITUDE: 122 28 58 W
ELEVATION: 1036 Metres

NORTHING: 5976445
EASTING: 533956

LOCATION ACCURACY: Within 1 KM
COMMENTS: On hilltop.

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0460 x 0003 Metres STRIKE/DIP:
COMMENTS: Veins occur over width of 460 metres and are up to 3.4 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Argillite
Quartzite
Granodiorite
Greywacke
Quartz Vein

HOSTROCK COMMENTS: Rocks may be correlative with either the Nicola Group or the Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Tabor showing is underlain mainly by Lower Jurassic meta-sedimentary rocks consisting of argillite, greywacke and quartzite. These may be correlative with either the Nicola Group further to the south or with the lower part of the Hazelton Group to the west. Small granodioritic intrusions have been emplaced into these rocks.

A number of approximately parallel quartz veins cut across the bedding of the flatly dipping rocks. The veins occur over an area 460 metres in width and are up to 3.4 metres wide. The veins are mineralized with pyrite and chalcopyrite, minor gold and silver values are also reported.

BIBLIOGRAPHY

EMPR AR 1928-191; 1933-118; 1934-C18
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **STONE CREEK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 38 29 N
LONGITUDE: 122 35 45 W
ELEVATION: Metres

NORTHING: 5943700
EASTING: 526720

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of Lot 4618.

COMMODITIES: Copper Gold Silver Lead

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
COMMENTS: Lead mineral not identified.
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Disseminated Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: 0004 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: 3.6 metre zone containing quartz and calcite with associated pyrite and chalcopyrite.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Brecciated Quartzitic/Quartzose Phyllite
Black Argillaceous Schist
Quartzite
Phyllite
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE:

CAPSULE GEOLOGY

The Stone Creek showing is located within an area considered to be underlain by the Barkerville Terrane, of the Omineca Crystalline Belt, near its western contact with the Quesnellia Terrane. Lithologies in the area consist of brecciated and fractured white to grey quartzite, phyllite and black argillaceous schist. Pyrite, disseminated and in quartz stringers, occurs within a brecciated quartzose phyllite from which gold, silver and lead values have been reported. Pyrite and chalcopyrite also occur associated with quartz within black clay-rich schist. This mineralization occurs in a 3.5 metre wide zone which contains quartz and calcite.

BIBLIOGRAPHY

GSC MEM 118, p. 105
EMPR AR 1929-190
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 021**

NATIONAL MINERAL INVENTORY:

NAME(S): **COUGAR**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G07W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 22 30 N
LONGITUDE: 122 48 28 W
ELEVATION: 564 Metres

NORTHING: 5914005
EASTING: 512788

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Faulted Sheared
DIMENSION: 0005 Metres
COMMENTS: Vein is from 1.5 to 5.2 metres wide.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Diorite
Argillite

HOSTROCK COMMENTS: Vein occurs at diorite/argillite contact.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel Stikine
COMMENTS: Showing is near the contact between these terranes.

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Cougar showing is located, near the western margin of the Quesnellia Terrane, at the contact of Mesozoic rocks with the Cache Creek Group of the Stikinia Terrane. The contact is marked by a zone of faulting which is the southern extension of the Pinchi Fault system. The mineralization is interpreted to occur within rocks of the Quesnellia Terrane. However, shearing and faulting suggests that the mineralized zone is close to the contact between the Quesnellia and Stikinia Terranes.

Mineralization consists of sparse pyrite, chalcopyrite, malachite and azurite within a 1.5 to 5.2 metre wide quartz vein. The footwall consists of thickly bedded argillite and the hanging wall consists of sheared diorite. Trace gold and silver values have been reported associated with the sulphide mineralization.

BIBLIOGRAPHY

EMPR AR 1935-C6
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **MACMILLIAN**, COTTONWOOD RIVER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G01E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 05 12 N
LONGITUDE: 122 12 35 W
ELEVATION: 760 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5882203
EASTING: 552929

LOCATION ACCURACY: Within 1 KM

COMMENTS: Old workings located near Cottonwood River-Boyd Creek junction.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The MacMillian placer workings are located along the banks of the Cottonwood River near the Boyd Creek junction. The river bars have been worked historically.

There are several placer gold deposits along the Cottonwood River. The deposits are located in benches ranging in height from about a metre to several metres above the present course of the river. The gold is derived from the concentration of pre-existing glacial or pre-glacial deposits, some may have been of Miocene age. The ultimate source of the gold may have been the auriferous veins of the Barkerville terrane from which the Cottonwood River drains. The pre-Tertiary geology of this area consists of mafic volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group of the Quesnellia Terrane.

The Cottonwood workings produced alluvial platinum and gold. This is a common feature of many of the placer deposits in this region.

The No. 2 shaft, the only shaft that reached true bedrock, contained a small concentration of gold at bedrock. The gold was fine-grained with a substantial quantity of black sand. Shallow drilling revealed only low grade or local pockets of concentrations.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR PF (Fraser, D.D., (1988): Placer tests, 3 to 5 Mile Posts, Cottonwood River, Cariboo, British Columbia; See 93G General File - Quesnel Area)
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR EXPL 1989, pp. 147-169
GSC MAP 1424A

DATE CODED: 1989/03/16
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093G 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **BELL - HOLM, MARIE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 52 18 N
LONGITUDE: 122 50 55 W
ELEVATION: 792 Metres

NORTHING: 5969254
EASTING: 509954

LOCATION ACCURACY: Within 1 KM

COMMENTS: Northern end of boundary between Lots 1601 and 1602.

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite
ASSOCIATED: Quartz
ALTERATION: Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0300 x 0150 x 0002 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Quartz vein stockwork occurs in area 300 metres long by 150 metres wide. Veins are up to 2.5 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

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

LITHOLOGY: Schistose Mafic Volcanic
Diorite Intrusive
Argillaceous Sediment/Sedimentary
Arenaceous Sediment/Sedimentary

HOSTROCK COMMENTS: Takla Group in this area is Upper Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 276.0000 Grams per tonne
Gold 9.6000 Grams per tonne

COMMENTS: Composite chip samples vary from low of 0.05 grams per tonne gold and 2.0 grams per tonne silver to this high.

REFERENCE: Property File - Byron Resources Inc., 1987, Prospectus.

CAPSULE GEOLOGY

The region of the Bell-Holm or Marie showing is underlain dominantly by the Upper Triassic Takla Group rocks of the Quesnellia Terrane. The Takla Group, here, comprises mainly argillaceous and arenaceous sedimentary rocks with interbedded mafic volcanic rocks. The area is largely covered by Pleistocene glacial and fluvio-glacial deposits.

The showing is underlain by schistose mafic volcanic rocks and an associated diorite intrusion. Mineralization near the old adit consists of gold and silver bearing quartz veins in an open stockwork in an area around 300 metres in length and 150 metres width. The veins vary from narrow seams to massive veins that are up to 2.5 metres in width. A winze in the adit is now flooded but historical reports claim high gold values. Sampling suggests that the veins may extend along a west strike for 400 metres.

Pockets of iron oxides and remnant pyrite is locally present and galena and sphalerite have been tentatively identified.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 736
REPORT: RGEN0100

CAPSULE GEOLOGY

Composite chip samples vary from a low of 0.05 grams per tonne gold and 2 grams per tonne silver up to a high of 9.6 grams per tonne gold and 276 grams per tonne silver (Property File - Byron Resources Inc. June 1987 Prospectus).

BIBLIOGRAPHY

EMPR EXPL 1987-C286
EMPR AR 1928-C190; 1938-C48
EMPR ASS RPT *15490, 16515
EMPR PF (Byron Resources Inc., Jun., 1987, Prospectus)
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **BURN**, CAT, BLACK CAT,
WILD CAT

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 53 48 N
LONGITUDE: 122 30 45 W
ELEVATION: 914 Metres

NORTHING: 5972135
EASTING: 532034

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Cat claim block.

COMMODITIES: Tungsten

Molybdenum

Copper

Bismuth

MINERALS

SIGNIFICANT: Scheelite Molybdenite Chalcopyrite Bismuthinite Pyrrhotite

Pyrite

ASSOCIATED: Quartz

Calcite

ALTERATION: Calcite

Sericite

Garnet

ALTERATION TYPE: Sericitic

Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

Stockwork

Disseminated

CLASSIFICATION: Epigenetic

Hydrothermal

Skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Jurassic

Unnamed/Unknown Informal

LITHOLOGY: Argillite
Greywacke
Skarn
Hornblende Diorite
Quartzite

HOSTROCK COMMENTS: Rocks may be correlative with either the Nicola Group or the Hazelton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Burn showing is underlain mainly by Lower Jurassic metasedimentary rocks, consisting of argillite, greywacke and quartzite. These may be correlative with either the Nicola Group further to the south or with the lower part of the Hazelton Group to the west. Hornblende diorite has been intruded into the assemblage.

Mineralization consists of veinlets of quartz, calcite, sericite, pyrrhotite, pyrite, scheelite, molybdenite and chalcopyrite in argillite and greywacke. Disseminated sulphide mineralization in association with red garnetiferous skarn also occurs in the area.

BIBLIOGRAPHY

EMPR ASS RPT *1129, 6644, *6876, 8328, 8808
EMPR EXPL 1977-E187; 1978-E207; 1979-217; 1980-325
EMPR AR 1934-C18; 1967-120
EMPR OF 1991-17

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 025**

NATIONAL MINERAL INVENTORY: 093G1 Au2

NAME(S): **COTTONWOOD PLACER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G01E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 05 18 N
LONGITUDE: 122 14 35 W
ELEVATION: Metres

NORTHING: 5882365
EASTING: 550695

LOCATION ACCURACY: Within 1 KM

COMMENTS: Junction of Umiti Creek and Cottonwood River.

COMMODITIES: Gold

Platinum

MINERALS

SIGNIFICANT: Gold Platinum

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

Residual

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

There are several placer gold deposits along the Cottonwood River. The deposits are located in benches ranging in height from about a metre to several metres above the present course of the river. The gold is derived from the concentration of pre-existing glacial or pre-glacial deposits, some may have been of Miocene age. The ultimate source of the gold may have been the auriferous veins of the Barkerville terrane from which the Cottonwood River drains. The pre-Tertiary geology of this area consists of mafic volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group of the Quesnellia Terrane.

The Cottonwood workings produced alluvial platinum and gold. This is a common feature of many of the placer deposits in this region.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EM GEOFIL 2000-2; 2000-5
EMPR AR 1874-1895-tables; 1874-5; 1878-373; 1883-402,403; 1885-380;
1890-360; 1893-1077; 1894-726; 1896-508,509,514; 1897-472;
1898-979,981; 1899-609; 1901-954; 1902-60,64,104,125; 1904-44;
1920-99; 1921-113; 1922-120; 1932-99; 1935-C37; *1936-C17,C20,
C22; 1944-78; 1945-126; 1946-197; 1947-194; 1948-177; 1949-231;
1950-A200; 1951-A205; 1952-A238; 1953-A176; 1955-85; 1960-123;
1961-133; 1962-141; 1963-134; 1965-252; 1967-295
EMPR ASS RPT 16114, 17278
EMPR BULL 28, pp. 21,24,50
EMPR EXPL 1987, p. C275; 1989, pp. 147-169
EMPR FIELDWORK 1989, pp. 167-172; 1990, pp. 331-356; 1992, pp.
463-473; 2001, pp. 303-312
EMPR GEM 1970-484; 1972-568; 1973-A526
EMPR PF (Prospectus, Brent Explorations Ltd., 1972; See 093G General
File - Quesnel Area)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 025**

MINFILE NUMBER: **093G 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARY CREEK**, NORTON CREEK, OLD SAN JUAN,
TOOPVILLE PLACER, ALICE CREEK, TOOP

STATUS: Past Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

UTM ZONE: 10 (NAD 83)

NTS MAP: 093G01E

BC MAP:

LATITUDE: 53 04 03 N

LONGITUDE: 122 05 36 W

ELEVATION: Metres

NORTHING: 5880164

EASTING: 560751

LOCATION ACCURACY: Within 1 KM

COMMENTS: Junction of Mary Creek and Alice Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer Residual

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

There are several placer gold deposits along the Cottonwood River. The deposits are located in benches ranging in height from about a metre to several metres above the present course of the river. The gold is derived from interstadial and possibly pre-glacial deposits. The ultimate source of the gold may have been the auriferous veins of the Barkerville terrane from which the Cottonwood River drains. The pre-Tertiary geology of this area consists of mafic volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group of the Quesnellia terrane.

Gold from the Mary Creek placer deposit was won from pay gravels a few centimetres to a few metres thick. The varying degrees of wearing of the gold particles suggest both proximal and distal sources.

Production was from a channel on bedrock with an average thickness of 1 to 7 metres across a channel width of 45 to 60 metres. The channel extends at least 480 metres. The average grade was 2.74 grams per cubic yard or about \$38 to \$42 per cubic yard (George Cross Newsletter #117, June 18, 1991).

Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion, is the likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1925-A147; 1938-C53; 1942-88; 1943-83; 1961-133; 1963-134
EMPR GEM 1973-525
EMPR BULL 28, pp. 22,28
EMPR ASS RPT 12474, 16365
EMPR FIELDWORK 1976, p. 54; 1988 pp. 377-385, 1989, pp. 167-172;
1990, pp. 331-356; 1992, pp. 463-473
EMPR EXPL 1983, pp. A20,21; 1986, p. B51; 1989, pp. 147-169
EMPR PF (See 93G General File - Quesnel Area)
GCNL #117, 1991

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 026**

MINFILE NUMBER: **093G 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **G, GG, R,
RB**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G02W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 09 54 N
LONGITUDE: 122 55 10 W
ELEVATION: 884 Metres

NORTHING: 5890629
EASTING: 505385

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Tertiary

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Mylonite
Andesite
Basalt
Granite
Sediment/Sedimentary

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Chilcotin Plateau

CAPSULE GEOLOGY

The area is mainly underlain by Tertiary andesites and basalts and by some sediments of the Mississippian to Triassic Cache Creek Group. A mylonite of probable granitic origin is exposed in a creek bed and contains minor disseminated pyrite, chalcopyrite and pyrrhotite.

BIBLIOGRAPHY

EMPR ASS RPT 4186, 4573, 4816, 5931
EMPR EXPL 1976-E143
EMPR GEM 1972-349; 1973-328
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **PURDEN**, PURDEN LAKE LIMESTONE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G16E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 59 29 N
LONGITUDE: 122 00 52 W
ELEVATION: 735 Metres

NORTHING: 5983013
EASTING: 564615

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry, located 5 kilometres northwest of Purden Lake (Personal Communication - J. Sutherland, 1989).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Carbonate

MINERALIZATION AGE: Paleozoic-Mesozoic

DEPOSIT

CHARACTER: Stratabound

Massive

CLASSIFICATION: Sedimentary

Industrial Min.

TYPE: R09 Limestone

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Slide Mountain

FORMATION

Antler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Limestone
Pillow Basalt
Breccia
Tuff
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Bowron Trench

TERRANE: Slide Mountain

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Purden Lake limestone deposit is hosted in the Upper Paleozoic-Lower Triassic Antler Formation (Slide Mountain Group) consisting of a sequence of pillow basalts, breccia and tuff with minor sediments.

Between 1986 and 1988, 20,000 tonnes of limestone were removed from a quarry.

BIBLIOGRAPHY

EMPR MAP 65, 1989
GSC P 68-1A; 72-35, pp. 59,60
GSC MAP 1356A; 1424A

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

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUARTZ**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 21 48 N
LONGITUDE: 122 26 22 W
ELEVATION: 945 Metres

NORTHING: 5912836
EASTING: 537302

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
ALTERATION: Limonite Pyrolusite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I07 Silica veins
DIMENSION: 0205 x 0021 Metres STRIKE/DIP: 140/ TREND/PLUNGE:
COMMENTS: Vein is at least 205 metres long and up to 21 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Argillite
Mafic Volcanic
Greywacke

HOSTROCK COMMENTS: In this area the Takla Group is Upper Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Cariboo Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Chip
COMMODITY: Silica GRADE: 95.5700 Per cent
COMMENTS: Chip sample across 2 metres.
REFERENCE: Open File 1987-15, page 30.

CAPSULE GEOLOGY

The Quartz showing occurs in an area underlain by argillite and greywacke with intercalated mafic volcanic rocks correlative with the Upper Triassic Takla Group of the Quesnellia Terrane. Late Tertiary sedimentary and basaltic rocks overlie the Mesozoic strata.

Surface exposures indicate that the quartz vein is at least 205 metres long and up to 21 metres wide. The vein strikes at about 140 degrees and at the approximate midpoint of its probable surface extent, bifurcates to the northwest. The quartz is opaque, white, massive, and very pure in appearance. Near the vein margins, trace limonite and manganese stain are present on fractures. Two chip samples collected by the Geological Survey Branch in 1981 returned 95.51 and 96.24 per cent silica (Fieldwork 1981 p. 10). A chip sample in 1987 across 2 metres assayed 95.57 per cent silica (Energy, Mines and Petroleum Resources Open File 1987-15 p.30). Surface exposures indicate that the quartz vein is at least 205 metres long and up to 21 metres wide. The vein strikes at about 140 degrees and, at the approximate midpoint of its probable surface extent, bifurcates to the northwest. The quartz is opaque, white, massive and very pure in appearance. Near the vein margins trace limonite and manganese stain are present on fractures. Two chip samples collected by the Geological Survey Branch in 1981 returned 95.51 and

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CAPSULE GEOLOGY

96.24 per cent silica (Fieldwork 1981, page 10). A chip sample in 1987 across 2 metres assayed 95.57 per cent silica (Open File 1987-15, page 30).

BIBLIOGRAPHY

EMPR ASS RPT 5141
EMPR GEM 1974-400
EMPR FIELDWORK 1981, p. 10
EMPR OF *1987-15, pp. 29-30
EMPR PF (See 93G General File - 8W Area and Quesnel Area)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093G 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **MEGA**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G16E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 58 40 N
LONGITUDE: 122 00 33 W
ELEVATION: 732 Metres

NORTHING: 5981504
EASTING: 564982

LOCATION ACCURACY: Within 500M
COMMENTS: Occurrence on Mega 3.

COMMODITIES: Lead Copper Zinc Gold Silver

MINERALS

SIGNIFICANT: Galena Chalcopyrite Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Basalt
Schist
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel Slide Mountain

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

Galena, chalcopyrite and sphalerite mineralization as well as silver and gold values are hosted by quartz veining. The area is underlain mainly by andesite but some schist and limestone have also been mapped.

BIBLIOGRAPHY

EMPR ASS RPT 5539, 15089
EMPR EXPL 1975-E134; 1986-C336
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 032**

NATIONAL MINERAL INVENTORY:

NAME(S): **DAHL LAKE**, DAHL LAKE QUARRY, NORTHROCK INDUSTRIES

STATUS: Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

UTM ZONE: 10 (NAD 83)

NTS MAP: 093G14W

BC MAP:

LATITUDE: 53 47 31 N

NORTHING: 5960412

LONGITUDE: 123 17 16 W

EASTING: 481042

ELEVATION: 872 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on the number 1 quarry as plotted on map 93G14W (Industrial Mineral File).

COMMODITIES: Limestone Aggregate

MINERALS

SIGNIFICANT: Carbonate

ASSOCIATED: Quartz

MINERALIZATION AGE: Upper Permian

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Fossils

DEPOSIT

CHARACTER: Stratabound

Massive

CLASSIFICATION: Sedimentary

Industrial Min.

TYPE: R09 Limestone

SHAPE: Tabular

MODIFIER: Fractured

DIMENSION: 4300 x 2800

Metres

STRIKE/DIP: 125/71E

TREND/PLUNGE:

COMMENTS: Limestone outcrops over a wedge-shaped area 5 by 2.5 kilometres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

Argillite

Greywacke

Andesitic Volcanic

Basaltic Volcanic

HOSTROCK COMMENTS: The Cache Creek Group is Carboniferous to Jurassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1969

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

55.0300

Per cent

COMMENTS: A 33.5-metre long chip sample; grade given for CaO.

REFERENCE: Geology, Exploration and Mining in British Columbia 1969.

CAPSULE GEOLOGY

A northwest trending wedge-shaped area of Upper Permian limestone of the Carboniferous to Jurassic Cache Creek Complex (Group), up to 2.8 kilometres wide and 4.3 kilometres long, outcrops along the northeast side of Dahl Lake, 35 kilometres southwest of Prince George. The northeast margin of the deposit is faulted against Upper Triassic to Lower Jurassic argillite, greywacke and andesitic to basaltic volcanics of the Takla Group of the Quesnellia Terrane. To the west and south, the limestone is buried under glacial till. Bedding generally dips steeply west to vertical, although at one point it strikes 125 degrees and dips 71 degrees northeast.

The limestone is black to light grey and medium to fine-grained with abundant crinoid remains. In thin section the rock displays a few rounded quartz grains and some thin quartz veinlets. The limestone occasionally contains northwest trending chert bands up to 0.6 metres wide that sometimes form zones of numerous bands up to 9 metres wide. Cream-coloured masses of magnesian limestone are

CAPSULE GEOLOGY

sometimes present.

A sample composed of chips taken at 1.5 metre intervals across the top of the Number 1 Quarry for 33.5 metres analyzed 55.03 per cent CaO, 0.14 per cent MgO, 0.77 per cent insolubles, 0.15 per cent R2O3, 0.06 per cent Fe2O3, trace of MnO, 0.04 per cent P2O5, 0.003 per cent sulphur and 43.48 per cent ignition loss (Geology, Exploration and Mining in British Columbia, page 395, Sample 1)

Limestone has been produced from three quarries just north of Dahl Lake by Kokanee Contracting since 1968 for pulp mills in the vicinity of Prince George. Up to 1988, a total of 550,309 tonnes of limestone were quarried. The quarry was last operated in 1990.

The Dahl Lake operation re-opened recently, processing approximately 20,000 tonnes of decorative aggregate from old waste rock (Information Circular 1996-1, page 9).

Northrock Industries reports limited production in 1998 to supply small contracts.

BIBLIOGRAPHY

EMPR AR *1968-310,311
EMPR ENG INSP Annual Report 1989
EMPR EXPL 1985-A48; 1996-A13
EMPR GEM *1969-393-395; 1970-502; 1971-467; 1972-601; 1974-384-385
EMPR INF CIRC 1996-1, p. 9; 1997-1, p. 12; 1998-1, p. 13
EMPR MAP 65, 1989
EMPR MINING 1975-1980 Vol.I, p. 47; 1981-1985, p. 65; 1986-1987, p. 89; 1988, p. 89
EMPR OF 1992-1; 1992-9; 1994-1
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/11

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 747
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MINFILE NUMBER: **093G 033**

NATIONAL MINERAL INVENTORY: 093G14 Bnt1

NAME(S): **BEDNESTI**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G14E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 51 03 N
LONGITUDE: 123 03 52 W
ELEVATION: 610 Metres

NORTHING: 5966927
EASTING: 495761

LOCATION ACCURACY: Within 1 KM

COMMENTS: East, 1.6 kilometres, from Bednesti Station on Canadian National Rail.

COMMODITIES: Clay Bentonite

MINERALS

SIGNIFICANT: Clay Bentonite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
DIMENSION: 0004 Metres
COMMENTS: Exposures are 3 to 4 metres thick.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Clay
Bentonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Bednesti showing is located near the Bednesti station on the Canadian National Railway. This consists of cream to grey bentonite of unknown age exposed in banks of the area. The exposures are 3 to 4 metres thick and include a bed of light grey, nonbentonitic, clay. The bentonite is buff burning, has high shrinkage characteristics, is plastic and semi-refractory.

BIBLIOGRAPHY

EMPR BULL 30, pp. 17,54
EMPR AR 1957-81
EMPR PF (See 93G General File - 14 Area)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 033**

MINFILE NUMBER: **093G 034**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHILAKO**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 54 10 N
LONGITUDE: 122 56 43 W
ELEVATION: 594 Metres

NORTHING: 5972706
EASTING: 503595

LOCATION ACCURACY: Within 1 KM

COMMENTS: Mile 13 on Canadian National Railway west of Prince George.

COMMODITIES: Clay Diatomite

MINERALS

SIGNIFICANT: Clay Diatomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
DIMENSION: 0001 Metres
COMMENTS: Clay bed is 1.5 metres thick.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Clay
Black Diatomite Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

Near Chilako on the Canadian National Railway is a 1.5 metre thick bed of clay. The clay is nearly white, non-calcareous and is cream to yellow open burning with a cone of 16. A bed of black diatomaceous clay also occurs in the area.

BIBLIOGRAPHY

EMPR BULL 30 pp. 17,54
EMPR AR 1957-81
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRINCE GEORGE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G15W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 51 36 N
LONGITUDE: 122 48 57 W
ELEVATION: 777 Metres

NORTHING: 5967961
EASTING: 512113

LOCATION ACCURACY: Within 1 KM

COMMENTS: On highway 16 in Prince George, pit on topographic map (?).

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay
DIMENSION: 6 Metres
COMMENTS: Clay beds are up to 6 metres thick.

STRIKE/DIP: E07 Sedimentary kaolin
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

Fine-grained varved clay beds up to about 6 metres thick underlie a large area around Prince George. Small quantities of clay were taken from several locations in this general area. Mainly, clay was produced from a pit now located in Prince George.

In general the clay is light brown sandy, soft, and noncalcareous. It has a cone of 1.5 - 3.5, is red to brown burning and is suitable for common brick or tile.

BIBLIOGRAPHY

EMPR BULL 30, pp. 17,54
GSC MAP 1424A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **WOODPECKER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 31 11 N
LONGITUDE: 122 40 46 W
ELEVATION: 549 Metres

NORTHING: 5930136
EASTING: 521253

LOCATION ACCURACY: Within 1 KM

COMMENTS: South, 0.4 kilometres, of Woodpecker on the East bank of Fraser River.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay
DIMENSION: 150 x 6 Metres
COMMENTS: Clay is 6 metres thick exposed for 150 metres.

E07 Sedimentary kaolin
STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Calcareous clay 6 metres thick is exposed for 150 metres along the east bank of the Fraser river south of Woodpecker. The clay is salmon burning and has a cone of 3.5. The colour is poor but it could be used for common brick and tile.

BIBLIOGRAPHY

EMPR BULL 30, p. 54
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHITES LANDING**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 23 05 N
LONGITUDE: 122 41 35 W
ELEVATION: 549 Metres

NORTHING: 5915113
EASTING: 520416

LOCATION ACCURACY: Within 1 KM

COMMENTS: Lot 4884, east bank of Fraser River, 15 metres above River.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay
DIMENSION: 23 Metres
COMMENTS: Clay exposed for about 23 metres.

STRIKE/DIP: E07 Sedimentary kaolin
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Calcareous Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Calcareous clay is exposed 15 metres above river level for about 23 metres along the east bank of the Fraser River. It is red-brown burning and could be used for common wares with a non-plastic mix.

BIBLIOGRAPHY

EMPR BULL 30, p. 54
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **STRATHNAVER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 21 03 N
LONGITUDE: 122 33 12 W
ELEVATION: 640 Metres

NORTHING: 5911392
EASTING: 529732

LOCATION ACCURACY: Within 1 KM

COMMENTS: In centre of Lot 3182, 3.2 kilometres north of Strathnaver.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay
DIMENSION: 9 Metres
COMMENTS: Calcareous clay exposed in 9 metre bank.

STRIKE/DIP: E07 Sedimentary kaolin
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Calcareous Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

A 9 metre bank of varved, brown calcareous clay is exposed 3.2 kilometres north of Strathnaver. It has a cone of 4-5 and burns red-brown. Possibly useful for common brick and tile.

BIBLIOGRAPHY

EMPR AR 1957-80
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **BIG BEND (L.6182)**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G02E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 32 N
LONGITUDE: 122 32 12 W
ELEVATION: 640 Metres

NORTHING: 5878922
EASTING: 531052

LOCATION ACCURACY: Within 1 KM

COMMENTS: Lot 6182 on the east bank of the Fraser River at the Big Bend
(Minister of Mines Annual Report 1959 p. 156).

COMMODITIES: Diatomite Clay

MINERALS

SIGNIFICANT: Diatomite Clay
MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: F06 Lacustrine diatomite B06 Fireclay
E07 Sedimentary kaolin

DIMENSION: 23 x 12 x 6 Metres

STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Diatomite exposure at the 23.5 metre long, 12.2 metre wide and 6.1 metre high quarry opening.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Miocene			Unnamed/Unknown Informal

LITHOLOGY: Diatomite
Clay

HOSTROCK COMMENTS: The diatomite is thought to be of lower Upper Miocene age and the clay is Tertiary.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Big Bend deposit is located on Lot 6182 along the east side of the Fraser River at the big bend, 12.8 kilometres north of Quesnel. The largest diatomite deposits in British Columbia occur in this area.

The area has been disrupted by faulting and the diatomite occurs as rather small disconnected blocks at various elevations. It is likely that the diatomite was originally laid down at the same elevation in lakes formed by obstructions in the Tertiary Fraser River. The diatomite, believed to be lower Upper Miocene in age, overlies older Tertiary clays, sands and gravels. The diatomite consists almost exclusively of various sizes of Melosira granulata diatoms, usually very small, with variable amounts of clay, silt and volcanic ash. The diatomite ranges in colour from white to grey to buff.

There are three major exposures of diatomite on Lot 6182. Small lots of the diatomite have periodically been shipped to Vancouver for making insulating brick.

A 3 to 6 metre bed of white stoneware clay underlies the diatomite. The deposit occurs close to water level at the downstream end of the big bend. The clay is interstratified with other clay and sandstone members of the Tertiary Fraser River series and is exposed for about 440 metres along the river. The clay deposit is on average 3 to 3.5 metres thick and dips gently to the south.

A sample of the clay had good plasticity and dried safely at 85 degrees Celsius. It fired to a hard cream body at cone 2, had a softening point at cone 16 and was classified as suitable for the production of sewer-pipe, flue-linings etc.

BIBLIOGRAPHY

EMPR AR *1947-209; *1959-156; 1960-139; 1961-143; 1962-150; 1963-141; 1964-184; 1965-262; 1966-265; 1967-302

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RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 754
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BIBLIOGRAPHY

EMPR BULL 30, pp. 17,42,53
EMPR GEM 1969-389
EMPR PF (Several reports on Diatomite Deposits in the Quesnel area
by J.D. Godfrey, 1960s)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1991/08/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **COTTONWOOD RIVER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G02E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 09 28 N
LONGITUDE: 122 32 41 W
ELEVATION: 610 Metres

NORTHING: 5889919
EASTING: 530442

LOCATION ACCURACY: Within 1 KM

COMMENTS: North side of Cottonwood River, Lot 8603.

COMMODITIES: Clay Coal

MINERALS

SIGNIFICANT: Clay
COMMENTS: Lignite coal.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay A02 Lignite
E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Clay
Lignite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

On the north side of the Cottonwood River, grey clay occurs under 30 centimetres of lignite. It is a plastic, low grade and high shrinkage fireclay with a cone of 26.

BIBLIOGRAPHY

EMPR AR 1957-80
GSC MAP 1424A
EMPR PF (Nasmith, H., (1954): An Analysis of a Slide of the Cottonwood Bridge)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **TERTIARY**, KILLAM, CAN,
CANYON

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G02E
BC MAP:
LATITUDE: 53 07 55 N
LONGITUDE: 122 39 32 W
ELEVATION: 503 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mill site.

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5887003
EASTING: 522822

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Miocene
Tertiary

GROUP

Undefined Group

FORMATION

Fraser Bend

IGNEOUS/METAMORPHIC/OTHER

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: "Tertiary" conglomerate believed to be correlative with the lower Fraser Bend Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

Gold

9.7000

Grams per tonne

COMMENTS: Sampling results varied from 1.474 to 9.70 grams per cubic yard. The average value overall was \$57.50 per cubic yard.

REFERENCE: George Cross Newsletter #14, 1985.

CAPSULE GEOLOGY

The Tertiary placer gold deposit is located 27 kilometers northwest of Quesnel adjacent to the Fraser River within an old river channel of probable Upper Tertiary (perhaps Miocene) age. The workings on the north side of the river are known as the Tertiary mine while the south side workings are known as the Canyon mine. The deposit has been worked since 1917 and records indicate that approximately 68,560 grams of gold have been recovered from the Tertiary mine up to 1926 when the channel was lost. Subsequent work has focused on attempting to locate the extension of this channel with little success.

The gold, which has been mined by underground methods, is mainly coarse and occurs within well cemented gravels at the gravel-bedrock interface. The gold bearing basal conglomerate, the "Tertiary conglomerate", is interbedded with gravel, clay and lignite and is believed to be correlative with the Mid-Miocene Fraser Bend Formation. The conglomerate is up to 9.6 metres thick.

The conglomerate rests on highly folded and fractured black siltite and phyllite correlative with the Upper Triassic Takla group. The bedrock contains numerous quartz pods and stringers which contain trace gold and silver.

A sampling program in 1985 resulted in values ranging from 1.474 to 9.70 grams gold per cubic yard. The average overall value obtained from the six samples was \$57.50 per cubic yard (George Cross Newsletter #14, 1985). In 1986, 10,804.1 cubic yards were mined from the

CAPSULE GEOLOGY

Canyon mine resulting in 14,453 grams of gold and 1,383 grams of silver (Assessment Report 17524).

Recent work has outlined a channel, 300 metres wide by 200 meters deep and 6300 meters long, 3 kilometres north of the Tertiary mine which contains the gold bearing conglomerate. Estimates indicate that there are 1,378,000 cubic yards of the conglomerate present and based on previous recorded grades from the Tertiary mine this would indicate 137,800 to 275,600 ounces of gold (Assessment Report 17524).

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1917-F131; 1918-K129; *1926-171; 1934-C27; 1936-C40
EMPR PF (*Fraser, D.D. (1926): Report of the "Tertiary" Channel in the Quesnel Mining Division of British Columbia; *Fraser, D.D. (1929): Report of the Tertiary Channel of Cariboo, British Columbia; *Fraser, D.D. (1933): Report of the Tertiary Channel, Canyon Creek Section; *Tertiary Placer Mine-Killam Creek-Fraser River Maps; Plans, sections, workings, 1936)
EMPR ASS RPT 15768, 16154, *17524
EMPR EXPL 1987, p. C281; 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A
GCNL #75,#91, 1983; *#14,#41,#173, 1985
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEVERLY**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G15W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 45 48 N
LONGITUDE: 122 56 05 W
ELEVATION: 799 Metres

NORTHING: 5957193
EASTING: 504303

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on outcrop of limestone as shown on Geological Survey of Canada Map 49-1960.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Upper Triassic

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone

DIMENSION: STRIKE/DIP: 075/55S

TREND/PLUNGE:

COMMENTS: Attitude of limestone beds exposed over 76 metres and up to 30 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Upper Triassic

GROUP

Takla

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Chert

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1957

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

52.4000

Per cent

COMMENTS: Sample across 30 metre width. Grade given for CaO.

REFERENCE: Minister of Mines Annual Report 1957, page 85.

CAPSULE GEOLOGY

A body of limestone forms a low knoll projecting above the surrounding glacial till near the centre of Lot 1893, 6 kilometres southwest of Beverley. The limestone strikes 075 degrees for an exposed length of 76 metres with widths of up to 30 metres and dips 55 degrees south.

The deposit is comprised of thinly bedded, fine grained, light grey limestone containing lenses and laminae of white chert. A chip sample taken across a width of 30 metres contained 52.40% CaO, 0.35% MgO, 5.50% insolubles, 0.30% R2O3, 0.11% Fe2O3, 0.005% MnO, 0.04% P2O5, 0.008% sulphur and 41.53% ignition loss (EMPR Annual Review 1957, p.85).

A few tonnes of limestone were quarried sometime earlier this century and burnt on site in a kiln to produce lime.

BIBLIOGRAPHY

EMPR AR 1957-85
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/10

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACKWATER CREEK (L.1469)**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G06E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 18 10 N
LONGITUDE: 123 12 34 W
ELEVATION: 671 Metres

NORTHING: 5905973
EASTING: 486043

LOCATION ACCURACY: Within 1 KM
COMMENTS: Southeast corner of Lot 1469.

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Diatomite
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Diatomite is reported with shale in patches of Tertiary sediments.

BIBLIOGRAPHY

CANMET RPT 691, pp. 48,81
EMPR AR 1947-A210
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUESNEL (L.12194)**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G02E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 15 N
LONGITUDE: 122 35 47 W
ELEVATION: 610 Metres

NORTHING: 5880226
EASTING: 527042

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: F06 Lacustrine diatomite
DIMENSION: 1600 x 0015 Metres
COMMENTS: Diatomite exposed over 1.6 kilometres and is up to 15 metres thick.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Diatomite
Gravel
Clay
Volcanic Ash

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Several exposures of pale buff to white diatomite occur in cliffs of the Fraser River over a length of about 1.6 kilometres. The diatomite lies on a bed of light-grey clay below which is a thick sequence of sand, gravel, clay and some volcanic ash. The diatomite is up to 15 metres thick.

BIBLIOGRAPHY

CANMET RPT 691, pp. 48,82
GSC MEM 118, p. 76
EMPR AR 1927-C171; *1959-158
GSC MAP 49-1960; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **HIXON MICA**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 26 37 N
LONGITUDE: 122 29 30 W
ELEVATION: 808 Metres

NORTHING: 5921741
EASTING: 533764

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Placer Lease 2118.

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Replacement Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Mica Schist
Gneiss
Meta Sediment/Sedimentary

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Hixon mica showing occurs within the (?)Hadrynian to Paleozoic Snowshoe Group of the Barkerville Terrane, adjacent to the western contact with the Quesnellia Terrane. The dominant rock types are metasedimentary which range from paragneiss to various schist types and marbles depending on the degree of metamorphism and deformation. The Snowshoe Group also contains some metamorphosed igneous units.

The area of the showing is underlain by gneiss which grades into a mica schist. No other information is available.

BIBLIOGRAPHY

EMPR AR 1926-A166
EMPR PF (See 93G General File - 8W Area and Quesnel Area)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **YORK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 17 13 N
LONGITUDE: 122 43 54 W
ELEVATION: 863 Metres

NORTHING: 5904225
EASTING: 517888

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrrhotite Pyrite Arsenopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: K07 Mo skarn I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Lower Cretaceous

GROUP

Takla

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Naver Intrusion

LITHOLOGY: Hornfels
Biotite Granodiorite
Phyllite
Black Shale
Greywacke
Mafic Tuff
Basaltic Volcanic

HOSTROCK COMMENTS: The Takla Group in this area is Upper Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The area is underlain by Middle to Upper Triassic metasediments (phyllite, slate, graphitic shale, schist, gneiss, hornfels, argillite and metagreywacke) and Upper Triassic metavolcanics. Intruding these units is an Early Cretaceous biotite granodiorite. Mineralization consisting of pyrite, pyrrhotite, chalcopyrite and molybdenite occurs in quartz veins and shear zones mainly in hornfels at the biotite granodiorite contact.

BIBLIOGRAPHY

EMPR ASS RPT 10216, 10599, 11388, 12174, 16521
EMPR EXPL 1981-235; 1982-293; 1983-423; 1987-C283
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 049**

NATIONAL MINERAL INVENTORY: 093G15 Au3

NAME(S): **NECHAKO RIVER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G15W
BC MAP:
LATITUDE: 53 57 50 N
LONGITUDE: 122 55 43 W
ELEVATION: 594 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5979506
EASTING: 504684

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

Placer gold occurs in bench gravels along the banks of the Nechako River.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1935-C37
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,28; 11, p. 32
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A
Placer Dome File

DATE CODED: 1986/06/30
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 050**

NATIONAL MINERAL INVENTORY: 093G15 Au2

NAME(S): **SKARET CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G15E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 53 06 N
LONGITUDE: 122 30 42 W
ELEVATION: 884 Metres

NORTHING: 5970837
EASTING: 532098

LOCATION ACCURACY: Within 1 KM

COMMENTS: Skaret and Corless Creek junction.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP

Tertiary

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Skaret Creek placer deposit is located at the Skaret Creek-Corless Creek junction. Fairly coarse gold occurs in gravels immediately overlying bedrock and also in cracks and crevices of the bedrock. The bedrock consists of andesitic volcanics interbedded with argillite.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1932-92; 1941-89
EMPR EXPL 1989, pp. 147-169
EMPR BULL 1, pp. 36,38; 28, pp. 22,29
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

DATE CODED: 1986/06/30
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 051**

NATIONAL MINERAL INVENTORY: 093G15 Au1

NAME(S): **TABOR CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G15E
BC MAP:
LATITUDE: 53 48 31 N
LONGITUDE: 122 43 55 W
ELEVATION: 579 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Mouth of Tabor Creek.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5962261
EASTING: 517651

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Tabor Creek placer deposit is located at the mouth of Tabor Creek. The deposit is in a post-glacial reconcentration of glacial debris that consists of granitic material. It immediately overlies a false bedrock formed of a kaolinized layer of granitic material.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1932-93; 1940-94; 1941-89
EMPR EXPL 1989, pp. 147-169
EMPR BULL 11, p. 64; 28, pp. 22,30
EMPR PF (Placer Claim Map, 1938; Placer-Gold Deposit Report)
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

DATE CODED: 1986/06/30
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 766
REPORT: RGEN0100

MINFILE NUMBER: **093G 052**

NATIONAL MINERAL INVENTORY: 093G9 Au1

NAME(S): **GEORGE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G09E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 42 20 N
LONGITUDE: 122 12 01 W
ELEVATION: Metres

NORTHING: 5951059
EASTING: 552790

LOCATION ACCURACY: Within 1 KM

COMMENTS: Junction of George Creek and Willow River.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

At the junction of George Creek and Willow River placer gold occurs in benches which extend up George Creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1927-165; 1935-C24; 1941-A89; 1948-175; 1959-147; 1960-122;
1961-130; 1962-138
EMPR BULL 28, pp. 21,25
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A
WWW <http://www.infomine.com/>

DATE CODED: 1986/07/02
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 052**

MINFILE NUMBER: **093G 053**

NATIONAL MINERAL INVENTORY: 093G7,8 Au1

NAME(S): **GOVERNMENT CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G10E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 30 09 N
LONGITUDE: 122 33 03 W
ELEVATION: Metres

NORTHING: 5928266
EASTING: 529793

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately 6.4 kilometres upstream on Government Creek from junction with Hixon Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Government Creek placer deposit is located approximately 6.4 kilometres upstream from the Hixon Creek junction. Placer deposits occur in an area underlain by slates and schists containing quartz veining. The placer deposits on Government Creek occur on a false bedrock formed of a lacustrine-type deposit.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1875-15; 1881-table; 1882-table; 1914-55; 1916-39; 1917-132; 1918-128; 1922-124; 1929-198; 1941-89
EMPR BULL 11, p. 58; 28, pp. 21,26
EMPR ASS RPT 16422
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

DATE CODED: 1986/07/02
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 054**

NATIONAL MINERAL INVENTORY: 093G7 Au1

NAME(S): **HIXON CREEK PLACER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G07E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 26 51 N
LONGITUDE: 122 33 15 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5922146
EASTING: 529610

LOCATION ACCURACY: Within 1 KM

COMMENTS: West end of flume on 1:50000 topo sheet.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Placer deposits on Hixon Creek have been worked since 1874 at various points. Placer gold occurs both as post glacial concentrations in low lying benches and as remnants of a pre-glacial channel.

Estimates from the Ministry of Mines Reports are that up to \$2,000,000 worth of gold was taken from this creek prior to 1945 (George Cross Newsletter #132, 1986).

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR BULL 11, p. 59; 28, pp. 22,26
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (Placer Claim Map, Drawings of Workings, Cross-sections; Gibbons, G.H., (1929): Correspondence and Report by Davis, A.M., (1916; Lay, D., (1935): Correspondence to John F. Walker)
EMPR EXPL 1989, pp. 147-169
GSC MAP 1424A
GCNL #114,#122,#131,#132, 1986

DATE CODED: 1986/07/02
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 055**

NATIONAL MINERAL INVENTORY: 093G7 Au1

NAME(S): **TERRY CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G08W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 22 25 N
LONGITUDE: 122 30 02 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5913949
EASTING: 533228

LOCATION ACCURACY: Within 1 KM

COMMENTS: Halfway between mouth of Terry Creek and junction with Tom Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

Concentrations of placer gold occur at different points along Terry Creek in post-glacial gravel overlying a false bedrock of kaolinized granitic material. The area is underlain by schists. "Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR BULL 11, p. 61; 28, pp. 21,26
EMPR PF (See 93G General File - 8W Area and Quesnel Area)
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

DATE CODED: 1986/07/02
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 770
REPORT: RGEN0100

MINFILE NUMBER: **093G 056**

NATIONAL MINERAL INVENTORY: 093G7 Au2

NAME(S): **CANYON CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G08W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 19 03 N
LONGITUDE: 122 26 03 W
ELEVATION: Metres

NORTHING: 5907740
EASTING: 537694

LOCATION ACCURACY: Within 1 KM

COMMENTS: Narrow, canyon-like part of Canyon Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Canyon Creek area is underlain by volcanic flows and argillite. Fairly coarse placer gold occurs on true bedrock and also on false bedrock in numerous benches.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1890-1895-tables; 1902-103; 1929-198; 1930-159; 1931-83; 1938-C52;
1949-240
EMPR EXPL 1989, pp. 147-169
EMPR BULL 1, p. 37; 28, pp. 21, 24
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (See 93G General File - 8W Area and Quesnel Area)
GSC MAP 1424A

DATE CODED: 1986/07/02
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 056**

MINFILE NUMBER: **093G 057**

NATIONAL MINERAL INVENTORY: 093G8 Au2

NAME(S): **AHBAU CREEK**, MURRAY CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G08E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 19 23 N
LONGITUDE: 122 05 13 W
ELEVATION: Metres

NORTHING: 5908597
EASTING: 560816

LOCATION ACCURACY: Within 1 KM

COMMENTS: Junction of Ahbau Creek and Murray Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Residual Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Ahbau Creek area is primarily underlain by schist. Placer gold deposits occur on bedrock and also to a large extent on false bedrock of glacial material. The Ahbau Creek deposit is located at the junction of Ahbau Creek with Murray Creek. Quartz veins are known to occur at several points in the area.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR PF (Claim Map 1933; Annual Report of the Minister of Mines, Part C Special Report by Douglas Lay; See 93G General File - Quesnel Area)
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GSC MAP 1424A

DATE CODED: 1986/07/03
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 058**

NATIONAL MINERAL INVENTORY: 093G1 Au3

NAME(S): **NORN CREEK**, ALDER CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G01W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 10 55 N
LONGITUDE: 122 28 27 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5892640
EASTING: 535140

LOCATION ACCURACY: Within 1 KM

COMMENTS: Junction of Norn and Alder Creeks.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Norn Creek placer gold occurrence is located at the junction of Norn and Alder Creeks. No other information known.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR AR 1882-357; 1912-51
EMPR BULL 28, pp. 22,28
EMPR FIELDWORK 1989, pp. 167-172; 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (See 93G General File - 1W Area and Quesnel Area)
EMPR EXPL 1989, pp. 147-169
GSC MAP 1424A

DATE CODED: 1986/07/03
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **GAGEN CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G01E
BC MAP:
LATITUDE: 53 00 28 N
LONGITUDE: 122 03 55 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5873544
EASTING: 562718

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The Gagen Creek deposit consists of well-worn and fairly coarse placer gold in bench-type deposits. Bedrock in the area is primarily basalt.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR BULL 28, pp. 21,25
EMPR FIELDWORK 1989, pp. 167-172; 1990, pp. 331-356; 1992, pp.
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EMPR PF (Moore, C.W.: Report on the Property of the Gagen Creek
Syndicate; See 93G General File - Quesnel Area)
EMPR EXPL 1989, pp. 147-169
GSC MAP 1424A

DATE CODED: 1986/07/03
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOSTIQUE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093G01E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 14 N
LONGITUDE: 122 01 08 W
ELEVATION: Metres

NORTHING: 5875007
EASTING: 565811

LOCATION ACCURACY: Within 1 KM
COMMENTS: Mouth of Mostique Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Cariboo Plateau

CAPSULE GEOLOGY

The area is primarily underlain by argillite which is cut by intrusions. At the mouth of Mostique Creek coarse placer gold occurs in a buried channel deposit, and fine gold originated mainly from post-glacial gravels overlying the deposit.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

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1912-50; 1930-165; 1931-85; 1932-100; 1933-129; 1936-C28; 1940-93;
1943-83; 1944-78; 1947-193; 1948-177; 1957-74; 1958-79
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,28
EMPR PF (See 93G General File - Quesnel Area)
EMPR FIELDWORK 1989, pp. 167-172; 1990, pp. 331-356; 1992, pp.
463-473
GSC MAP 1424A

DATE CODED: 1986/07/03
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORT GEORGE CANYON**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 40 13 N
LONGITUDE: 122 43 06 W
ELEVATION: Metres

NORTHING: 5946874
EASTING: 518609

LOCATION ACCURACY: Within 1 KM

COMMENTS: Fraser River between Lots 4595A and 1871.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The area is underlain primarily by basalt and andesitic breccias. The Fort George Canyon placer deposit occurs on benches of the Fraser River.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473

DATE CODED: 1986/07/08
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093G 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEST ROAD RIVER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093G07W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 18 04 N
LONGITUDE: 122 57 55 W
ELEVATION: 701 Metres

NORTHING: 5905768
EASTING: 502314

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The West Road River placer deposit contains coarse, mainly well worn, nuggety gold. The area is predominantly underlain by alternating bands of argillite and rhyolite.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1935-C22-C24
EMPR EXPL 1989, pp. 147-169
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GSC MAP 1424A

DATE CODED: 1986/07/08
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **VAN WINKLE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 01 32 N
LONGITUDE: 121 41 48 W
ELEVATION: 1234 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Near mouth of Van Winkle Creek.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5875908
EASTING: 587413

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

In the Van Winkle Creek area the best placer gold deposits were located in the lower 610 metres of the creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR AR 1874,1878,1883-1895-tables; 1874-6; 1875-608
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EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (Sketch of H.Jones Lease on Van Winkle Creek and Plan of Lease on Van Winkle Creek, dates unknown)
GSC MAP 1424A, 2046
GSC MEM 149, p. 160

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 001**

MINFILE NUMBER: **093H 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUTCHER**, SPRUCE, LIGHTNING CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 01 31 N
LONGITUDE: 121 41 24 W
ELEVATION: 1250 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5875885
EASTING: 587861

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The Butcher, Spruce or Lightning Creek gold production was from gravels on a gently sloping rock bench 18 to 24 metres above the present level of Lightning Creek. This bench appears to be a remnant of an old channel of Lightning Creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.
463-473
EMPR PF (Lease Map-Lightning Creek, C-1908)
GSC MAP 1424A
GSC MEM 149, p. 160

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 002**

MINFILE NUMBER: **093H 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **VAN WINKLE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 32 N
LONGITUDE: 121 41 31 W
ELEVATION: 1250 Metres

NORTHING: 5875913
EASTING: 587730

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Harveys Ridge Succession

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Phyllite
Quartzite
Limestone
Black Siltstone

HOSTROCK COMMENTS: Snowshoe Group is Hadrynian to Lower Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The Van Winkle showing occurs in an area underlain dominantly by metasedimentary rocks of the Harveys Ridge succession of the Snowshoe Group. These rocks comprise black siltstone, phyllite, micaceous quartzite and limestone regionally metamorphosed to greenschist facies.

Mineralization consists of chalcopyrite and pyrrhotite in five quartz veins up to 0.6 metres wide.

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GSC MEM 149
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOME** EVANS CREEK

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H11E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 38 48 N
LONGITUDE: 121 06 31 W
ELEVATION: 1400 Metres

NORTHING: 5945873
EASTING: 625020

LOCATION ACCURACY: Within 5 KM

COMMENTS: Along Evans Creek at 1280-1524 metres elevation.

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Chalcopyrite Galena Pyrite
ASSOCIATED: Quartz Ankerite
ALTERATION: Ankerite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Replacement Hydrothermal Epigenetic
SHAPE: Tabular
DIMENSION: 0015 Metres STRIKE/DIP: 085/60S TREND/PLUNGE:
COMMENTS: Attitude and width of quartz sill, brecciated zones host mineralization.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Cariboo	Dome Creek	

LITHOLOGY: Quartzite
Calcareous Argillite
Quartz Sill
Breccia
Shale
Limestone

HOSTROCK COMMENTS: Cariboo Group is Lower Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

CAPSULE GEOLOGY

The region in which the Dome showing is located is underlain dominantly by rocks of the Cariboo Terrane. These consist mainly of Hadrynian to Lower Paleozoic Cariboo Group metasedimentary rocks. In this area the underlying rocks belong to the Dome Creek Formation of the upper part of the Cariboo Group. The Dome Creek Formation is, here, considered to be of Cambrian age and consists of limestone, calcareous argillite, shale and quartzite.

Mineralization comprises chalcopyrite, galena and minor pyrite in brecciated zones of a 15 metre thick quartz sill between grey quartzite in the hanging wall and calcareous argillite in the footwall. The sill and the enclosing rocks strike about 85 degrees and dip 60 degrees south. Carbonate (probably ankerite) occurs as a secondary mineral within the sill.

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DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOWRON RIVER COAL**, BOWRON

MINING DIVISION: Cariboo

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093H13W

BC MAP:

LATITUDE: 53 49 55 N

LONGITUDE: 121 53 35 W

ELEVATION: 745 Metres

LOCATION ACCURACY: Within 500M

COMMENTS:

UTM ZONE: 10 (NAD 83)

NORTHING: 5965392

EASTING: 572850

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal

MINERALIZATION AGE: Paleocene

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Fossil Fuel

TYPE: A04 Bituminous coal

SHAPE: Tabular

MODIFIER: Folded

Faulted

COMMENTS: Coal-bearing strata occur in a northwest trending basin and are folded into a northwest trending, gently south plunging asymmetric syncline.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleocene	Undefined Group	Bowron River	

LITHOLOGY: Coal
Sandstone
Siltstone
Claystone
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Bowron Trench

RELATIONSHIP:

GRADE: HVol Bituminous

INVENTORY

ORE ZONE: BOWRON

REPORT ON: Y

CATEGORY: Combined YEAR: 1981

QUANTITY: 40000000 Tonnes

COMMODITY: Coal GRADE: 100.0000 Per cent

COMMENTS: Measured plus indicated reserves have been proven.

REFERENCE: MDAP - Stage 1 Submission, Norco Resources Ltd., March 1981.

ORE ZONE: BOWRON

REPORT ON: Y

CATEGORY: Inferred YEAR: 1981

QUANTITY: 27000000 Tonnes

COMMODITY: Coal GRADE: 100.0000 Per cent

REFERENCE: MDAP - Stage I Submission, Norco Resources Ltd., March 1981.

CAPSULE GEOLOGY

The Bowron River Coal measures, of Upper Cretaceous to Lower Tertiary age, unconformably overlies rocks of the Slide Mountain Terrane in the poorly exposed area of the Bowron River.

Three coal seams, containing coal of high volatile bituminous B rank, occur in 75 to 100 metres of section (Lower Coal zone) at the base of the Bowron River Formation sedimentary succession. The coal is of Paleocene age and is interbedded with sandstone, siltstone, claystone and conglomerate. The three seams on the west bank of the Bowron River are the upper or main seam (average thickness 2.4 metres) the middle seam (average thickness 3.4 metres) and the lower seam (averaging 4.0 metres thick). The lower seam is most

CAPSULE GEOLOGY

continuous, while the middle and upper seams are less well-developed and are not so extensive laterally. The seams have variable thicknesses and thin and swell laterally. The coal contains 5.0 to 6.1 per cent moisture, 4.7 to 18 per cent ash, 31.0 to 35.5 per cent volatile matter, 45.0 to 55.3 per cent fixed carbon and 0.6 to 1.6 per cent sulphur (air dried basis). The coal is characterized by the presence of about 8 per cent amber and "refined" resin.

The in situ reserves of the drilled area (1980) are estimated to be 35,280,000 to 43,344,000 tonnes (lower seam average thickness is approximately 4.0 metres, average ash content is approximately 30 per cent, and specific gravity of run of mine coal is approximately 1.8). Including the remaining area of the basin, indicated in situ reserves may be up to 67,320,000 tonnes (Coal Assessment Report 20).

The coal-bearing strata unconformably overlie the Upper Paleozoic-Upper Triassic Slide Mountain Group in a northwest trending basin. The strata are folded into a northwest trending and gently south plunging asymmetric syncline with dips ranging from 35 to 45 degrees and 8 to 15 degrees in the western and central portions of the basin respectively. The southwest margin of the basin has been reported as being either faulted or a sedimentary unconformity. The basin shallows and deepens towards the northwest with a resultant thickening of the coal towards the centre and southeast of the basin. The northeast margin of the basin is faulted. A number of additional faults mainly north trending, are also present in the basin.

Inferred reserves are 27 million tonnes coal; measured plus indicated reserves have been proven to total 40 million tonnes coal (Mine Development Assessment Process - Stage I Submission, Norco Resources Ltd., March 1981).

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GSC P 89-4
GCNL #67, 1980
GSC MAP 1424A
EMPR MAP 65 (1989)

DATE CODED: 1985/07/24
DATE REVISED: 1989/05/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 006**

NATIONAL MINERAL INVENTORY: 093H4 Au3

NAME(S): **ISLAND MOUNTAIN, ISLAND MOUNTAIN MINE, AURUM,
JUKES, MAIN BAND, CARIBOO GOLD**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 06 04 N
LONGITUDE: 121 35 02 W
ELEVATION: 1372 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Johns veins.

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5884455
EASTING: 594811

COMMODITIES: Gold Silver Lead Zinc Tungsten
Bismuth

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Scheelite Cosalite
Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Carbonate Sericite
ALTERATION TYPE: Carbonate Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound
CLASSIFICATION: Replacement Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz. GROUP: Snowshoe FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Clastic Sediment/Sedimentary
Limestone
Quartzite
Conglomerate
Grit
Siltstone
Slate
Phyllite
Marble
Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: ISLAND MOUNTAIN

REPORT ON: Y

CATEGORY: Inferred YEAR: 1996
QUANTITY: 36000 Tonnes
COMMODITY: Gold GRADE: 24.0000 Grams per tonne

COMMENTS: A mineral inventory remains in the northern extremities of the old Island Mountain workings.

REFERENCE: Property File - Gold City Mining Corporation Information Brochure.

CAPSULE GEOLOGY

The Aurum property is located on the southeast slope of Island Mountain, extending from the town of Wells southwesterly along the west shore of Jack of Clubs Lake. The property is adjoined to the north and east by the Mosquito (093H 010) and Cariboo (093H 019) groups (Cariboo Gold Quartz property).

Gold-bearing quartz veins were found on Island Mountain in the early 1870's, and in 1878 the Enterprise Company, a group of Barkerville miners, began exploration work on them. This company intended to haul ore to a 10-stamp mill installed in the Kurtz and Lane shaft-house at the Meadows. The Island Mountain Quartz Mining and Milling Company, Limited Liability, was incorporated in 1887 to take over the ground. The mill was purchased and moved from the

CAPSULE GEOLOGY

Meadows to the Aurum N.E. claim (Lot 10518) and, assisted by a loan of \$20,000 from the British Columbia Government, a new mill was built. Several hundred tons of ore, mainly from the Johns adit, was milled in 1890, and 15 to 20 tons of pyrite concentrates was shipped to the Government Reduction Works at Barkerville for treatment.

A satisfactory recovery of gold could not be made, and the property was forfeited to the Government for non-repayment of the loan. No further work was done until 1897, when the same company leased the property from the Government, installed four vanners, and ran the mill for about a month, again unprofitably. In 1903 the late C.J. Seymour Baker tested ore from Island Mountain and cleaned out some old adits, but interest in the property again lapsed.

About 305 metres of underground work was done during early exploration. Although several hundred tons of ore was milled, there is no record of the amount of gold produced.

Surface workings for the most part are on the Aurum and Aurum West mineral claims. Attention was first drawn to these outcrops by early prospectors who were able to recover gold by rocker from the broken and weathered quartz outcrops.

In 1925 Baker acquired the five original Crown-granted mineral claims, later known as the Aurum group, from the Government and each year until 1932 employed a small crew clearing out the old workings. In 1932 he optioned the Aurum group of five claims to Reward Mining Company, Limited, who located eight adjoining claims to the west. This company bonded the whole property to Cariboo Consolidated Gold Mines, Limited, in 1933; a controlling interest in Cariboo Consolidated had been acquired earlier in the year by Newmont Mining Corporation of New York. Newmont in October 1933 incorporated Island Mountain Mines Company, Limited, to acquire and develop the property, which then consisted of 29 claims. In addition to the old Union Quartz Crown-grant (Lot 28) the property comprised the Aurum, Mohawk, and Paystreak groups, and other claims, including Lots 10517, 10518, 11066-11073, 11081-11095. These claims were Crown-granted to the company during the period 1935-1941. Production by Island Mountain Mines began in November 1934 with a 50-ton mill. The mill capacity was increased to 100 tons per day in 1935 and production was continuous until August 15, 1954, when the company sold the property, excluding the mill, to The Cariboo Gold Quartz Mining Company, Limited, for \$300,000.

Island Mountain Mines had developed the property from a main haulage adit, from which a 3 compartment internal shaft 442 metres was sunk; 11 levels were established from the Aurum shaft; the mine workings are extensive, totalling more than 32 kilometres.

The mine remained in production after its purchase by Cariboo Gold Quartz, the ore being hauled to the Cariboo mill some 640 metres to the east. The company's interest in the property was in part to provide access to the Mosquito group, adjoining to the northwest; the Mosquito (Lot 10355) and Mosquito Fraction (Lot 10359) had been Crown-granted to Cariboo Gold Quartz in 1936. A drift to the northwest on the 3000 level was begun in 1958 to explore the Mosquito claims, some 610 to 1220 metres northwest of the Aurum shaft. This work resulted in the discovery of a number of replacement orebodies which were developed on 3 levels (2850, 3000, and 3125) during 1960 and 1961. Operations were continuous until the mine closed on March 31, 1967.

The Mosquito, Mosquito Fraction, and several adjacent claims (see 93H/4, Au4) were purchased in 1971 by The Mosquito Creek Gold Mining Company Limited for a 20 per cent interest in that company. Cariboo Gold Quartz Mining Company, Limited, in June 1972 amalgamated with Coseka Resources Limited under the latter name. Coseka in February 1973 incorporated a wholly owned subsidiary, French Exploration Limited, to receive all its mineral property interests. In March 1973 French Exploration amalgamated with Wharf Resources Ltd. under the name Wharf Resources Ltd.; Coseka Resources Limited was allotted 80.4 per cent of the issued shares of Wharf Resources. A program of diamond and percussion drilling in 1980-81 was carried out mainly on the adjacent Cariboo property.

By a February 1985 agreement with Wharf Resources, Mosquito Creek Gold Mining Company Limited acquired 100 per cent interest in the property in exchange for shares of the company. In February 1986 Hecla Mining Company obtained from Mosquito an option to earn a 50 per cent interest in the property but then dropped it. In 1987, Mosquito Creek changed its name to Mosquito Consolidate Gold Mines Limited. In 1988, Lyon Lake Mines Limited optioned the property and earned 50 per cent interest after doing underground exploration. Ore driven from the Mosquito Mine property intersected Old Island Mountain drift.

The area is underlain by a thick, highly deformed sedimentary sequence belonging to the Downey succession of the Proterozoic-Early

CAPSULE GEOLOGY

Paleozoic Snowshoe Group. This sequence consists of quartzites, conglomerates, grits, siltstone, slates, phyllites, marbles, limestones, dolomites, amphibolites and possibly metatuff. The sequence has been folded and regionally metamorphosed to greenschist facies.

There are two types of auriferous occurrences at the Island Mountain deposit. One type consists of quartz-pyrite veins occurring in a sequence of black and grey clastic sediments that in the past has been referred to as the Rainbow Member. The ore-bearing quartz veins carry up to 25 per cent pyrite and also may contain some galena, sphalerite, arsenopyrite, scheelite and cosalite. The veins represent filling of an extensive fracture system and occur in two general directions.

The other type of mineralization consists of stratabound, massive auriferous pyrite lenses referred to as replacement ore. These occur at the contacts and within certain limestone beds referred to as the Baker Member. The replacement bodies are composed almost entirely of pyrite and minor arsenopyrite. They are commonly localized in the crests or noses of minor folds and less frequently in fold troughs. Carbonate and sericite alteration is associated with the mineralization.

The adjacent Mosquito Creek mine (093H 010) produced 661,604 grams of gold from lenses hosted in a limestone unit called the Main Band (George Cross News Letter #55, 1989). Recent exploration at the Island Mountain mine has concentrated on this horizon. The Jukes adit, recently completed, provides access to 1000 metres of unexplored stratigraphy. A channel sample over 60 centimetres from the intersection of the Jukes adit and the old Island Mountain workings assayed 51.42 grams per tonne gold (George Cross News Letter #55, 1989).

At the Island Mountain mine, most of the production in early years was from quartz veins while in latter years mining concentrated on the higher grade massive lenses.

Combined reserves at the Island Mountain and Cariboo Gold Quartz (093H 019) mines are 326,556 tonnes grading 4.1 grams per tonne gold (Vancouver Stock Exchange Filing Statement 24/86, Mosquito Creek Gold Mines Company Ltd.).

A mineral inventory of 36,000 tonnes grading 24 grams per tonne gold remains in the northern extremities of the old Island Mountain workings (Property File - Gold City Mining Corporation Information Brochure).

In 1997, International Wayside Gold Mines Ltd. purchased the remaining 50 per cent of the Cariboo Gold Quartz mine (093H 019), the Island Mountain mine and the permitted Mosquito Creek Gold mine (093H 010) and formed the Cariboo Gold project. International Wayside formed a new company, Island Mountain Gold Mines Ltd., in May 1999.

Drilling by Island Mountain Gold Mines Ltd. in 2002 intersected 0.03 metre grading 19.4 grams per tonne gold, 0.30 metre grading 69.05 grams per tonne gold, in drillhole IGM02-02 and 1.8 metres grading 6.96 grams per tonne gold in drillhole IGM02-04. These intersections occur within quartz veins hosted by the Rainbow unit (PR REL Island Mountain Gold Mines Ltd., July 16, 2002).

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1938-C46; 1939-70; 1940-56; 1941-56; 1943-60; 1944-54; 1945-79;
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N MINER May 4, 1998; Apr.24, July 10, 2000; July 17, 2002
PR REL International Wayside Gold Mines Ltd., June 13, 2002; Island Mountain Gold Mines Ltd., July 16, 2002
V STOCKWATCH Jul.2, Aug.27, 1987; Oct.2, 2001
WWW <http://www.wayside-gold.com>

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/12

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **NELSON CREEK PLACER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 05 39 N
LONGITUDE: 121 41 53 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5883538
EASTING: 587182

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The Nelson Creek gold deposits were mainly worked prior to 1900 and were amongst the initial discoveries of gold in the region.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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GSC MEM 149
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 008**

NATIONAL MINERAL INVENTORY: 093H3 Au1

NAME(S): **GROUSE CREEK**, HERON, BLACK HAWK,
WAVERLY, FULL RIG, HARD UP,
DISCOVERY, GLASGOW, ANTLER MOUNTAIN GOLD,
SHY ROBIN GULCH

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 02 13 N
LONGITUDE: 121 26 56 W
ELEVATION: 1325 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5877505
EASTING: 604003

LOCATION ACCURACY: Within 500M

COMMENTS: Heron incline, Geological Survey of Canada Memoir 149, page 81.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold has mainly been produced from an old bedrock channel of Grouse Creek that was covered in places by over 30 metres of drift.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

Bud Hellekson has a placer operation (placer claims 321413 and 321414) near the headwaters of Grouse Creek.

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RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 789
REPORT: RGEN0100

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new workings, Grouse Creek, 1929)
GSC MAP 1424A
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WWW http://www.infomine.com/GROUSE_CREEK_-_BC.html

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **CANADIAN CREEK**, CLEAR GRIT, MILLER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 38 N
LONGITUDE: 121 27 39 W
ELEVATION: 1280 Metres

NORTHING: 5880114
EASTING: 603146

LOCATION ACCURACY: Within 500M

COMMENTS: Map, Geological Survey of Canada Memoir 149, page 93.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

One, and possibly two, old channels occur on the west side of the present Canadian Creek. Some placer gold was recovered by drifting on the old channels and some by hydraulicking. Records indicate that the placer occurrences on Canadian Creek were probably not very rich.

Supergene leaching of gold, dispersed Tertiary deep weathering and followed by Cenozoic erosion, is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

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EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 21,24
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.
463-473
GSC MEM *149, pp. 92-95
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 010**

NATIONAL MINERAL INVENTORY: 093H4 Au4

NAME(S): **MOSQUITO CREEK, MOSQUITO (L.10355), MOSQUITO CREEK MINE,**
MAIN BAND, WELBAR, CARIBOO GOLD,
RED GULCH, BROOKFORD, VANCOUVER,
PORT HOPE, SEATTLE, DAWNE,
PRODUCTION, WILLOW, AL

STATUS: Past Producer	Underground	MINING DIVISION: Cariboo
REGIONS: British Columbia		
NTS MAP: 093H04E		UTM ZONE: 10 (NAD 83)
BC MAP:		
LATITUDE: 53 06 30 N		NORTHING: 5885241
LONGITUDE: 121 35 50 W		EASTING: 593903
ELEVATION: 1356 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Gunn and Rip zones.		

COMMODITIES: Gold Silver Lead Zinc Tungsten

MINERALS

SIGNIFICANT: Pyrite	Galena	Sphalerite	Scheelite
ASSOCIATED: Quartz	Carbonate	Ankerite	
ALTERATION: Ankerite	Sericite		
ALTERATION TYPE: Carbonate		Sericitic	
MINERALIZATION AGE: Unknown			

DEPOSIT

CHARACTER: Stratabound	Vein	Massive	
CLASSIFICATION: Replacement	Epigenetic	Hydrothermal	
TYPE: J04 Sulphide manto Au			101 Au-quartz veins
DIMENSION: 5 Metres		STRIKE/DIP:	TREND/PLUNGE:
COMMENTS: Veins are up to 5 metres wide.			

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Limestone
 Quartzite
 Phyllite
 Mafic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP:
	GRADE: Greenschist

CAPSULE GEOLOGY

The property is located on the northeasterly slope of Island Mountain about 1.2 kilometres west of the town of Wells; the claims cover Mosquito and Red Gulch Creeks.

Placer operations which began on both creeks in the 1870's subsequently led to the uncovering of several showings of replacement mineralization but the diversity of ownership of the claims held back development work.

Claims adjoining the Aurum property (093H 006) on the northwest and extending westerly across the upper part of Mosquito Creek were staked for The Cariboo Gold Quartz Mining Company, Limited, in the early 1930's. The claims, including the Mosquito (Lot 10355), Mosquito Fraction, Brookford 1-8 (Lots 5899-5903, 10351-10354), Vancouver, Port Hope, and Seattle (Lots 10356-10358, respectively), were Crown-granted to the company in 1936.

Cariboo Amalgamated Gold Mines, Limited, incorporated in 1933, acquired the Red Gulch group of 10 claims (Lots 10360-10366, 10368, 10369, and 5924) adjoining the Mosquito group on the west; the claims were Crown-granted to the company in 1939.

Pioneer Gold Mines of B.C. Limited carried out a geological study of the area in 1944. As a result about 17 claims were acquired adjoining the Cariboo Amalgamated property on the west and north. In October 1945 Barkerville Mining Company, Limited, was incorporated to take over the claims. Pioneer invited other companies to participate and was joined by Transcontinental Resources Limited, Leitch Gold Mines Limited, and a fourth company (not specified). The only work reported was during 1946 when efforts were made to locate favourable formations under the deep overburden. Some 4267 metres of bulldozer

CAPSULE GEOLOGY

trenching was done but much failed to reach bedrock. A partial cross-section of the claims was obtained from 385 metres of diamond drilling. The Dawne, Production, Willow, and A1 claim groups, totalling 17 claims (Lots 10706-10722) were Crown-granted to Barkerville Mining Company, Limited, in 1951; the A1-A5 claims subsequently reverted to the Crown.

No further work was reported until 1958 when Cariboo Gold Quartz Mining began a drift to the northwest from the 3000 level of the Aurum mine to explore their Mosquito claim group. At 701 metres northwest of the Aurum shaft a new fault zone named the Burnett fault was discovered. Mineralization was found adjacent to the fault and during 1958-1961 several replacement bodies on the Mosquito claims were developed on 3 levels, the 2850, 3000, and 3125. The 2850 level, extended several hundred metres beyond the Burnett fault, intersected the Mosquito Creek fault and exposed further replacement mineralization. In 1962 the 3000 level was extended 259 metres west through the Mosquito fault. Mining operations continued in the Mosquito property until the Aurum mine closed in March 1967.

The Mosquito Creek Gold Mining Company Limited was incorporated June 1971 to acquire and consolidate claims on Mosquito and Red Gulch Creeks owned by The Cariboo Gold Quartz Mining Company, Limited; Cariboo Amalgamated Gold Mines, Limited; Barkerville Mining Company, Limited, and Mr. J.J. Gunn; the latter carried on a placer operation in the 1960's. The consolidated property comprised 29 Crown-granted claims and 2 placer leases. Cariboo Gold, Cariboo Amalgamated, and Barkerville Mining received 200,000; 100,000; and 100,000 shares, respectively, of the new company. Cariboo Gold Quartz had the option to increase their net interest from 20 to 24 per cent through participation in financing further exploration work. Reserves below the 3250 level of the old Mosquito workings were estimated at 36,300 tonnes averaging 23.9 grams per tonne gold. Work during 1971-72 included an induced potential survey, trenching, and diamond drilling. Cariboo Gold Quartz in June 1972 amalgamated with Coseka Resources Limited under the latter name.

Coseka Resources in February 1973 incorporated a wholly owned subsidiary, French Exploration Limited, to receive all its mineral property interests. In March 1973 French Exploration amalgamated with Wharf Resources Ltd. under the latter name; Coseka was allotted 80.4 per cent of the issued shares of Wharf Resources Ltd. Home Oil Company Limited optioned the property in 1973. During the year Home Oil carried out surface diamond drilling in 23 holes totalling 4225 metres on the Mosquito Fr., Seattle and Port Hope claims, and 37 percussion holes totalling 3325 metres in the above claims and the Mosquito claim. An adit, designated 4400, was driven 37 metres when it had to be abandoned due to badly faulted ground. During 1974 a three compartment shaft was completed to a depth of 157 metres and levels established at 4100 and 4400 elevations. A total of 651 metres of drifting and crosscutting was done on the 2 levels along with 2014 metres of underground diamond drilling in 74 holes. A number of small occurrences of replacement mineralization were encountered. Home Oil, under the terms of the option agreement, earned a 50 per cent interest in the property by carrying out the above development work. Early in 1975 Home Oil sold this interest back to Mosquito Creek Gold Mining Company Limited. The property was idle from April 1975 to July 1977. Mosquito Creek arranged additional financing, including an option to Peregrine Petroleum Ltd. to earn a 10 per cent interest with an option on a further 15 per cent interest. Work resumed on the property in July 1977. The shaft and workings were rehabilitated and crosscutting and drifting resumed on the 4100 level. A sulphide replacement body was encountered on the 4100 level in November. Considerable crosscutting, drifting and diamond drilling was done on the four levels driven from the shaft; the lowest (4100) is 73 metres above the former workings. Total drift and drill indicated reserves were estimated at 19,400 tonnes averaging 28.7 grams per tonne gold and 8.9 grams per tonne silver (Northern Miner, Aug. 31, 1978). Under a new agreement for further financing Peregrine Petroleum Ltd. earned a 50 per cent interest in the property. A feasibility study was carried out in 1978, and late in 1979 the construction of a 100 tonne per day mill and cyanidation plant was begun. The mill was put into operation in January 1980. A 76-metre decline was driven from surface to #1 level. Surface geophysics were done and trenches were sampled and mapped. In 1984, Hudson Bay Mining and Smelting Co. Limited optioned the property but dropped it after earning 10 per cent interest. They did 434 metres of drifting and 2673 metres of underground diamond drilling. Subsequently, Hudson Bay sold its interest back to Mosquito Creek and Peregrine sold its 50 per cent interest to Mosquito. In 1986, Hecla Mining Company of Canada Ltd. optioned the property, did underground exploration and then dropped it. Mining operations were intermittent

CAPSULE GEOLOGY

until 1987 when Mosquito Creek became Mosquito Consolidated Gold Mines Limited. In 1988, Lyon Lake Mines Limited optioned the property and earned 50 per cent interest after doing underground exploration. One drive intersected Old Island Mountain drift.

The Mosquito Creek deposit is hosted by rocks of the Proterozoic-Early Paleozoic Snowshoe Group within the Barkerville Terrane. In the vicinity of the mine these rocks comprise light grey quartzite, phyllite, limestone and mafic volcanic rocks of the Baker Member and dark quartzite and phyllite of the Rainbow Member. The contact between the two groups of rocks can be traced for over 15 kilometres through the "Cariboo Gold Belt". The sequence in the mine dips 30 to 50 degrees to the northeast and is interpreted to comprise the overturned southwest limb of a regional anticline. Asymmetric Z-folds with shallow northeasterly dipping axial planes, plunging about 20 degrees to the northwest, parallel the regional lineation. These rocks have been regionally metamorphosed to greenschist facies.

Gold mineralization occurs primarily in stratabound massive auriferous pyrite lenses concentrated in certain limestone beds known as the Main Band and Aurum limestones.

Quartz-pyrite-sericite veins, generally subvertical and striking at a high angle to the dominant lineation, are also present. The veins are up to 5 metres in width and carry ankerite, galena and sphalerite.

The younger replacement ore is composed of lenses of quartz, carbonate, pyrite, galena and sphalerite, commonly perpendicular to the lineation. The gold content increases with increasing pyrite content and ore is primarily hosted in the Main Band limestone. The adjacent Island Mountain mine (093H 006) is currently being explored for this type of ore. Both mineralization types contain scheelite as well as gold and sulphide mineralization. The average gold to silver ratio is about 8 to 5.

Test stope production from the No. 2 level of the Mosquito Creek mine was 1350 tonnes with an average grade of 28.45 grams per tonne gold (George Cross News Letter #55, 1989).

In 1997, International Wayside Gold Mines Ltd. purchased the remaining 50 per cent of the Cariboo Gold Quartz mine, the Island Mountain mine (093H 006) and the permitted Mosquito Creek Gold mine (093H 010) and formed the Cariboo Gold project. International Wayside formed a new company, Island Mountain Gold Mines Ltd., in May 1999. A 9-hole, 811-metre drill program was completed in 1999. A 10-hole, 1000-metre drill program is planned for 2000.

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DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEAVER PASS**, PEARSON'S PLACER, NO NAME PLACER

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 05 30 N
LONGITUDE: 121 53 01 W
ELEVATION: Metres

NORTHING: 5883050
EASTING: 574761

LOCATION ACCURACY: Within 5 KM

COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The Beaver Pass area is a wide valley which is speculated to have been a Tertiary channel of Lightning Creek. Only a few ounces of placer gold production have been recorded.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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GSC MAP 1424A
GSC MEM 149

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 012**

NATIONAL MINERAL INVENTORY: 093H4 Au2

NAME(S): **WINGDAM**, MELVIN, SANDERSON,
LIGHTNING CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 02 42 N
LONGITUDE: 121 58 12 W
ELEVATION: 975 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mine symbol on 1:50,000 topographic map.

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5877772
EASTING: 569051

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C02 Buried-channel placers C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel
Clay

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group in the east and rocks of Quesnellia in the west.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: WINGDAM

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 80308 Tonnes
COMMODITY: Gold
GRADE: 28.3500 Grams per tonne

YEAR: 1986

COMMENTS: Quantity in cubic yards and grade in grams per cubic yard.
REFERENCE: Property File - Gold Ridge Resources Prospectus, 1987.

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Near Wingdam, Lightning Creek crosses and re-crosses its buried pre-glacial channel. There are two distinct types of placer deposits, apart from minor post-glacial concentrations, in this area: 1) underlying the top boulder-clay at 36 metres below surface, possibly concentrated during an intra-glacial period, fairly coarse, flat and well worn gold was extracted and 2) auriferous sand and gravels in the pre-glacial channel buried at a depth of about 50 metres, just above bedrock.

This deeper deposit attains up to 2.7 metres in pay thickness and is overlain by 4.5 to 7.5 metres of fine sand and gravel interbedded with lenses of very fine silt. The silty lenses have the property that when saturated with water they will flow very easily

CAPSULE GEOLOGY

through small openings. These have been referred to as "slum" and have caused mining problems for previous operators. Gold reportedly also occurs in fractures and other irregularities in the channel bedrock.

Combined probable and possible reserves in 1986 were estimated to be 80,308 cubic yards grading 28.35 grams per cubic yard in the deep channel deposits (Property File - Gold Ridge Resources Prospectus, 1987). A 550 metre decline and underground facilities were completed in December, 1991; gold recovery is expected to begin in February 1992 (George Cross News Letter Dec. 18, 1991).

The two major historical producers in the Wingdam area have been the Melvin and Sanderson mines. At the Melvin mine the gold-bearing gravels, about two metres thick and from 12 to 43 metres wide, lie on bedrock. The auriferous gravel occurs above bedrock under a boulder clay at the Sanderson mine.

Production from the deep channel in the years 1937 and 1938 is reported to be 37,212 grams of gold from 2,872 cubic yards of mined ore (Property File - Gold Ridge Resources Prospectus, 1987).

Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion is the likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

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- GSC SUM RPT 1918B, pp. 48,49; *1933A, pp. 51,52
- GCNL #175,#210, 1975; #88, 1989; #117,#237,#243, 1991
- Placer Dome File

MINFILE NUMBER: **093H 013**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINUS CREEK**, PINE CREEK, REDDICK PIT

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 07 58 N
LONGITUDE: 121 31 28 W
ELEVATION: 1271 Metres

NORTHING: 5888058
EASTING: 598718

LOCATION ACCURACY: Within 500M

COMMENTS: Reddick hydraulic pit.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold occurring primarily in surface gravels along Pinus Creek has been mined by open-cut work, drifting and ground-sluicing. The gravels extend to bedrock in only a few places and in the valley bottom are underlain by glacial silt and gravels. The gold has apparently been derived by reconcentration of glacial drift.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1891-1894-tables; 1925-147; 1926-173; 1927-169; 1929-199; 1943-83; 1944-78; 1945-126; 1946-201; 1947-192; 1948-175; 1949-234, 235; 1961-130
EMPR PF (Maps showing leases on Pine Creek, 1896)
EMPR GEM 1973-527; 1974-360
EMPR BULL 28, pp. 22,29
EMPR ASS RPT 14517
EMPR EXPL 1986, p. C339; 1989, pp. 147-169
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM *149, pp. 126,132,133

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RUN TIME: 11:27:59

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GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **EIGHT MILE LAKE**, THISTLE PIT, EIGHT MILE CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 08 55 N
LONGITUDE: 121 32 32 W
ELEVATION: 1244 Metres

NORTHING: 5889795
EASTING: 597493

LOCATION ACCURACY: Within 500M

COMMENTS: Thistle hydraulic pit.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold occurs in interglacial pay gravels that are overlain and underlain by boulder clay. The placer gold therefore does not occur in the bedrock channel and it appears that it was reconcentrated by stream erosion of glacial drift. In general the gold is fairly coarse, uniform in size, flattened and worn. The area is underlain by Snowshoe Group rocks.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

- EMPR AR 1898-981; 1899-609; 1900-736; 1901-951,960; 1902-119; 1903-64; 1904-47; 1905-55; 1906-41; 1907-40; 1908-43; 1909-45; 1914-53; 1923-122; 1925-147; 1926-168; 1929-199; 1930-163; 1933-133; 1935-C36; 1944-78; 1945-126; 1946-197; 1947-192; 1950-199; 1951-204; 1952-237; 1953-175; 1954-170; 1955-85
- EMPR GEM 1973-527; 1974-361
- EMPR PF (Surficial Geology Map, Eight Mile Lake Placer Property, 1974)
- EMPR BULL 28, pp. 21,25
- EMPR ASS RPT 12023, 14517, 16109
- EMPR EXPL 1983, pp. 429,430; 1986, p. C339; 1989, pp. 147-169
- EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.

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BIBLIOGRAPHY

463-473
GSC MEM *149, pp. 125-129
GSC MAP 1424A
GSC SUM RPT 1932A, p. 16
GCNL #65, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLD - THORIUM**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H13E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 57 20 N
LONGITUDE: 121 39 05 W
ELEVATION: 640 Metres

NORTHING: 5979419
EASTING: 588492

LOCATION ACCURACY: Within 1 KM
COMMENTS: Foot of Grand Canyon.

COMMODITIES: Thorium Uranium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Gravel
Sandstone
Shale
Limestone

HOSTROCK COMMENTS: Area is underlain by the Lower Cambrian Mural Formation (Gog Group).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1952
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Uranium	0.3100 Per cent

COMMENTS: From black sands, probably thorium.
REFERENCE: Geological Survey of Canada Economic Geology 16, page 45.

CAPSULE GEOLOGY

The Gold-Thorium showing is located at the foot of the Grand Canyon on the Fraser River. The area is underlain by platformal sedimentary rocks of the Cariboo Terrane. These rocks comprise limestone, shale and sandstone of the Lower Cambrian Mural Formation of the Gog Group which are poorly exposed in the Fraser River Valley.

The showing comprises fluvial concentrates of black sand in which radioactivity, likely attributable to thorium, has been determined. Analysis of this black sand returned 0.31% uranium (Geological Survey Of Canada Economic Geology vol. 16, p.45). The source of the radioactive sand may be gneissic rocks of the Omineca Belt to the southwest.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR MAP 22,#50
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC EC GEOL No. 16, p. 45; No. 16 (2nd Edit.), p. 232
GSC MAP 1356A, 1424A

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RUN TIME: 11:27:59

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GSC OF 551

DATE CODED: 1987/08/07
DATE REVISED: 1989/02/23

CODED BY: LDJ
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 016**

NATIONAL MINERAL INVENTORY: 093H13 Cu1

NAME(S): **FRASER RIVER, CANYON, HUTTON,
LUCKY, TRILOBITE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H13E
BC MAP:
LATITUDE: 53 57 18 N
LONGITUDE: 121 39 56 W
ELEVATION: 640 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5979340
EASTING: 587564

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Pyrite
ASSOCIATED: Quartz
ALTERATION: Malachite Quartz Carbonate
ALTERATION TYPE: Silicific'n Carbonate Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Podiform Massive
CLASSIFICATION: Epigenetic Hydrothermal
DIMENSION: STRIKE/DIP: 120/35S TREND/PLUNGE:
COMMENTS: Bedding attitude.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Gog	Mural	

LITHOLOGY: Limestone
Shale
Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

CAPSULE GEOLOGY

The showing is located on the Fraser River, an area underlain by platformal sedimentary rocks of the Cariboo Terrane. The dominant rocks of the region are limestone, dolostone, shale, siltstone and phyllite of the Mural Formation of the Lower Cambrian Gog Group. The showing is underlain by three limestone units and a shale unit, striking to the northwest and dipping 30 to 40 degrees to the southwest.

Mineralization consists of chalcopyrite, sphalerite, pyrite and malachite in brecciated and altered limestone near the shale contact. This mineralization occurs as pods and lenses of massive sulphides and in quartz veins cutting the limestone. Alteration consists of silicification and secondary carbonate.

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EMPR EXPL 1981-49
EMPR AR 1948-A85; 1956-31; 1959-22
EMPR PF (Minister of Mines Annual Report 1940 Copper Deposits near Sinclair Mills; Fraser River Copper Prospect Sketch Maps, 1948; Location Map Fraser River and McGregor River Prospects, 1948; Field Notes, date and author unknown)
GSC MAP 1424A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **PTARMIGAN CREEK QUARRY**, URLING, QUESNEL RED-MIX

STATUS: Past Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093H10W

BC MAP:

LATITUDE: 53 40 46 N

LONGITUDE: 120 54 35 W

ELEVATION: 716 Metres

LOCATION ACCURACY: Within 5 KM

COMMENTS: Centre of quarry on the east side of Ptarmigan Creek (Industrial Mineral File - Map 093H/10). Production began in Jan. 1990.

UTM ZONE: 10 (NAD 83)

NORTHING: 5949887

EASTING: 638058

COMMODITIES: Limestone Railroad Ballast Aggregate

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Dolomite Quartz Muscovite

MINERALIZATION AGE: Proterozoic-Cambrian

DEPOSIT

CHARACTER: Stratiform Massive

CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

DIMENSION: 5000 x 800 Metres

COMMENTS: Bedding attitude near centre of deposit.

STRIKE/DIP: 134/45W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Cambrian

Hadrynian

GROUP

Gog

Cariboo

FORMATION

Mural

Cunningham

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1944

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

54.5800

Per cent

COMMENTS: Sample taken across high calcium limestone. Grade given for CaO.

REFERENCE: CANMET Report 811, page 221 - Sample 98.

CAPSULE GEOLOGY

A band of limestone of either the Lower Cambrian aged Mural Formation or the Hadrynian aged Cunningham Formation outcrops on Ptarmigan Creek and continues southeastward along the west side of the Fraser River for 5 kilometres. The band varies up to 800 metres in width and bedding strikes 120 to 150 degrees and dips 25 to 40 degrees southwest.

The band is composed mostly of pale blue to grey high calcium limestone with some pink and light brown streaks, patches and lenses of magnesian limestone containing disseminated dolomite with some quartz and muscovite. A sample taken across a bed of high calcium limestone (sample 98) and a second sample of brown magnesian limestone (sample 98A) contained (CANMET Report 811, p. 221, Samples 98, 98A):

Sample	98	98A
CaO	54.58%	42.67%
MgO	0.87%	11.35%
SiO2	0.20%	0.32%
Al2O3	0.02%	0.11%
Fe2O3	0.07%	0.38%
Sulphur	trace	trace

A quarry was developed on the east side of Ptarmigan Creek, at the north end of a northwest trending ridge, 2.5 kilometres due west of Urling. Since the 1940's the quarry supplied limestone for rail-

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CAPSULE GEOLOGY

road ballast. Between 1967 and 1984 the quarry was operated by Quesnel Read-Mix Cement Co. Ltd., producing railroad ballast and limestone for pulp mills near Prince George. A total of 626,544 tonnes of limestone were quarried by Quesnel Read-Mix.

BIBLIOGRAPHY

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EMPR GEM 1970-502; 1971-467; *1972-601-602
CANMET RPT 811, Part 5, pp. 220-221
GSC P 68-1A, pp. 15-19; 72-50, pp. 18-19,35-38
GSC MAP 1356A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/18

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUZ**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 05 36 N
LONGITUDE: 121 42 59 W
ELEVATION: Metres

NORTHING: 5883423
EASTING: 585956

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of 1974 trenching, 1974 Exploration Form.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Other than weathered sulphide mineralization, specific minerals not mentioned.

ASSOCIATED: Quartz
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Limestone
Phyllite
Quartzite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Lower Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Buz showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies. Mineralization consists of quartz veins which exhibit limonitic boxwork after pyrite and are anomalous in gold and silver.

BIBLIOGRAPHY

EMPR EXPL 1978-209
EMPR GEM 1973-328; 1974-250
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of Northeast Cariboo District, in 93H General Property File)
GSC MEM 149
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 019**

NATIONAL MINERAL INVENTORY: 093H4 Au1

NAME(S): **CARIBOO GOLD QUARTZ, PINKERTON, RAINBOW, GOLDFINCH, SANDERS, BUTTS, B.C. VEIN, BC VEIN, BONANZA, WELLS, HUESTIS, CGQ, THE TAILINGS, NEW ZONE, BONANZA LEDGE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 05 23 N
LONGITUDE: 121 33 41 W
ELEVATION: 1372 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Pinkerton claim.

Underground
MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5883219
EASTING: 596343

COMMODITIES: Gold Silver Tungsten Bismuth Lead
Zinc

MINERALS

SIGNIFICANT: Pyrite Cosalite Scheelite Bismuthinite Galena
Sphalerite Arsenopyrite Tetrahedrite
ASSOCIATED: Quartz Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound
CLASSIFICATION: Replacement Epigenetic Hydrothermal
TYPE: I01 Au-quartz veins
DIMENSION: 730 x 6 Metres
STRIKE/DIP: I02 Intrusion-related Au pyrrhotite veins
TREND/PLUNGE: 315/70N

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Clastic Sediment/Sedimentary
Quartzite
Limestone
Phyllite
Micaceous Mudstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: BC VEIN
REPORT ON: Y
CATEGORY: Indicated
QUANTITY: 55836 Tonnes
COMMODITY: Gold
GRADE: 9.8400 Grams per tonne
YEAR: 1999
REFERENCE: International Wayside Gold Mines Ltd. Press Release November 15, 1999.

ORE ZONE: CARIBOO GOLD QUARTZ
REPORT ON: Y
CATEGORY: Combined
QUANTITY: 7900000 Tonnes
COMMODITY: Gold
GRADE: 2.0300 Grams per tonne
YEAR: 2000
COMMENTS: Inferred mineral resource of the Sanders, Pinkerton and Rainbow zones calculated from 376 drillholes.
REFERENCE: George Cross News Letter #107 (June 5), 2000.

ORE ZONE: RAINBOW
REPORT ON: Y
CATEGORY: Indicated
QUANTITY: 10000000 Tonnes
COMMODITY: Gold
GRADE: 3.3600 Grams per tonne
YEAR: 2000
COMMENTS: Estimated reserves.
REFERENCE: Northern Miner, April 24, 2000.

CAPSULE GEOLOGY

The property extends southeasterly from the town of Wells, covering the north spur of Cow Mountain, Lowhee Creek, and the westerly slopes of Barkerville Mountain. The mine workings extend southeasterly from the north end of Jack of Clubs Lake through Cow Mountain to the Cariboo claim (Lot 93) at the head of Lowhee Creek, a distance of 3 kilometres.

Gold bearing quartz veins on the property were examined repeatedly from the 1870's. Most of the early work was done on the B.C. (Bonanza) vein, on the American (Lot 92), Cariboo (Lot 93), and St. Laurent (Lot 94) claims, but some was done on the Pinkerton and Enterprise veins (both on the Pinkerton claim lot 356). Some 36 claims were reported located in 1877. At that time the Cariboo Quartz Mining Company, Limited, was driving an adit on the Cariboo claim. The American and St. Laurent claims were reported under development by the St. Laurent Co.; no record has been found of this incorporation. A 4 stamp quartz mill was operated part time during 1877. The B.C.M. & M. Co., which was apparently the British Columbia Mining and Milling Company, of Spokane, brought a 20 stamp mill to the B.C. vein in 1878 but did not erect it. In the next ten years this company sank an inclined shaft in the vein approximately 46 metres, drove a few hundred metres of drift, and did some drilling but mined little ore. The American, Cariboo and St. Laurent claims were Crown-granted to the company in 1889.

Work on the Pinkerton and Enterprise veins was reported from 1877. The Enterprise Gold and Silver Mining Company, Limited, drove a 107 metre adit to develop the Enterprise vein. During the 1878-1888 period the "Victoria Company" is reported to have carried out some underground exploration on the Pinkerton and Enterprise veins, sinking a 46 metre shaft on the former. During this same period Jack Pinkerton and associates washed considerable gold from the surface showings, and experimented with gold recovery by rough crushing. In 1897 a 30 metre adit was reported on the Gold Finch claim (Lot 318), which adjoins the Pinkerton claim on the east; the claim was Crown-granted in 1898 to The Oriole Syndicate, Limited, of London, England. Messrs. Baker and Atkin held the Pinkerton and Cariboo claims under option during 1902-03. The underground workings to that date totalled about 305 metres.

From the 1800's little was done until the early 1920's when A.W. Sanders located the Rainbow (Lot 7794) and 2 adjacent claims, extending westerly from the Pinkerton claim. During the period 1922 to 1926 he was able to recover considerable gold by panning from the surface showings, and by rough crushing.

Fred M. Wells, confident that the rich placer deposits emanated from the immediate area, was instrumental in incorporating The Cariboo Gold Quartz Mining Company, Limited, in February 1927. The Pinkerton group of 5 claims was purchased from Clarke and Law, and the Rainbow group from A.W. Sanders. Several groups of claims were staked on behalf of the company. In 1932 the Apex group was purchased from Wells and associates. The Cariboo, and adjacent claims on the B.C. vein, were purchased in 1934. The claims staked by the company were Crown-granted during the period 1935-1939, and included Lots 5862-5867, 5878-5890, and 7798-7805.

In 1927 a crosscut adit was driven from Lowhee Creek towards the downward projection of the showing on the Rainbow claim (Sanders zone); this was abandoned in 1930 before the objective was reached. In 1931 an adit (1500 level) was begun on the Telluride claim (Lot 7798) at a point about 30 metres above Jack of Clubs Lake and driven southeasterly. Mineable veins were encountered before the Sander zone was reached and a mill was put into production in January 1933. The initial capacity of 50 tons per day was increased in several stages to 350 tons per day by 1940. By 1942 four interval shafts had been sunk and the 1500 level extended over 3 kilometres to meet the B.C. shaft, opening up 6 mineralized zones. Ore from the veins was mined by cut and fill and shrinkage stoping methods. The mine workings are extensive, totalling more than 40 kilometres. Operations were continuous until September 30, 1969, when the mine closed. Reserves at that time were reported at 42,300 tonnes averaging 9.25 grams per tonne gold and 68,410 tons averaging 12.685 grams per tonne gold.

Cariboo Gold Quartz Mining Company, Limited, in June 1972 amalgamated with Coseka Resources Limited under the latter name. Coseka in February 1973 incorporated a wholly owned subsidiary, French Exploration Limited, to receive all its mineral property interests. In March 1973 French Exploration amalgamated with Wharf Resources Ltd. under the name Wharf Resources Ltd.; Coseka was allotted 80.4 per cent of the issued shares of Wharf Resources Ltd.

By 1980 Wharf had 100 per cent interest in the property and Coseka a 32.1 per cent interest in Wharf. Exploration of the

CAPSULE GEOLOGY

property resumed in 1980 with most of the work directed towards surface showings worked in the 1920's on the Rainbow claim. Diamond drilling on this claim in 1980-81 located the Sanders zone; 70 holes were drilled on the zone in 1981. This work indicated approximately 907,000 tonnes of open pit material averaging about 3.42 grams per tonne gold (Coseka Res L, 1981 AR); or probable 326,600 tonnes at 4.11 grams per tonne gold (Mosquito Creek Gold Mining CL, Filing Statement 24/86).

By a February 1985 agreement with Wharf Resources, Mosquito Creek Gold Mining Company Limited acquired 100 per cent interest in the property in exchange for shares of the company. In February 1986 Hecla Mining Company obtained from Mosquito an option to earn a 50 per cent interest in the property, then dropped it. In 1987, Mosquito Creek changed its name to Mosquito Consolidated Gold Mines Limited. In 1988, Pan Orvana Resources Inc. optioned the property to obtain 50 per cent interest. They carried out soil geochemical, magnetic and VLF-EM surveys. From this and earlier work, a geological resource of 1,090,000 tonnes of 4.11 grams per tonne gold were indicated in the Sanders zone to a depth of 91 metres. (Pan Orvana Resources Inc. 1989 Annual Report).

The Cariboo Gold Quartz deposit lies within the Barkerville Terrane of the Omineca belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Proterozoic-Early Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

From 1933 to 1987, the Mosquito Creek (093H 010), Cariboo Gold Quartz and Island Mountain (Aurum) (093H 006) mines were reported to have recovered about 1 million ounces (37,300,000 grams) of gold from 2.75 million tonnes of ore. Two types of ore were mined: quartz veins and narrow stockworks hosted in meta-quartzite and meta-pelite grading 13 grams per tonne gold; and pyrite replacement ore, hosted in matrix of carbonate, dolomite and silica grading 21.6 grams per tonne gold. The Island Mountain and Cariboo Gold Quartz mines, located a few kilometres north of where International Wayside is active, accounted for 97 per cent of the total production.

The deposit consists primarily of quartz-pyrite veins. A series of north striking, east dipping faults and auriferous quartz veins are associated with fracture zones. The veins may contain cosalite, bismuthinite, arsenopyrite, ankerite, scheelite, galena, sphalerite and possibly tetrahedrite. The veins occur in a sequence of black and grey clastic sediments referred to as the Rainbow Member.

A relatively small amount of ore has been taken from stratabound, massive auriferous pyrite lenses. This has been called replacement ore. The lenses occur at the contacts and within certain limestone beds in what has been called the Baker Member. The limestone beds are called the Main Band and the Aurum. The Main Band limestone was the historic producer at the nearby Mosquito Creek mine (093H 010) and it is presently being investigated for potential at the adjacent Island Mountain mine (093H 006).

New mineralization was discovered in the Wells zone grading 1.71 grams per tonne gold over 10 and 14.9 metres respectively (George Cross New Letter #169, 1989).

Probable reserves are 394,788 tonnes grading 4.9 grams per tonne gold of open pit material in the Sanders zone, which is the surface expression of one of five zones mined underground (George Cross News Letter September 1, 1985).

Known reserves at the Sanders zone are 689,396 tonnes grading 3.83 grams per tonne gold based on previous work by Wharf Resources and Pan Orvana Resources (George Cross News Letter No.114 (June 14), 1995).

International Wayside optioned the Cariboo claims in 1994 from Mosquito Consolidated Gold Mines and staked additional contiguous claims.

Exploration to the end of 1995 on the Rainbow zone has partially defined a zone 120 metres long, 36 metres wide, over a 60-metre vertical height from the 1300-level to the surface. The company estimates "reserves" at 907,000 tonnes grading 4.53 grams per tonne gold (Information Circular 1996-1 page 24).

In 1996, the 1200 level adit was extensively rehabilitated providing access to the Rainbow zone through to the Sanders zone and Pinkerton zone. Drilling tested these zones along a strike length of approximately 730 metres and a width of 120 metres. The Huestis zone was discovered in 1996 and occurs between the Rainbow and Sanders zone. Surface exploration was carried out on the B.C. vein.

CAPSULE GEOLOGY

International Wayside Gold Mines Ltd. has released the results of a recently completed geological mineral inventory calculation. Holes prior to July 31, 1997 were used in the calculation. The results indicate a geological mineral inventory, at a 1.02 grams per tonne gold cutoff, of 3,084,140 tonnes grading 3.49 grams per tonne gold uncut and 3.29 grams per tonne gold when composite assays are cut to 17.14 grams per tonne gold (T. Schroeter, personal communication, 1997).

In 1997, International Wayside Gold Mines Ltd. conducted a major surface and underground exploration program. This work is in preparation for entering the pre-application process with the Cariboo Mine Development Review Committee. To December 1997, the company had completed 193 holes, including 78 holes drilled during 1997. The company purchased the remaining 50 per cent of the Cariboo Gold Quartz mine, the Island Mountain mine (093H 006) and the permitted Mosquito Creek Gold mine (093H 010) and formed the Cariboo Gold project. The permit application under the Environmental Assessment Act will encompass all three former producing gold mines, expand the existing permit to increase daily tonnage milled and include relocating the mill to a more advantageous site.

Programs during 1997 included grid-style surface diamond-drilling above the previously productive Pinkerton zone, and underground percussion drilling from the 1200 level across the Baker-Rainbow contact near the Sanders zone. Drilling has focused on the Rainbow, Sanders and Pinkerton zones. The objective is to define a mineable open-pit reserve. A geochemical survey was completed over the Barkerville, Cow, Richfield and Island Mountain areas. Trenching tested the new, 1.4-kilometre-long Wells trend, a northwest-trending zone that lies southwest of and subparallel to the Sanders-Rainbow-Pinkerton trend.

In January 1999, a combined resource was reported as 6,747,188 tonnes grading 4.63 grams per tonne gold at a cut off of 1.03 grams per tonne. This includes a measure resource of 5,402,393 tonnes grading 4.8 grams per tonne gold, an indicated resource of 904,092 tonnes grading 3.53 grams per tonne gold and an inferred resources of 440,706 tonnes grading 5.0 grams per tonne gold (GCNL #16 (January 25) 1999). Calculations using other cutoffs are reported in International Wayside's January 21, 1999 Press Release. In 1998 and 1999, International Wayside drilled over 30 holes on the BC Vein.

They calculated a preliminary mineral resource on a 232-metre section between the BC Shaft and the Goldfinch Fault gap, and a portion of the American extension to a vertical depth of roughly 37 metres from surface. The 232-metre section represents 25 per cent of the surface exposure of the BC Vein. The resource, classified as drill indicated, totals 55,836 tonnes, grading 9.84 grams per tonne gold (Press Release November 15, 1999).

In early 2000, International Wayside drilled the "New" Zone located in the footwall of the BC Vein. A 25.8-metre intersection averaged 24.65 grams per tonne gold, including a 13.6-metre intersection grading 42.92 grams per tonne gold (International Wayside Press Release, April 9, 2000). Drilling by International Wayside in 2002 to test the northwest extension of the Bonanza Ledge/BC Vein mineralization intersected 15.8 metres grading 22.97 grams per tonne gold in the BC Vein in diamond drillhole BC02-03 (Press Release, June 18, 2002).

The BC vein is exposed on surface for a continuous length of 730 metres and averages 6 metres in width. The vein strikes northwest and dips 70 degrees north. Drill holes testing the eastern extension of the vein cut into the phyllitic footwall and found it to contain a distinct type of ore. Gold is reported to be associated with pyrite-enriched zones within tan-coloured micaceous mudstone and gritty quartzites. These rocks are strongly folded and crenulated. This new footwall zone has been named the Bonanza Ledge.

As of April 2000, International Wayside had completed 12,344 metres of drilling in 238 holes on the Cariboo property and has reported a preliminary open-pit "resource estimate" above the Rainbow, Sanders and Pinkerton zones of 10 million tonnes grading 3.36 grams per tonne gold (Northern Miner, April 24). The company has submitted an application to the BC Environmental Assessment Office to develop a 3000 tonne per day open-pit operation.

A consultant in a May 18, 2000 report calculated from 376 drillholes an inferred mineral resource of 7.9 million tonnes grading 2.03 grams per tonne gold in the Sanders, Pinkerton and Rainbow zones (George Cross News Letter No. 107, June 5, 2000).

An independent consultant as defined in NI 43-101 combined new BC Vein and Bonanza Ledge resource estimates with the Cow Mountain resource estimate, completed in 2000, and released new estimates. The total indicated resource is estimated to be 6,647,000 tonnes grading 2.67 grams per tonne gold, which has 17,748 contained kilograms above

CAPSULE GEOLOGY

the 0.685 gram per tonne gold cutoff in the three zones. The total inferred resource is estimated to be 1,859,000 tonnes grading 2.02 grams per tonne gold, which has 3,776 contained kilograms above the 0.685 gram per tonne gold cutoff in the three zones (Press Release International Wayside Gold Mines Ltd., December 3, 2002).

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- EMPR INF CIRC 1995-9, p. 24; 1996-1, p. 24; 1997-1, p. 28; 1998-1, p. 22; 1999-1, pp. 10, 12; 2000-1, pp. 9,14
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- EMPR OF 1992-1, 1998-10; 1999-3
- EMPR P 1991-4, pp. 185,186
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- GSC EC GEOL *43, pp. 571-597, (Skerl, A.C. (1948): Geology of the Cariboo Gold Quartz Mine, Wells, British Columbia)
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- GSC SUM RPT 1932, pp. 53,54; 1933, pp. 44-48
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IDPM Feb/Mar, 1985
MIN REV Fall 2000
N MINER May 4, 1998; *Apr.24, May 8, 15, 22, 29, June 12, 19,
July 10, 31, Aug.21, Sept.11,25, Dec.4, 2000; Sept.23, Dec.2,
Dec.16, 2002
PR REL International Wayside Gold Mines Ltd., Nov. 19, 1997; Feb.5,
Feb.12, March 23, Oct. 6, 13,Nov. 5, 17, 30, 1998; Jan.21, Feb.3,
Mar.3, Apr.14, June 23, Aug.30, Oct.19, Nov.15, Nov. 22, Dec.9,
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Summary) 2000; June 13, June 18, Dec.3,10, 2002; Jan.16, Feb.27,
2003
STOCKWATCH Nov.14, 2001
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WWW <http://www.wayside-gold.com>;
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Vancouver Sun April 27, 2000

DATE CODED: 1985/07/24
DATE REVISED: 2000/06/28

CODED BY: GSB
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **HIGHWAY 16**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H13E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 53 47 N
LONGITUDE: 121 41 43 W
ELEVATION: 762 Metres

NORTHING: 5972783
EASTING: 585734

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately 72 kilometres east of Prince George airport along Highway 16.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION:
COMMENTS: Attitude of limestone beds.

STRIKE/DIP: 110/25N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Gog	Mural	

LITHOLOGY: Black Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY

YEAR: 1969

Limestone	<u>GRADE</u>	<u>Per cent</u>
	53.0100	

COMMENTS: Taken across 6 metre stratigraphic thickness. Grade given for CaO.
REFERENCE: Geology, Exploration and Mining 1969, page 396.

CAPSULE GEOLOGY

The Highway 16 showing is located 72 kilometres east of Prince George along highway 16 in an area underlain by platformal sedimentary rocks of the Cariboo Terrane. The dominant rocks of the region are limestone, dolostone, shale, siltstone and phyllite of the Mural Formation of the Lower Cambrian Gog Group.

A 400 metre long roadcut exposes dense, black, well-bedded limestone of uniform appearance. The beds, which strike at 110 degrees and dip 25 degrees north, vary from a few centimetres to a few metres thick.

A sample of chips taken over a stratigraphic thickness of 6 metres contained 53.01 per cent CaO, 0.84 per cent MgO, 1.78 per cent insolubles, 0.70 per cent R2O3, 0.53 per cent Fe2O3, trace MnO, 0.03 per cent P2O5, 0.13 per cent sulphur and 42.74 per cent ignition loss (Geology, Exploration and Mining 1969 p.390).

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GSC MAP 1356A, 1424A
GSC P 72-35

DATE CODED: 1985/07/24
DATE REVISED: 1989/07/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 021**

NATIONAL MINERAL INVENTORY:

NAME(S): **PROSERPINE**, WILKINSON, FORREST,
FOREST ROSE, FOREST

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 02 28 N
LONGITUDE: 121 29 49 W
ELEVATION: 1646 Metres

NORTHING: 5877900
EASTING: 600772

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of Proserpine claim, Lot 430.

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Arsenopyrite Galena Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

DIMENSION: 0001 Metres STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Veins are up to 1.2 metres wide with one set striking northwest and the other northeast.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite
Siltstone
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The Proserpine showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

Two sets of quartz veins, northeast and northwest striking, comprise the showing. The veins are up to 1.2 metres wide and contain variable pyrite, arsenopyrite, galena and sphalerite mineralization. Gold is associated with arsenopyrite and the galena is argentiferous.

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GSC MEM *149, pp. 195-201; 181, p. 31
GSC SUM RPT *1932A, pp. 42-47
GSC MAP 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 816
REPORT: RGEN0100

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GCNL #190(Oct.4), 2000

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/24

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **MCBRIDE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H08E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 17 50 N
LONGITUDE: 120 07 45 W
ELEVATION: 700 Metres

NORTHING: 5909179
EASTING: 691314

LOCATION ACCURACY: Within 5 KM
COMMENTS: Placer sands along Fraser River.

COMMODITIES: Thorium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Recent			Glacial/Fluvial Gravels

LITHOLOGY: Gravel
Quartzite
Shale
Conglomerate

HOSTROCK COMMENTS: Fluvial sand concentrates are radioactive. The area is underlain by the Lower Cambrian McNaughton Group.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The McBride showing is located near McBride on the Fraser River. This area is underlain by platformal sedimentary rocks of the Cariboo Terrane. These rocks comprise conglomerate, shale and quartzite of the Lower Paleozoic McNaughton Formation which, in the Fraser River Valley, are poorly exposed.

The showing comprises fluvial concentrates of black sand in which radioactivity, likely attributable to thorium, has been detected. The source of the radioactive sand may be gneissic rocks of the Omineca Belt to the southwest.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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GSC MAP 1356A, 1424A
GSC OF 551
GSC EC GEOL No. 16 (2nd Edit.), p. 235

DATE CODED: 1987/08/07
DATE REVISED: 1989/02/23

CODED BY: LDJ
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARDSCRABBLE** HARDSCRABBLE SCHEELITE, HARDSCRABBLE MINE,
COLUMBIA TUNGSTEN

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 08 12 N
LONGITUDE: 121 39 11 W
ELEVATION: 1219 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5888321
EASTING: 590106

COMMODITIES: Tungsten

Gold

Lead

Zinc

MINERALS

SIGNIFICANT: Scheelite Gold Galena Sphalerite Pyrite
ASSOCIATED: Quartz Ankerite Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Phyllite
Limestone

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The Hardscrabble deposit lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The occurrence is found in a sequence of Snowshoe Group rocks consisting of fissile quartzite, relatively massive quartzite, calcareous phyllite, relatively pure phyllite and sandy limestone. Mineralization occurs in quartz-sulphide and quartz-carbonate scheelite veins and veinlets which are associated with faults and joints or which follow the schistosity of the enclosing rocks. The three types of mineralized veins are a gold-bearing lenticular quartz vein, two quartz-sulphide veins which apparently do not carry gold and scheelite bearing quartz veinlets or stringers. Sulphide veins are composed of quartz, pyrite, sphalerite and galena. Scheelite-bearing veinlets occur both crosscutting and following the bedding and schistosity of the enclosing rocks. These veins contain quartz, ankerite, calcite, scheelite and traces of sphalerite and galena. In general the mineralized veins are discontinuous and widely spaced.

A total of 9963 kilograms of tungsten was produced from this dposit in 1939 and 1941. In 1937, about 90 tonnes of ore was produced for testing puposes.

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EMPR PF (Report on the Hardscrabble Scheelite Deposit, 1918; Geology
of workings on Hardscrabble Creek, 1939; Hardscrabble Mine section
and level plans, Columbia Tungstens Co. Ltd., 1939; Sutherland
Brown, A., Holland, S.S., (1956) The Structure of the Northeast
Cariboo District, in 93H General Property File)
GSC EC GEOL 17, pp. 62-67
GSC MAP 1424A
GSC MEM 149, pp. 210,211
GSC SUM RPT 1932A, pp. 55,56

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOOSEHORN**, RAINBOW

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 18 08 N
LONGITUDE: 121 58 16 W
ELEVATION: 1052 Metres

NORTHING: 5906385
EASTING: 568565

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Silver Lead Zinc Gold

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Massive
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Mississippian

GROUP

Slide Mountain

FORMATION

Antler

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Black Argillite
Phyllite
Quartz Mica Schist
Feldspathic Greenstone
Quartzite
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1982

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	41.1360	Grams per tonne
Gold	0.1714	Grams per tonne
Lead	2.8800	Per cent
Zinc	0.0400	Per cent

COMMENTS: Weighted average across 4.8 metres.

REFERENCE: Assessment Report 10397.

CAPSULE GEOLOGY

The area of the occurrence is underlain by three units of the Mississippian Antler Formation, Slide Mountain Group. The lowest sequence is comprised of quartz mica schist and micaceous quartzite. Next highest is a medium grained chloritic feldspathic greenstone and chloritic schist which in turn is overlain by a black pyritiferous argillite and phyllite sequence. The argillite and phyllite unit is pervaded by quartz in the form of veins, stringers, lenses and boudins. Selvages, masses and disseminations of galena, sphalerite and pyrite are associated with the quartz bodies. Coarse crystalline masses of mineralization 10 to 20 centimetres in diameter occur in boudins.

A large quartz vein (1 to 2 metres wide) occurs at the mid-level of a bluff on the north side of Paput Creek. A weighted average of samples taken in 1982 across 4.8 metres of this vein was 41.136 grams per tonne silver, 0.1714 grams per tonne gold, 2.88 per cent lead and 0.04 per cent zinc (Assessment Report 10397).

BIBLIOGRAPHY

EMPR AR 1920-97
EMPR ASS RPT *10397

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 821
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 025**

NATIONAL MINERAL INVENTORY:

NAME(S): **MYRTLE** SHAMROCK

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 36 N
LONGITUDE: 121 32 45 W
ELEVATION: Metres

NORTHING: 5881787
EASTING: 597414

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of Myrtle claim.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
COMMENTS: Sulphides not identified.
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>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite
Phyllite
Siltstone

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization
	GRADE: Greenschist

CAPSULE GEOLOGY

The Myrtle showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

Mineralization consists of sulphides with associated gold values reported from quartz veins which cut Snowshoe Group strata.

International Wayside Gold Mines Ltd. drilled 5 core holes and reported assay results for 3 (Press Release October 24, 2002). A 17.68 metre intercept in drillhole M02-01 assayed 9.12 grams per tonne gold. Drillhole M02-05 intercepted 0.18 metre of 61.79 grams per tonne gold.

BIBLIOGRAPHY

EMPR AR 1924-117; 1925-149; 1933-122; 1941-56
EMPR BULL 1, p. 62; 38, p. 88
EMPR PF (Sketch Map of Shamrock Group, 1933; Mine Plan, Shamrock Gold Mines Ltd., 1933; Sutherland Brown, A., Holland, S.S., (1956) The Structure of Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A
GSC MEM 181, p.26
N MINER Oct.25, Nov.4, 2002
PR REL International Wayside Gold Mines Ltd., Oct.24, 2002; Feb.27, Mar.4, 2003
WWW <http://www.infomine.com/index/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **BONANZA**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 56 56 N
LONGITUDE: 121 25 52 W
ELEVATION: Metres

NORTHING: 5978975
EASTING: 602962

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Lead Zinc Silver Barite

MINERALS

SIGNIFICANT: Galena Sphalerite Barite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Cambrian
Silurian

GROUP

Gog

FORMATION

McNaughton

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Quartzite
Limestone
Mafic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

RELATIONSHIP: Pre-mineralization GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	2.7424	Grams per tonne
Lead	38.0000	Per cent
Zinc	7.0000	Per cent

COMMENTS: Selected sample also contained trace gold.
REFERENCE: Minister of Mines Annual Report 1928, page 190.

CAPSULE GEOLOGY

The Bonanza showing occurs in a region in which Silurian platformal sediments and mafic volcanic rocks are in fault contact to the west with Hadrynian to Lower Paleozoic McNaughton Formation metasedimentary rocks. Although strata strike northwest on a regional scale, in this area the beds strike northeast and dip steeply southeast due to folding.

Mineralization comprises irregularly distributed galena and sphalerite in quartz seams hosted by quartzite near the contact with limestone. Some barite is also present. A selected sample of this mineralization in 1928 assayed 2.7424 grams per tonne silver, 38 per cent lead, 7 per cent zinc and trace gold (Annual Report 1928 p.190).

BIBLIOGRAPHY

EMPR AR *1928-189,190; 1929-189
EMPR FIELDWORK 1988, pp. 377-385
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACK JACK**, BLACKJACK, WESTPORT,
WINTRIP

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 03 45 N
LONGITUDE: 121 31 15 W
ELEVATION: 1311 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit on Black Jack claim.

Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5880246
EASTING: 599121

COMMODITIES: Gold Lead

MINERALS

SIGNIFICANT: Galena Arsenopyrite Pyrite
ASSOCIATED: Quartz Siderite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite
Phyllite
Limestone
Siltstone

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: TOTAL
CATEGORY: Indicated
QUANTITY: 75000 Tonnes
COMMODITY: Gold
YEAR: 1991
GRADE: 16.0000 Grams per tonne

COMMENTS: Drilling by Williams Creek Explorations Limited in 1947 and 1991 indicates a mineral inventory of approximately 1250 kilograms of gold contained in 75,000 tonnes grading 16 grams per tonne gold along a strike length of 60 metres and to a depth of 125 metres.

REFERENCE: Property File - see 093H 006, Gold City Mining Corporation Brochure.

CAPSULE GEOLOGY

The Black Jack deposit is located south of Barkerville, 92 kilometres east of Quesnel.

The Black Jack deposit lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

Mineralization occurs in eight major quartz veins, bedded replacement type zones and disseminated throughout the favorable horizon. These are variably mineralized with galena, pyrite, arsenopyrite and occasionally siderite. Gold is associated with sulphide mineralization.

A 60 centimetre chip sample in 1948 across one vein assayed 97.7 grams per tonne gold (Bulletin 38 pp. 91-92). Drilling on this vein in 1991 by Williams Creek Explorations Ltd. failed to produce significant assays. The best intersection from this drilling

CAPSULE GEOLOGY

program, from another vein, was 8.57 grams per tonne gold over 3.9 metres (George Cross Newsletter #210, October 31, 1991).

Minor production (180 tonnes grading 29.14 grams per tonne was reported in George Cross Newsletter #210) from the Black Jack deposit was recorded in the late 1800's. Old workings consist of the Westport and Black Jack adits.

Drilling by Williams Creek Explorations Limited in 1947 and 1991 indicates a mineral inventory of approximately 1250 kilograms of gold contained in 75,000 tonnes grading 16 grams per tonne gold along a strike length of 60 metres and to a depth of 125 metres (Property File - see Island Mountain (093H 006), Gold City Mining Corporation Information Brochure).

BIBLIOGRAPHY

- EMPR AR 1887-257; 1897-473; 1903-H109; 1922-117; 1926-173;
1930-A166; 1933-122; 1947-A113
EMPR BULL *38, pp. 91,92
EMPR PF (Sketches of Westport workings from A. Sutherland Brown's files, c.1953; Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File; see Island Mountain (093H 006), Gold City Mining Corporation Information Brochure)
GSC MAP 1424A
GSC MEM 149; 181, p. 29
GSC SUM RPT 1932A, p. 40
GCNL #84,*#210, 1991
N MINER Nov. 25, 1991
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOME CREEK**

STATUS: Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093H10W 093H11E

UTM ZONE: 10 (NAD 83)

BC MAP:

LATITUDE: 53 41 05 N

NORTHING: 5950342

LONGITUDE: 120 58 43 W

EASTING: 633492

ELEVATION: 808 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Located on Highway 16, 3.8 kilometres east of its intersection with Dome Creek (Assessment Report 16760).

COMMODITIES: Slate

Flagstone

Dimension Stone

Building Stone

MINERALS

SIGNIFICANT: Unknown

COMMENTS: Slate

MINERALIZATION AGE: Hadrynian

DEPOSIT

CHARACTER: Massive

Stratabound

CLASSIFICATION: Sedimentary

Industrial Min.

TYPE: R08 Flagstone

COMMENTS: An estimated 3 square kilometres of slate with a thickness ranging from 500 to 750 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Hadrynian

Cariboo

Yankee Belle

LITHOLOGY: Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

TERRANE: Cariboo

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Dome Creek slate prospect is located along Provincial Highway 16, 3.8 kilometres east of its intersection with Dome Creek.

The region is underlain dominantly by rocks of the Cariboo Terrane. These consist mainly of Hadrynian to Lower Paleozoic Cariboo Group metasedimentary rocks. In this area the underlying rocks belong to the Hadrynian Yankee Belle Formation.

The slate is green in color, cleaves easily, contains no pyrite and is considered to be good building material quality. The slate is estimated to cover an area approximately 3 kilometres square with depth estimates varying between 500 and 750 metres. Overburden cover ranges from less than 1 to 7.6 metres in thickness, while surface staining due to weathering penetrates 6 to 8 metres.

Surface samples compare favourably with much deeper deposits from France and those of the eastern United States.

In 1995, with Explore B.C. Program support, Dome Creek Structural Slate intended to carry out a substantial program of site clearing and quarry preparation. Major permitting delays by the Ministry of Forests prevented work until well into the winter. As a consequence, although a 30-day Explore B.C. work deadline was granted, only a limited amount of road upgrading and site clearing could be done (Explore B.C. Program 95/96 - M49).

BIBLIOGRAPHY

EM EXPL 1996-A24
EMPR ASS RPT 15769, *16760
EMPR Explore B.C. Program 95/96 - M49
EMPR INF CIRC 1996-1, p. 20; 1997-1, p. 23
EMPR MAP 65 (1989)
EMPR OF 1992-1; 1992-9
EMPR PF (Excerpts from FAME reports submitted by A.J. Rogac Ltd. 1986-1988)
GSC MAP 1356A; 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 827
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 72-35

DATE CODED: 1989/08/14
DATE REVISED: 1996/11/04

CODED BY: ZDH
REVISED BY: VAP

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093H 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOWSETT**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 00 08 N
LONGITUDE: 121 24 54 W
ELEVATION: Metres

NORTHING: 5873693
EASTING: 606361

LOCATION ACCURACY: Within 5 KM

COMMENTS: Short distance south of California Gulch.

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite
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>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Siltstone
Phyllite
Quartzite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Dowsett showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The showing was discovered following the recognition of a significant amount of scheelite in the placer sands of nearby California Gulch.

BIBLIOGRAPHY

EMPR AR 1943-78
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MEM 149
GSC MAP 1424A
EMPR OF 1991-17

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALROY**

MINING DIVISION: Cariboo

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093H10E
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 31 58 N
 LONGITUDE: 120 40 24 W
 ELEVATION: 883 Metres

NORTHING: 5934050
 EASTING: 654195

LOCATION ACCURACY: Within 500M

COMMENTS: Approximately 160 kilometres east of Prince George. Location is for centre of quartzite exposure (Lane, personal communication, 2001).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform Massive
 CLASSIFICATION: Metamorphic Sedimentary Industrial Min.
 TYPE: R07 Silica sandstone

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian	Cariboo	Yanks Peak	

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

CAPSULE GEOLOGY

Most of the upper Fraser River drainage, which follows the northwest trend of the underlying country rock, is covered by Quaternary alluvium and glacial deposits. Scattered outcrops are of Cambrian and/or Hadrynian (Proterozoic) Cariboo Group sedimentary rocks and/or their metamorphic equivalents.

The Alroy property is underlain by pale quartzite, probably part of the Cambrian(?) Yanks Peak Formation, which forms several prominent exposures at lower elevations in the upper Fraser River valley. Exposures of quartzite form several small to medium-size 'humpbacks' whose long axes follow a northwesterly trend.

The main exposure of quartzite is approximately 450 metres in length (oriented along an azimuth of 132 degrees) and is about 52 metres wide at its widest point. Thin to medium beds of quartzite are defined by either vague pale orange bands of Fe-oxide or, less commonly, micaceous partings. Bedding ranges from 112 to 126 degrees and dips moderately to steeply to the southwest (47 to 88 degrees). A prominent subvertical jointing, oriented at 030 degrees, cuts the quartzite. Veins of milky white to semi-translucent 'bull quartz' intrude the quartzite mainly along joints and bedding planes.

In 1996, three hand samples were collected from the property by GSB geologist Dan Hora and submitted for whole rock analysis. The results are listed below: sample 96-01 was quartzite with micaceous partings; sample 96-02 was the clean, centre part of a quartzite bed; sample 96-03 was the clean, centre part of a quartzite bed with secondary quartz veining.

Sample	SiO2 %	Al2O3 %	MgO %	Na2O %	MnO %	Fe2O3 %	TiO2 %
96-01	97.39	0.98	0.01	0.01	0.01	0.06	0.14
96-02	98.41	0.65	0.01	0.01	0.01	0.05	0.1
96-03	98.7	0.45	0.01	0.01	0.01	0.13	0.01

Sample	P2O5 %	CaO %	K2O %	Cr2O3 %	Ba ppm	LOI %	Total %
96-01	0.01	0.08	0.23	0.01	500	0.31	99.29
96-02	0.01	0.08	0.16	0.01	291	0.27	99.81
96-03	0.01	0.08	0.12	0.01	218	0.3	99.95

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 830
REPORT: RGEN0100

CAPSULE GEOLOGY

More recently, four small pits were blasted to provide fresh rock for geochemical analysis. Samples from three of the four pits have been submitted for whole rock analysis and will be reported when received.

BIBLIOGRAPHY

GSC P 72-35
GSC MAP 1424A
Pers Comm Bob Lane (Prince George Regional Geologist), 2001

DATE CODED: 2001/07/06
DATE REVISED: 2001/07/06

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 031**

NATIONAL MINERAL INVENTORY:

NAME(S): **COMSTOCK**, MOONLIGHT

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 12 00 N
LONGITUDE: 121 44 32 W
ELEVATION: 1372 Metres

NORTHING: 5895258
EASTING: 584017

LOCATION ACCURACY: Within 1 KM

COMMENTS: On flat-topped summit immediately north of Mustang Creek.

COMMODITIES: Lead Zinc Gold

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: 0010 Metres
COMMENTS: Veins are up to 10 metres wide.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite
Conglomerate
Siltstone
Phyllite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Comstock showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east.

The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The showing is underlain by sheared quartzite and conglomerate in which quartz veins up to 10 metres wide occur. The veins are sparsely mineralized with galena and pyrite. Low gold values are reported. There is also a small seam, a few centimetres wide, of galena and sphalerite.

BIBLIOGRAPHY

EMPR AR 1934-C26; 1947-A122
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A
GSC MEM 149; 181, p. 37
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 032**

NATIONAL MINERAL INVENTORY:

NAME(S): **COSALITE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 12 13 N
LONGITUDE: 121 46 20 W
ELEVATION: 1341 Metres

NORTHING: 5895625
EASTING: 582007

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0004 x 0003 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Veins are up to 3.5 metres wide and exposed for up to 4 metres along strike.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Phyllite
Siltstone
Quartzite

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The Cosalite showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The showing comprises an area of quartz veining in which veins both cut and are conformable with bedding. The veins, up to 3.5 metres wide, are exposed for up to 4 metres along strike. They contain galena and pyrite mineralization with trace amounts of gold and silver.

BIBLIOGRAPHY

EMPR ASS RPT *12383, 16002
EMPR AR 1934-C26
EMPR EXPL 1983-430; 1987-C290
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOW**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 22 54 N
LONGITUDE: 121 32 35 W
ELEVATION: 1067 Metres

NORTHING: 5915718
EASTING: 596909

LOCATION ACCURACY: Within 500M

COMMENTS: Claims are located west of the Bowron River about 31 kilometres north of the community of Wells (Assessment Report 25133).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Volcanogenic
TYPE: G05 Cyprus massive sulphide Cu (Zn)

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mississippian	Slide Mountain	Antler	

LITHOLOGY: Intermediate Mafic Flow
Intermediate Mafic Tuff
Chert

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The Bow claims were staked to cover showings of massive sulphide boulders in a geological environment suitable to host volcanogenic massive sulphide deposits. The claims are underlain by volcanic rocks of the Mississippian Antler Formation of the upper Paleozoic to Lower Triassic Slide Mountain Group. Rocks are mainly an intermediate to mafic sequence of volcanic flows and tuffs. Chert horizons are commonly found in the sequence.

On the Bow 1 claim, an area 500 by 250 metres contains in excess of fifty small boulders that exhibit features typical of volcanogenic massive sulphide mineralization. The principal sulphide is pyrite, however, some boulders contain up to 10 per cent chalcopyrite. The rock is 90 to 95 per cent sulphides and shows well-banded lineations. Copper grades vary from 1 to about 3 per cent (Assessment Report 25133). Also apparent are several rusty zones of ferricrete.

BIBLIOGRAPHY

EM EXPL 1999-65-77
EMPR ASS RPT *25133, 25746
GSC MAP 1424A; 1356A
WWW <http://www.infomine.com/>

DATE CODED: 1998/12/07
DATE REVISED: 1998/12/07

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 034**

NATIONAL MINERAL INVENTORY:

NAME(S): **MORNING STAR**, EVENING STAR ALADDIN,
HONEST JOHN, DOOLEY, HOME RULE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 04 02 N
LONGITUDE: 121 31 43 W
ELEVATION: 1433 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Boundary between Morning Star and Evening Star claims.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5880760
EASTING: 598589

COMMODITIES: Gold Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0001 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite
Limestone
Phyllite
Siltstone

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Morning Star showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The showing is underlain by quartzite and limestone cut by closely spaced quartz veins up to 1.2 metres wide. Some of these veins are well mineralized with galena and pyrite and at least two stringers with widths of 15 and 25 centimetres respectively carry good gold values. Old reports refer to these veins as being bedded.

BIBLIOGRAPHY

EMPR AR 1886-231-232; 1918-135; 1947-A113
EMPR BULL 38, p. 91
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MEM 149; 181, p. 27
GSC SUM RPT 1932A, p. 57
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHISHOLM**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 05 N
LONGITUDE: 121 42 18 W
ELEVATION: 1600 Metres

NORTHING: 5880625
EASTING: 586769

LOCATION ACCURACY: Within 1 KM

COMMENTS: Boundary between Lots 10430 and 10431.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Phyllite
Quartzite
Siltstone

HOSTROCK COMMENTS: The Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Chisholm showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

This showing consists of quartz veining reported to contain minor amounts of gold associated with pyrite.

BIBLIOGRAPHY

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EMPR EXPL 1975-134; 1978-208; 1980-327; 1987-C289
EMPR GEM 1974-249
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

DATE CODED: 1985/07/24
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CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAD**, UG, BOWRON RIVER

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 48 21 N
LONGITUDE: 121 52 45 W
ELEVATION: 762 Metres

NORTHING: 5962502
EASTING: 573810

LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole location.

COMMODITIES: Coal Uranium Germanium Molybdenum Vanadium

MINERALS

SIGNIFICANT: Coal Thucholite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary
TYPE: D04 Basal U
SHAPE: Tabular
DIMENSION: 0050 Metres
COMMENTS: Dip 20 to 60 degrees northeast.

STRIKE/DIP: 140/40E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary Mississippian	Undefined Group Slide Mountain	Bowron River Undefined Formation	

LITHOLOGY: Coal
Greenstone
Shale
Sandstone
Conglomerate
Tuff
Breccia
Chert
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Bowron Trench
TERRANE: Overlap Assemblage Slide Mountain

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1970
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Molybdenum	0.0580 Per cent
Uranium	0.0080 Per cent
Vanadium	0.1080 Per cent

COMMENTS: Seam sample taken near old mine site.
REFERENCE: Geological Survey of Canada Paper 70-52, pages 14-16,32,35.

CAPSULE GEOLOGY

Mid-Tertiary coal measures occur within a 600 metre thick sequence of conglomerate, sandstone, and shale which trend north-west for about 24 kilometres along the Bowron River valley. The measures strike 140 degrees and dip 20 to 60 degrees northeast. The basin is bordered by tuffs, breccia, greenstone, and minor chert and limestone of the Mississippian Slide Mountain Group.

Radioactive conglomerate and greenstone were intersected over 50 metres in drill holes. The radioactivity occurs beneath the main coal seams, in the basal rock in contact with the Slide Mountain rocks. Thucholite, which is a hydrocarbon with uranium, and germanium were also identified in shale and coal. A seam sample from a section along the river near the old mine site to the north assayed 0.008 per cent uranium. The ash from the sample assayed 0.058 per cent molybdenum and 0.108 per cent vanadium (GSC Paper 70-52). A sample assayed 186 grams per tonne germanium (Assessment Report 4438).

CAPSULE GEOLOGY

Refer to the Bowron River (093H 005) and the Bear River (093H 130) coal occurrences for descriptions on the coal measures.

BIBLIOGRAPHY

EMPR ASS RPT *4438, 4953, 5103, 5113, 5243, 5428, 5577
EMPR GEM 1970-527; 1974-251
EMPR MAP 22, #51
EMPR AR 1914-67-71; 1948-233-240; 1954-247; 1955-162; *1960-238,239;
1970-527; 1974-251
GSC P 69-1A, p. 4; 70-52, pp. 14-16,32,35; 72-35, pp. 61,90; 89-4
EMPR PF (Rpt. by K. Douglass, 1979 in General 93H)
GSC MAP 1356A, 1424A
GSC OF 551

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FIELD CHECK: N
FIELD CHECK: N

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RUN TIME: 11:27:59

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CAPSULE GEOLOGY

silver, 2.78 per cent lead, 0.97 per cent zinc (Assessment Report 8820).

BIBLIOGRAPHY

EMPR AR 1878-374; 1880-425; 1886-236; 1914-66; 1922-117; 1932-91;
1933-125
EMPR ASS RPT 8039, *8820
EMPR BC METAL MM00453
EMPR BULL 1, p. 63; *26, pp. 43-49
EMPR EXPL 1980-327
EMPR FIELDWORK 2000, pp. 169-190
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of
the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A
GSC MEM 149, pp. 183,209; 181, p. 34
GSC SUM RPT 1932A, p. 54; 1933A, p. 42
GCNL #16,#114,#175,#220, 1980
N MINER Apr.9, 1981

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: 093H 037

MINFILE NUMBER: **093H 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **LONGWORTH**, NONDA QUARTZITE, SNOW,
RAIN, LONG, DOLL

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093H14W
BC MAP:

MINING DIVISION: Cariboo

LATITUDE: 53 58 48 N
LONGITUDE: 121 29 30 W
ELEVATION: 1554 Metres

UTM ZONE: 10 (NAD 83)

LOCATION ACCURACY: Within 1 KM

NORTHING: 5982350
EASTING: 598914

COMMENTS: Approximate center of five non-contiguous claim blocks covering quartzite showings over a distance of about 10 kilometres (Open File 1987-15).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
ASSOCIATED: Muscovite Limonite Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R07 Silica sandstone
SHAPE: Regular
MODIFIER: Folded
DIMENSION: 0400 Metres
COMMENTS: Bands of quartzite are up to 400 metres thick.

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 Silurian	Undefined Group	Nonda	

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1982

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silica

99.0800

Per cent

COMMENTS: Average of 8 chip samples.

REFERENCE: Open File 1987-15, page 15.

CAPSULE GEOLOGY

The Longworth prospect is located about 80 kilometres east of Prince George. The claims were staked originally in 1974 and blasting, trenching and sampling has been completed on the property. The prospect is hosted by a folded sequence of sedimentary and volcanic rocks which underlie Bearspaw Ridge. They are all, or in part, Lower Silurian in age and equivalent to the Nonda Formation. At least four northwest trending bands of quartzite have been mapped along the western flank of Bearpaw Ridge. Thicknesses reach up to about 400 metres. The main quartzite band outlines a synformal structure open to the northwest. Rare bedding observed in outcrop dips 70 to 80 degrees east. The quartzite is very pure, massive and homogeneous. It is composed of extremely well-rounded and well-sorted quartz grains, averaging 0.5 millimetre in diameter, which are cemented by silica. The quartzite is pinkish white to buff on fresh surfaces and weathers grey to white. Impurities include muscovite in cavities, limonite on microfractures, minor calcite and possible hydrocarbons. Eight chip samples collected in 1982 by the Geological Survey Branch averaged 99.5 per cent silica (Open File 1987-15).

Consolidated Silver Standard Mines Ltd. evaluated the property in 1985 for the production of ferrosilicon and silicon metal. They

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CAPSULE GEOLOGY

took 42 samples of which 28 had the required chemical specifications, SiO₂ was from 98.84 to 99.80 per cent and 16 samples had acceptable thermal shock results (Open File 1987-15).

BIBLIOGRAPHY

EMPR AR 1965-274
EMPR FIELDWORK 1982, p. 196
EMPR ASS RPT *14815
EMPR OF 1987-15, pp. 13-15
EMPR PF (Consolidated Silver Standard Mines Ltd. Annual Report 1988)
EMPR EXPL 1986-C342,343
GSC P 72-35, p. 89
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/24

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093H 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOUG**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H11W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 39 19 N
LONGITUDE: 121 15 42 W
ELEVATION: Metres

NORTHING: 5946573
EASTING: 614881

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of Doug claim group.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Chalcocite
ASSOCIATED: Quartz Ankerite
ALTERATION: Cuprite Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 3000 x 1000 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralized quartz veins occur over an area 3 by 1 kilometres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Gog	Mural	

LITHOLOGY: Fossiliferous Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The area of the Doug occurrence is underlain by fossiliferous light grey limestone of the Lower Cambrian Mural Formation, Gog Group. Mineralization consisting of chalcopyrite and chalcocite with lesser amounts of cuprite, azurite and malachite occurs over an area of about one kilometre by 3 kilometres in low temperature quartz veins. The mineralization is found in patches in the quartz up to a few centimetres in width and 10 centimetres in length. Ankerite is also present.

BIBLIOGRAPHY

EMPR FIELDWORK 1978, p. 97
EMPR ASS RPT *6938
EMPR EXPL 1978-E209; 1979-220
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/24

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **PETERS CREEK, CAMPBELL CREEK, BASFORD CREEK,
MATHER, VENTURE, CARRUTHERS CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 03 07 N
LONGITUDE: 121 50 58 W
ELEVATION: 1091 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mather shaft.

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5878668
EASTING: 577120

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel
Clay
Glacial Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold has been recovered from several locations along Peters Creek including the tributaries of Campbell Creek, Bassford Creek and Carruthers Creek. The valley of Peters Creek is filled with surface stream gravels which are underlain in places by clay and in other places by glacial gravels. Gold has been produced from both surface gravels and bedrock gravels.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1922-120; 1924-115; 1939-108; 1942-87; 1945-126; 1946-200;
1950-200; 1952-238; 1953-178; 1954-170; 1958-79; 1960-123;
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EMPR EXPL 1989, pp. 147-169
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EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473

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Collins Pacific Ltd., unknown date; Placer Mining Leases Peters
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GSC MEM *149, pp. 177-181
GSC SUM RPT 1933, part A, p. 53
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/24

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **JACK OF CLUBS**, BONNER, SISTERS,
BROTHERS, DISCOVERY, CENTRAL,
STONY CREEK, MCDOUGALL CREEK, QUEEN OF CLUBS

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 03 43 N
LONGITUDE: 121 36 15 W
ELEVATION: 1305 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Discovery shaft.

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5880072
EASTING: 593538

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers
DIMENSION: 0045 Metres
COMMENTS: Gravels vary from 30 to 60 metres in depth.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area underlain mainly by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer mining activity has taken place at several points along Jack of Clubs Creek and also on tributaries such as Stony Creek, McDougall (Victoria) Creek and Queen of Clubs Creek. The main activity has been directed toward bedrock gravels in an old channel of Jack of Clubs Creek. The gravels probably vary from about 30 metres to over 60 metres in depth. Gold in the gravels is fairly coarse but it was found that the presence of gold was discontinuous and patchy.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1903-64; 1904-48; 1905-57; 1917-137; 1918-145; 1922-119; 1940-92
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR BULL 28, pp. 17,19

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 846
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BIBLIOGRAPHY

EMPR PF (Canyon Group claims, Larsen Holding Co.Ltd., date unknwn)
GSC MEM *149, pp. 108-113
GSC SUM RPT 1918, part B, p. 48
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOAT RIVER, HILL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 29 00 N
LONGITUDE: 120 34 05 W
ELEVATION: 900 Metres

NORTHING: 5928793
EASTING: 661366

LOCATION ACCURACY: Within 1 KM

COMMENTS: The Goat River showing is located south of Highway 16, approximately 35 kilometres northwest of McBride.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite

COMMENTS: Trace chalcopyrite.

ASSOCIATED: Quartz

ALTERATION: Sericite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Mesothermal

TYPE: I01 Au-quartz veins

SHAPE: Tabular

MODIFIER: Other

DIMENSION: 250 x 1 Metres

STRIKE/DIP: 116/90

TREND/PLUNGE:

COMMENTS: The veins are boudined. The strike length is minimum. Several quartz-sulphide spays were also noted and there are reportedly parallel veins up slope from the main showing.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

Hadrynian

GROUP

Kaza

Snowshoe

FORMATION

Unnamed/Unknown Formation

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Sericite Phyllite
Chlorite Sericite Schist
Quartzite

HOSTROCK COMMENTS: Possibly Miette Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Cariboo

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Mountains

RELATIONSHIP: Pre-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The Goat River vein showing (Hill zone) is located just south of Highway 16, approximately 35 kilometres northwest of McBride.

The area is underlain by phyllite, schists and minor quartzite of Hadrynian age. These rocks are likely part of the Kaza and/or Snowshoe groups.

The main showing consists of a 1.2-metre wide quartz-sulphide vein that contains 3 to 5 per cent coarse-grained pyrite, minor pyrrhotite and traces of chalcopyrite. The vein also comprises trace amount of sericite and several per cent of angular wallrock clasts. Several narrow quartz veins parallel the main structure and carry trace to 2 per cent sulphides. A 20-centimetre wide splay off the main vein was also noted. The main vein is exposed intermittently (or discontinuously) over a strike length of at least 250 metres.

BIBLIOGRAPHY

PERS COMM R.A. Lane, May 12, 1997

DATE CODED: 1997/05/12
DATE REVISED: 1997/05/12

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093H 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 29 00 N
LONGITUDE: 120 35 05 W
ELEVATION: 800 Metres

NORTHING: 5928755
EASTING: 660260

LOCATION ACCURACY: Within 1 KM

COMMENTS: The Black manganese oxide showing is located south of Highway 16, approximately 36 kilometres northwest of McBride. The showing is located 1 kilometre west of the Goat River (Hill zone) gold-vein showing (093H 042).

COMMODITIES: Manganese Travertine

MINERALS

SIGNIFICANT: Pyrolusite
COMMENTS: Earthy coating and cavity fillings in tufa (travertine).
ASSOCIATED: Calcite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Residual
TYPE: J03 Mn veins and replacements H01 Travertine
SHAPE: Irregular
COMMENTS: Base of the deposit follows the paleotopography.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Kaza	Unnamed/Unknown Formation	
Hadrynian	Snowshoe	Unnamed/Unknown Formation	

LITHOLOGY: Tufa
Travertine
Chlorite Sericite Phyllite
Chlorite Sericite Schist
Quartzite

HOSTROCK COMMENTS: Possibly Miette Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Mountains
TERRANE: Cariboo
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Black manganese oxide showing is located just south of Highway 16, approximately 36 kilometres northwest of McBride. It is about 1 kilometre west on the Goat River (Hill zone) gold-vein showing (093H 042).

The Black showing consists of MnO₂ (pyrolusite) coatings on/in a buff-coloured calcareous tufa (travertine) deposit. The tufa is extremely porous and the earthy MnO₂ comprises approximately 50 per cent of the volume of the rock where it was sampled. A 2.5-metre deep pit exposes the deposit and hand augering has tested the zone to a depth of 4 metres. Nearby, manganese oxide reportedly occurs cementing glacial gravels.

BIBLIOGRAPHY

PERS COMM R.A. Lane, May 12, 1997

DATE CODED: 1997/05/12
DATE REVISED: 1997/05/12

CODED BY: RAL
REVISED BY: RAL

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **093H 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **COOPER CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 11 03 N
LONGITUDE: 121 43 28 W
ELEVATION: 1280 Metres

NORTHING: 5893517
EASTING: 585236

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate mid-point of placer operations along creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer operations took place on small benches and along the bed of Cooper Creek for approximately 1,000 metres upstream from its mouth. The area is underlain by Snowshoe Group rocks.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1939-106; 1940-91; 1941-86; 1947-123; 1949-241; 1950-199; 1951-204; 1954-170; 1955-85
EMPR EXPL 1984, pp. 313,314; 1985, p. C301; 1989, pp. 147-169
EMPR BULL 28, pp. 21,24
EMPR ASS RPT 10586, 12875, 13669
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC SUM RPT 1933A, p. 61
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHEPHERD CREEK, REES**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 08 19 N
LONGITUDE: 121 32 39 W
ELEVATION: 1280 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Rees hydraulic pit.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5888680
EASTING: 597385

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

In the upper part of Shepherd Creek there is a series of old stream channels that have been partly cut away by more recent streams and have been modified by glacial erosion and deposition. Included in the old stream channels is at least one that is a cross channel to the present Shepherd Creek. The old channels are filled with gravels that are mainly glacial. Gold is unevenly distributed within the gravels and is most abundant on bedrock. Little gold occurs in the lower part of Shepherd Creek where the creek flows in a narrow, deep valley.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1898-976; 1899-609; 1900-736; 1914-53; 1915-55; 1916-38; 1926-167;
1927-167; 1928-194; 1929-199; 1940-91; 1941-86; 1943-83; 1947-191;
1948-175; 1950-199; 1951-204
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR BULL 28, pp. 22,28
EMPR ASS RPT 14517, 16109
EMPR EXPL 1986, p. C339; 1987, p. C288; 1989, pp. 147-169

RUN DATE: 26-Jun-2003
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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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BIBLIOGRAPHY

GSC MEM *149, pp. 126,130-132
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **JAWBONE GOLD QUARTZ, TIGER GOLD QUARTZ, DRAGON MOUNTAIN GOLD QUARTZ, EAGLE MOUNTAIN GOLD QUARTZ**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 03 56 N
LONGITUDE: 121 45 08 W
ELEVATION: 1189 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5880291
EASTING: 583610

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartz Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Jawbone Gold Quartz showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The showing is underlain mainly by folded quartz sericite schist striking northwest to northeast with variable dips west. These rocks host quartz veins which contain pyrite and galena mineralization.

BIBLIOGRAPHY

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EMPR EXPL 1984-315,316
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
EMPR ASS RPT 13149
GSC SUM RPT 1933A, p. 39
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **WARSPITE** PRIVATEER MINE LIMITED

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 57 N
LONGITUDE: 121 29 10 W
ELEVATION: 1707 Metres

NORTHING: 5876958
EASTING: 601518

LOCATION ACCURACY: Within 500M
COMMENTS: Warspite adit.

COMMODITIES: Gold Silver Lead Iron

MINERALS

SIGNIFICANT: Galena Sphalerite Arsenopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Quartz Pyrite
ALTERATION TYPE: Silicific'n Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I01 Au-quartz veins
DIMENSION: 0004 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Northwest striking veins are up to 3.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Quartzite
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEINS REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1926
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 25.7100 Grams per tonne
Gold 126.8000 Grams per tonne
Iron 26.0400 Per cent

COMMENTS: Selected sample from the junction of A and B veins.
REFERENCE: Geological Survey of Canada Memoir 149, page 205.

CAPSULE GEOLOGY

The Warspite showings are underlain by the Hadrynian to Paleozoic Snowshoe Group. On the Warspite claim the Snowshoe Group grades from largely phyllite to micaceous quartzite with interbedded phyllite. Northwest striking quartz veins up to about 3.8 metres in width and northeast striking quartz veins up to about 0.6 metres in width are exposed in workings. The veins contain variable amounts of pyrite, arsenopyrite, galena and sphalerite mineralization. Selected samples returned high gold values. Also, a 9 metre bed of white silicified and pyritized quartzite has been traced for about 120 metres. A selected sample in 1926 from the junction of A and B veins assayed 3.4 grams per tonne of gold.

BIBLIOGRAPHY

EMPR AR 1917-129; 1918-134; 1922-117; 1928-520; 1934-C24; 1940-57;
1945-82; 1946-92
EMPR ASS RPT 7128, 10382, 12263, 16981
EMPR BULL *38, pp. 89,90
EMPR EXPL 1978, p. 207; 1984, p. 312
EMPR FIELDWORK 2000, pp. 169-190
EMPR PF (Sutherland Brown, A. and Holland, S.S. (1956): The Structure

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BIBLIOGRAPHY

of the Northeast Cariboo District, in 93H General Property File;
Information letter from Clifton Resources Limited)
GSC MAP 1424A
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GSC SUM RPT *1932A, pp. 47,48,51
WWW <http://www.infomine.com/index/properties/WARSPITE.html>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 049**

NATIONAL MINERAL INVENTORY:

NAME(S): **TIPPERARY**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 42 N
LONGITUDE: 121 29 15 W
ELEVATION: 1692 Metres

NORTHING: 5876492
EASTING: 601435

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Silver Gold Lead

MINERALS

SIGNIFICANT: Galena Arsenopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I01 Au-quartz veins

DIMENSION: 0001 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Vein is 0.9 to 1.2 metres wide and strikes northwest.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Argillite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: VEINS

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1918

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

377.0000

Grams per tonne

COMMENTS: Minor gold and silver values up to 377 grams per tonne have been reported.

REFERENCE: Minister of Mines Annual Report 1918, page 134.

CAPSULE GEOLOGY

The Tipperary showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The property is underlain by argillite and quartzite cut by a northwest striking quartz vein carrying small amounts of disseminated pyrite, arsenopyrite and galena. The vein is 0.9 to 1.2 metres wide. Minor gold values and silver up to 377 grams per tonne have been reported (Annual Report 1918 p. 134).

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EMPR ASS RPT 7128, 12263, 16981

EMPR EXPL 1978-207; 1984-312

EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)

GSC MEM 149, p. 201; 181, p. 32

GSC SUM RPT 1932A, p. 48

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BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/24

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **KITCHENER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 37 N
LONGITUDE: 121 28 54 W
ELEVATION: 1753 Metres

NORTHING: 5876346
EASTING: 601829

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Arsenopyrite Pyrite
ASSOCIATED: Quartz Siderite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: 0003 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Larger northwest striking veins are up to 3 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz. GROUP: Snowshoe FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Graphitic Schist
Sericite Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: KITCHENER REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Chip
COMMODITY: Gold GRADE: 10.3000 Grams per tonne
COMMENTS: Sample across 1.2 metres.
REFERENCE: Minister of Mines Annual Report 1918, page 134.

CAPSULE GEOLOGY

The Kitchener showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies. The showing is underlain by graphitic and sericitic schists of the Snowshoe Group. Two types of quartz veins are exposed. Larger veins up to about 3 metres wide strike northwest and carry some arsenopyrite and galena. Smaller veins strike northeast and carry some siderite, galena and sphalerite. Mineralization is most abundant near the intersections of the two types of veins. Gold assays up to 10.3 grams per tonne across 1.2 metres of quartz are reported (Annual Report 1918 p.134). Sampling in 1987 revealed minor amounts of silver (Assessment Report 16981).

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EMPR ASS RPT 7128, 12263, 16981
EMPR EXPL 1978-207; 1984-312
EMPR BULL 1 p. 63

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
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REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of
the Northeast Cariboo District, in 93H General Property File)
GSC MEM 149, p. 202; 181, p. 32
GSC SUM RPT 1932A, p. 48
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **INDEPENDENCE** BELL, NEWBERRY,
PROSERPINE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:
LATITUDE: 53 01 28 N
LONGITUDE: 121 28 36 W
ELEVATION: 1716 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Bell adit.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5876075
EASTING: 602170

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Galena Arsenopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: 0009 Metres STRIKE/DIP:
COMMENTS: Largest vein of banded quartz and schist is 9 metres wide. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz. GROUP: Snowshoe FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Quartzite
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Drill Core
COMMODITY: Gold GRADE: 14.8770 Grams per tonne
COMMENTS: Samples from five drill holes assayed up to 14.877 grams per tonne gold over 81 centimetres.
REFERENCE: Northern Miner Oct. 4, 1984.

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Grab
COMMODITY: Silver GRADE: 6.8560 Grams per tonne
Gold 42.5100 Grams per tonne
COMMENTS: Sample across 3.0 metres of third cut on west side.
REFERENCE: Minister of Mines Annual Report 1918, page 133.

CAPSULE GEOLOGY

The Independence showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The showing is underlain by grey micaceous quartzite and phyllite with lesser amounts of brown or green phyllite and minor limestone lenses. The earliest reports indicate the presence of two

CAPSULE GEOLOGY

parallel, vertical, northwest striking quartz veins about 30 to 45 metres apart. The largest vein consists of banded quartz and schist over up to 9 metres in width. A chip sample in 1918 across 8.5 metres assayed 27.4 grams per tonne gold (Annual Report 1918 p. 133). Later reports indicate the presence of several smaller intersecting quartz veins. Mineralization consists of galena, arsenopyrite and pyrite.

Samples from holes drilled on the Bell structure in 1984 assayed from 3.7 over 1.2 metres to 14.877 grams per tonne gold over 0.81 metres (Northern Miner Oct. 4, 1984).

BIBLIOGRAPHY

EMPR AR *1917-129; 1918-131-134; 1922-117; 1925-148; 1928-195;
1934-C24
EMPR EXPL 1978-207; 1984-312
EMPR ASS RPT 7128, 12263, 16981
EMPR BULL 1 p. 63; 38, pp. 89-91
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of
the Northeast Cariboo District, in 93H General Property File)
GSC MEM *149, pp. 202-204; 181, pp. 32,33
GSC SUM RPT *1932A, pp. 48-50
GSC MAP 1424A
GCNL #124,#144, 1984
N MINER Oct.4, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 052**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARD CASH**, ANDERSON ADIT, CAMPBELL ADIT,
MOORE ADIT, FOUNTAIN HEAD

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 15 N
LONGITUDE: 121 28 05 W
ELEVATION: 1554 Metres

NORTHING: 5875686
EASTING: 602756

LOCATION ACCURACY: Within 500M

COMMENTS: Moore adit. Possibly also includes the Lady Dufferin and Lord Dufferin showings mentioned in old reports.

COMMODITIES: Gold Lead

MINERALS

SIGNIFICANT: Galena Arsenopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: 0009 Metres
COMMENTS: Largest vein is up to 9 metres wide.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Quartzite
Phyllite
Limestone

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 2.7424 Grams per tonne

COMMENTS: Sample from 1.2 metres of barren looking quartz.
REFERENCE: Minister of Mines Annual Report 1918, page 134.

CAPSULE GEOLOGY

The Hard Cash showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The area of the showings is underlain by grey micaceous quartzite and phyllite with lesser amounts of brown or green phyllite and minor limestone lenses. A number of workings on the property have intersected several quartz veins. Most of the veins are apparently quite narrow but one vein is up to 9 metres wide. Generally sparse pyrite and galena mineralization occurs in places in the veins. One adit intersected a silicified and bleached zone with a width of about 24 metres.

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RUN TIME: 11:27:59

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PAGE: 862
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BIBLIOGRAPHY

EMPR AR 1886-230; 1897-474; 1917-130; 1918-134
EMPR EXPL 1978-207; 1984-312
EMPR ASS RPT 7128, 12263, 16981
EMPR BULL 38, p. 91
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of
the Northeast Cariboo District, in 93H General Property File)
GSC MEM 181, p. 33
GSC MAP 1424A

DATE CODED: 1986/07/25
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 053**

NATIONAL MINERAL INVENTORY:

NAME(S): **GM**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04W 093H05W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 14 58 N
LONGITUDE: 121 54 03 W
ELEVATION: 1000 Metres

NORTHING: 5900590
EASTING: 573340

LOCATION ACCURACY: Within 500M

COMMENTS: Located about 29 kilometres northwest of Wells. Highway 26 to 2400 road, then left onto 1000 road, cross bridge and 1.5 kilometres to property (Personal Communication, R.A. Lane, 2001).

COMMODITIES: Lead Zinc Copper Gold Silver

MINERALS

SIGNIFICANT: Galena Pyrite Sphalerite Chalcopyrite
ASSOCIATED: Quartz Carbonate
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Quartz Mica Schist
Micaceous Quartzite
Pyritic Argillite
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The GM occurrence was discovered by partners Mel Zeiler and Gary Toop by prospecting in 2000.

The GM area is underlain by rocks of the Hadrynian or Paleozoic Snowshoe Group, Barkerville Terrane. The rocks are comprised of quartz mica schist and micaceous quartzites, pyritiferous argillite and phyllites. The showing comprises a 1 metre wide quartz-carbonate vein and stockwork zone exposed in two excavator trenches spaced 40 metres apart. Mineralization consists of disseminated to locally massive galena and minor pyrite, sphalerite and chalcopyrite. Galena is also disseminated in siliceous bands within crenulated to gently folded metasediments adjacent to the vein structure, and exposed in a road cut below the trenches. The vein is subvertical and has a strike of about 140 degrees.

A grab sample of quartz vein with 3 to 4 per cent galena assayed: 0.79 gram per tonne gold, 134.6 gram per tonne silver and greater than 1 per cent lead (Personal Communication, Robert Lane, 2001).

BIBLIOGRAPHY

EM EXPL 1999-65-77
GSC MAP 1424A; 1635A
GSC MEMOIR 421

DATE CODED: 2001/12/14
DATE REVISED: 2001/12/14

CODED BY: RAL
REVISED BY: GJP

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093H 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **ACME**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 01 N
LONGITUDE: 121 43 01 W
ELEVATION: 1433 Metres

NORTHING: 5878633
EASTING: 586004

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Visible gold mineralization is associated with veins (up to 1.0 metre wide) trending north.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Quartzite
Conglomerate

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1948
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 34.2800 Grams per tonne
Gold 4.1140 Grams per tonne
Lead 2.2000 Per cent
COMMENTS: Selected sample 169F, quartz containing galena.
REFERENCE: Bulletin 26, page 55.

CAPSULE GEOLOGY

The Acme showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies. A number of quartz veins up to one metre in width occur in an area underlain primarily by quartzite that grades to a pea-pebble conglomerate. Some of the quartz veining is sparingly mineralized with pyrite, galena and sphalerite. Fine visible gold has also been reported. The veins occupy two sets of fractures which have general trends of north-south and east-west. Most of the visible gold appears to be associated with the northerly trending veins.

BIBLIOGRAPHY

EMPR BULL 26, p. 55
EMPR EXPL 1980-328; 1987-C287
EMPR ASS RPT 7734, 15832
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of

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RUN TIME: 11:27:59

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PAGE: 865
REPORT: RGEN0100

BIBLIOGRAPHY

the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOMINION**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 02 53 N
LONGITUDE: 121 44 35 W
ELEVATION: 1173 Metres

NORTHING: 5878355
EASTING: 584258

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
COMMENTS: Veins are up to 1 metre wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite
Quartz Conglomerate
Limestone
Chlorite Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Dominion showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The area of the occurrence is underlain by quartzite, conglomerate, limestone and chlorite schist. Adits that are primarily in a hard, massive, light-grey, quartz, pea-pebble conglomerate intersected several quartz veins and stringers up to a width of about one metre. Pyrite mineralization occurs with some of the quartz veining and minor gold and silver values have been reported.

BIBLIOGRAPHY

EMPR BULL 26, p. 56
EMPR ASS RPT 11887
EMPR EXPL 1983-427
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/21

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **STANDARD LOCATION**, LUCKY CAP, SIDE LOCATION

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 17 N
LONGITUDE: 121 39 48 W
ELEVATION: 1687 Metres

NORTHING: 5879193
EASTING: 589588

LOCATION ACCURACY: Within 500M

COMMENTS: Location of shaft-northeast end of Lot 63.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold Galena Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

DIMENSION:

STRIKE/DIP: 030/75W

TREND/PLUNGE:

COMMENTS: Veins up to 1.5 metres wide strike 30 to 35 degrees and dip 75 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite

Argillaceous Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The Standard Location showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

Quartzites with some interbedded thin layers of argillaceous schist underlie the claims. Cutting these rocks are three approximately parallel quartz veins which strike at 030 to 035 degrees and dip 75 degrees west with widths up to about 1.5 metres. Early reports indicate the presence of pyrite, galena and visible gold in some of the quartz veins. However, later investigations report only pyrite mineralization with trace amounts of gold and silver.

BIBLIOGRAPHY

EMPR AR 1883-403; 1884-418; 1886-198,222,236; 1887-257; 1896-556
EMPR BULL *26, pp. 49,50
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC ANN RPT v. III, part C, 1889 p. 38
GSC MEM 149
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **FOSTER LEDGE**, GALENA, FOSTER

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 42 N
LONGITUDE: 121 42 29 W
ELEVATION: 1397 Metres

NORTHING: 5879911
EASTING: 586577

LOCATION ACCURACY: Within 500M
COMMENTS: Foster shaft.

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Pyrite
ASSOCIATED: Quartz
ALTERATION: Ankerite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Proterozoic-Paleoz. GROUP: Snowshoe FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Quartzite
Schist
Argillaceous Quartzite
Quartzitic/Quartzose Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Foster Lodge showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies. A number of quartz vein showings occur in an area underlain mainly by micaceous quartzite, argillaceous quartzite and highly carbonate altered quartzose schist. In the vicinity of the original Foster Ledge are several quartz veins which are mainly less than 60 centimetres in width and which trend generally northerly with a westerly dip of about 70 degrees. Some of the quartz is mineralized with pyrite, galena and sphalerite. Visible gold has also been reported. Another vein, which is known as the Galena vein, occurs about 670 metres southwest of the Foster shaft and is mineralized with galena. The galena carries significant silver values. Other narrow quartz veins occur south of the Foster shaft, along and to the east of Oregon Gulch. These veins apparently carry low values of gold and silver. In general the veins on the Foster property occupy westerly dipping fractures belonging to a regional north-northeast trending system.

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EMPR AR 1877-396; 1886-236; 1933-126; 1934-C27
EMPR BULL *26, pp. 50-55
EMPR EXPL 1987-C287
EMPR ASS RPT 15942
EMPR PF (Winex Resources Inc. Prospectus Aug. 1987; Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo

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District, in 93H General Property File)
GSC MEM 149, p. 212; 181, p. 37
GSC SUM RPT 1932A, p. 57; 1933A, p. 42
GSC MAP 1424A
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **CANUSA**, BLUE JAY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 13 N
LONGITUDE: 121 32 52 W
ELEVATION: 1445 Metres

NORTHING: 5881074
EASTING: 597298

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of shaft.

COMMODITIES: Gold Lead Zinc Bismuth

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Cosalite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 3 Metres STRIKE/DIP: 120/65N TREND/PLUNGE:
COMMENTS: Attitude of Canusa vein, which is 2.9 to 3.4 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite
Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1957
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 24.0000 Grams per tonne
COMMENTS: Sample of pyritic material.
REFERENCE: Bulletin 38, page 73.

CAPSULE GEOLOGY

The Canusa showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies. The occurrence consists of several small surface showings and the larger Canusa vein which has only been exposed in underground workings. The area is underlain mainly by quartzite and schist, both of which are often argillaceous. Surface veins are up to 40 centimetres in width, are well mineralized with pyrite and have had values up to 4.8 grams per tonne of gold reported. Thin bands of pyritic replacement in quartzite also occur near the veins. The pyritic material has given values up to 24.0 grams per tonne of gold (Bulletin 38 p. 73). The Canusa vein has a width of 2.9 to 3.4 metres, strikes 120 degrees and dips 65 degrees north. It is mineralized sparingly with pyrite and also contains galena, some sphalerite, cosalite and occasionally some visible gold.

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BIBLIOGRAPHY

EMPR AR 1933-124; 1940-57; 1945-80,81; 1946-90,91; 1947-112;
*1948-87-90
EMPR ASS RPT 14836, 16116
EMPR BULL *38, pp. 72-74
EMPR EXPL 1986-C338; 1987-C287
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of
the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A
GSC MEM 181, p. 27
PR REL International Wayside Gold Mines Ltd., June 13, 2002
WWW <http://www.wayside-gold.com/s/Default.asp>

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 059**

NATIONAL MINERAL INVENTORY:

NAME(S): **NELSON CREEK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 05 24 N
LONGITUDE: 121 41 34 W
ELEVATION: 1204 Metres

NORTHING: 5883081
EASTING: 587544

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION: 0001 Metres

STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Vuggy quartz in fault zone is up to 1.0 metre thick.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Argillite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

CAPSULE GEOLOGY

The Nelson Creek showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

Black argillaceous rocks are cut by a major fault zone trending north-northeast. Vuggy quartz up to about a metre thick within the fault zone is sparsely mineralized with pyrite, galena and sphalerite.

BIBLIOGRAPHY

EMPR ASS RPT 13497, 15947
EMPR BULL 26, p. 57
EMPR EXPL 1985-C303; 1987-C289
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **SWEETWATER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 55 39 N
LONGITUDE: 121 25 01 W
ELEVATION: Metres

NORTHING: 5976616
EASTING: 603945

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian	Gog	McNaughton	Unnamed/Unknown Informal
Silurian			

LITHOLOGY: Amygdaloidal Greenstone
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Sweetwater showing occurs in a region in which Silurian platformal sediments and mafic volcanic rocks are in fault contact to the west with Hadrynian to Lower Paleozoic McNaughton Formation metasedimentary rocks. Mineralization consists of minor amounts of chalcopyrite in amygdaloidal greenstones.

BIBLIOGRAPHY

EMPR AR 1928-190
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **DAVIS CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 02 59 N
LONGITUDE: 121 43 50 W
ELEVATION: Metres

NORTHING: 5878555
EASTING: 585093

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area underlain mainly by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic Nicola Group sediments, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources being the numerous auriferous veins in the Downey succession of the Snowshoe Group.

As for most placer deposits in the area, production from the Davis Creek area took place primarily before 1900.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR BULL 1928, pp. 21,27
EMPR EXPL 1979, p. 219; 1980, p. 328; 1983, p. 426; 1988, p. 377;
1989, pp. 147-169
EMPR ASS RPT 5554, 6668, 7734, 11672, 16512
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR AR 1874-1895-tables; 1874-5; 1902-104; 1974-360
EMPR PF (Jones, R. 1989, Summary Report - Property Acquisitions and Phase I Drilling Program in the Wells Area, B.C.)
GSC MEM 149, pp. 163,171
GSC SUM RPT 1932A, p. 75
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 062**

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 876
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 064**

NATIONAL MINERAL INVENTORY:

NAME(S): **TWO-BIT CREEK**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 12 54 N
LONGITUDE: 121 37 59 W
ELEVATION: Metres

NORTHING: 5897060
EASTING: 591277

LOCATION ACCURACY: Within 1 KM

COMMENTS: On Two-Bit Creek near the junction with Big Valley Creek.

COMMODITIES: Barite

MINERALS

SIGNIFICANT: Barite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Industrial Min.
DIMENSION: 0001 Metres
COMMENTS: Vein of barite is 1 metre wide.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Paleozoic

GROUP

Slide Mountain

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Greywacke
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

The Two Bit Creek showing occurs within the Cariboo Terrane of the Omineca Belt in an area underlain mainly by greywacke and argillite probably of the Slide Mountain Group. These rocks are separated from the Barkerville Terrane by the Pleasant Valley thrust to the southwest. The Pundata thrust separates the area from the Slide Mountain Terrane to the northeast.

A vein of barite about 1 metre wide has been reported on the property.

BIBLIOGRAPHY

EMPR IND MIN FILE (Barite Occurrences in BC (in Ministry Library))
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 878
REPORT: RGEN0100

MINFILE NUMBER: **093H 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **MILE 83**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H14E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 47 30 N
LONGITUDE: 121 03 35 W
ELEVATION: 670 Metres

NORTHING: 5962089
EASTING: 627811

LOCATION ACCURACY: Within 5 KM

COMMENTS: Along CNR tracks east of Prince George at miles 81.8, 83.0, 89.8 and 103.3.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay 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: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

Blue plastic clays occur along the CNR tracks north of the Fraser River. The clays burn salmon and are suitable for common brick.

BIBLIOGRAPHY

EMPR BULL 30, p. 54
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 065**

MINFILE NUMBER: **093H 066**

NATIONAL MINERAL INVENTORY:

NAME(S): **ILTZUL RIDGE**, SANDY LAKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 07 38 N
LONGITUDE: 121 12 59 W
ELEVATION: 1280 Metres

NORTHING: 5887909
EASTING: 619341

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on surface trace of belt of Mural Formation, as shown on Geological Survey of Canada Map 1356A.

COMMODITIES: Limestone Dolomite

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite
MINERALIZATION AGE: Lower Cambrian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
COMMENTS: Bedding dips 20 to 35 degrees northeast. Deposit dimension is 19,000 X 2,500 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Gog	Mural	

DATING METHOD: Fossil
MATERIAL DATED: Various fossils

LITHOLOGY: Oolitic Limestone
Dolomitic Limestone
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

A belt of Lower Cambrian aged Mural Formation extends northwest from Sandy Lake along Iltzul Ridge for 19 kilometres. The belt varies from 0.5 to 2.5 kilometres in width. Bedding generally strikes northwest and dips between 20 and 35 degrees northeast.

Two carbonate members separated by shale are contained within the formation. The lower member is comprised of oolitic and bioclastic fossiliferous limestone. The upper carbonate member is made up almost entirely of massive beds of dolomitic micrite.

BIBLIOGRAPHY

EMPR BULL 47, pp. 24-29, Figure 2
GSC MEM 149
GSC P 72-35, pp. 18-19,51
GSC MAP 1356A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/18

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 067**

NATIONAL MINERAL INVENTORY:

NAME(S): **CUNNINGHAM PASS**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H03W 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 40 N
LONGITUDE: 121 26 16 W
ELEVATION: 1524 Metres

NORTHING: 5882063
EASTING: 604649

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on surface trace of limestone belt (Cunningham Formation), as shown in Bulletin 38, Figure 2.

COMMODITIES: Limestone Dolomite

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Ferrodolomite Quartz Muscovite
ALTERATION: Ferrodolomite
MINERALIZATION AGE: Hadrynian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 0021 x 0002 Metres STRIKE/DIP:
COMMENTS: Belt strikes northwest, extends for 21 kilometres and is 2.2 kilometres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Cunningham	

DATING METHOD: Fossil

LITHOLOGY: Limestone
Dolomite
Chlorite Schist
Phyllite
Quartz

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

A belt of limestone of the Hadrynian aged Cunningham Formation outcrops in the vicinity of Cunningham Pass and Cunningham North Mountain and continues northwest for 21 kilometres to 8 Mile Lake. The belt follows the crest of the Cunningham anticline, which is segmented by a series of northeast trending faults. Overlying chloritic schists, phyllites and quartzites of the Yankee Belle Formation flank the belt to the east and west. The belt varies up to 2.2 kilometres wide.

The deposit is comprised of massive, fine grained, grey limestone that is hydrothermally altered over widespread areas to light grey and buff mottled, medium grained ferroan dolomite. The limestone is commonly cut by thin white calcite veinlets. Some argillaceous layer become more numerous near the top of the formation. In thin section the rock displays up to 5 percent in detrital quartz and calcite.

BIBLIOGRAPHY

EMPR BULL 38, p. 23
GSC P 72-35, p. 51
GSC MEM 149
GSC MAP 1356A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 068**

NATIONAL MINERAL INVENTORY:

NAME(S): **ISAAC LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H02W 093H07W 093H06E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 15 16 N
LONGITUDE: 120 56 01 W
ELEVATION: 1372 Metres

NORTHING: 5902568
EASTING: 637851

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on surface trace of belt of Cunningham Formation along east side of Isaac Lake, as shown on Geological Survey of Canada Map 1356A.

COMMODITIES: Limestone Dolomite

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Quartz
MINERALIZATION AGE: Hadrynian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 0028 x 0003 Metres STRIKE/DIP:
COMMENTS: Bedding strikes northwest, dips 25 to 40 degrees southwest. Belt extends for 28 kilometres and is up to 3 kilometres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Cunningham	

DATING METHOD: Fossil

LITHOLOGY: Limestone
Dolomite
Shale
Siltstone
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

A largely fault bounded belt of limestone with minor dolomite, shale, siltstone and sandstone of the Hadrynian Cunningham Formation, Cariboo Group, extends northwest from Mt. Amos Bowman to Wolverine Mountain along the east side of Isaac Lake for 28 kilometres. The belt varies up to 3 kilometres wide. Various exposures of overlying chloritic schist, phyllite and quartzite of the Yankee Belle Formation lie within the belt. Bedding generally strikes northwest and dips between 25 and 40 degrees southwest.

The limestone consists of bedded to massive micrite and calcarenite with oolites, pellets and algal grains. The dolomite is commonly silty and sandy. Rounded quartz granules are sometimes contained in the dolomite.

BIBLIOGRAPHY

EMPR BULL 47, pp. 24-29, Figure 2
GSC P 68-1A, pp. 15-19; 72-35, pp. 35-38
GSC MAP 1356A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/18

CODED BY: GSB
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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: 882
REPORT: RGEN0100

MINFILE NUMBER: **093H 069**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRAND CANYON**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H13E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 56 24 N
LONGITUDE: 121 38 47 W
ELEVATION: Metres

NORTHING: 5977695
EASTING: 588854

LOCATION ACCURACY: Within 1 KM
COMMENTS: West of Longworth 12.8 kilometres.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Gog	Undefined Formation	

LITHOLOGY: Limestone
Shale
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

CAPSULE GEOLOGY

The Grand Canyon limestone showing occurs within the Lower Cambrian Gog Group. The Gog Group is an assemblage of shale, sandstone and limestone exposed in the incision of the Fraser River. The occurrence comprises a broad band of mixed limestone which crops out on both sides of the Fraser River.

BIBLIOGRAPHY

EMPR IND MIN FILE (McCammon, J.W. 1973 Limestone Occurrences in B.C. p.24 (in Ministry Library))
EMPR PF (Jones, W.C., 1962, Grand Canyon Damsite)
GSC MAP 1356A, 1424A
GSC P 72-35, p. 51

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 069**

MINFILE NUMBER: **093H 070**

NATIONAL MINERAL INVENTORY:

NAME(S): **PURDEN LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 54 00 N
LONGITUDE: 121 55 05 W
ELEVATION: Metres

NORTHING: 5972938
EASTING: 571090

LOCATION ACCURACY: Within 1 KM

COMMENTS: Southwest of Sinclair Mills, 16.1 kilometres.

COMMODITIES: Bentonite

MINERALS

SIGNIFICANT: Bentonite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain

PHYSIOGRAPHIC AREA: Bowron Trench

CAPSULE GEOLOGY

A large deposit of bentonite is reported at Purden Lake. No other information on this deposit exists.

BIBLIOGRAPHY

EMPR AR 1960-A69
EMPR EXPL 1980-332
EMPR ASS RPT 8160
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **WD, HAGGEN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 28 07 N
LONGITUDE: 121 27 12 W
ELEVATION: 1280 Metres

NORTHING: 5925515
EASTING: 602666

LOCATION ACCURACY: Within 500M

COMMENTS: Zone of breccia mineralization.

COMMODITIES: Zinc Lead Barite

MINERALS

SIGNIFICANT: Sphalerite Galena Barite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Devonian	Cariboo	Black Stuart	

LITHOLOGY: Argillite
Siltstone
Chert
Breccia
Siltstone
Limestone

HOSTROCK COMMENTS: The Cariboo Group is Hadrynian to Lower Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The showing is located within the Cariboo Terrane of the Omineca Belt near the contact between the Hadrynian to Lower Paleozoic Cariboo Group and the Lower Devonian Black Stuart Formation. This contact is marked by a steeply dipping reverse fault with Black Stuart Group argillite, siltstone and chert in the footwall and Cariboo Group siltstone and limestone, possibly of the Dome Creek Formation, in the hanging wall.

Mineralization occurs as pockets within a tectonic breccia in the immediate footwall of the fault. The breccia contains 1-4 per cent fine-grained orange sphalerite with minor galena and barite occurring as disseminations in fine-grained white quartz and as rims on grey chert fragments. Thin sphalerite-galena-barite veinlets are also present cutting sedimentary chert breccia.

BIBLIOGRAPHY

EMPR ASS RPT 9331, *10607
EMPR EXPL 1980-332; 1982-298
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/23

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOWRON RIVER**

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093H12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 42 40 N
LONGITUDE: 121 41 43 W
ELEVATION: 1219 Metres

NORTHING: 5952171
EASTING: 586113

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located 4.5 kilometres west of the Bowron River (Industrial Mineral File - Map 093H).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

SHAPE: Tabular

DIMENSION: 1000 x 750 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Outcrop area.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Undefined Group

FORMATION

Mural

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1983

SAMPLE TYPE: Grab

COMMODITY

GRADE

Limestone

53.9000

Per cent

COMMENTS: Average of 12 grab samples: grade is for CaO.

REFERENCE: Industrial Minerals File - Suess, Mike, 1987.

CAPSULE GEOLOGY

Limestone of the Lower Cambrian Mural Formation(?) outcrops over a 750 by 1000 metre area on the steep west side of a small conical shaped mountain. The deposit is 4.5 kilometres west of the Bowron River, 23.8 kilometres south-southeast of the conjunction of Highway 16 and the Bowron River logging road.

The deposit is comprised of medium to coarse grained (3 to 5 millimetre), white to grey to black limestone. The white to light grey rock occurs higher up on the mountain and the dark grey to black rock lies near the base. A sample taken from a stock pile of crushed limestone (0.5 centimetre sized) contained 46.8 per cent CaO, 7.6 per cent MgO, 0.34 per cent SiO₂, 0.08 per cent Al₂O₃, 0.11 per cent Fe₂O₃ and 44.6 per cent ignition loss (Fieldwork 1985, p. 240).

Twelve grab samples of limestone rubble (talus), weathered from higher up on the mountain side, averaged 53.90 per cent MgO, 0.80 per cent MgO, 2.16 per cent SiO₂, 0.10 per cent Al₂O₃, 0.07 per cent Fe₂O₃, 0.01 per cent Na₂O, 0.07 per cent K₂O, 0.01 per cent TiO₂, 0.01 per cent MnO and 0.01 per cent Cr₂O₃ (Industrial Mineral File - M. Suess, 1987).

Western Lime & Marble Inc. developed a small quarry in the face of a cliff in 1983. Some limestone, intended for the agricultural markets in Alberta, was crushed on site. The high cost of transporting the limestone to Alberta led to the discontinuation of further development.

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BIBLIOGRAPHY

EMPR EXPL 1983 p.211
EMPR FIELDWORK 1983, pp. 215-216; *1985 p. 240
EMPR IND MIN FILE (*Suess, Mike 1987 Report (in Ministry Library))
GSC MAP 1424A
GSC P 72-35, p. 51

DATE CODED: 1986/03/14
DATE REVISED: 1989/10/05

CODED BY: GRF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 074**

NATIONAL MINERAL INVENTORY:

NAME(S): **WILLOW RIVER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 06 49 N
LONGITUDE: 121 43 49 W
ELEVATION: Metres

NORTHING: 5885662
EASTING: 584986

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered
CLASSIFICATION: Replacement Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Harveys Ridge Succession	

LITHOLOGY: Graphitic Schist

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Harveys Ridge is informal name.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Willow River area is underlain mainly by the Harveys Ridge succession of the Hadrynian to Paleozoic Snowshoe Group. This succession in general consists of black and grey siltite, micaceous quartzite, phyllite, limestone and minor dolostone (Geological Survey of Canada Memoir 421). Graphitic schist has been reported from early work in the area (Geological Survey of Canada Summary Report 1933A, pp. 32-33)

BIBLIOGRAPHY

EMPR PF (Sketch Map of Area and Plan of Willow River Mining Ground, date unknown; Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
EMPR ASS RPT 17687
GSC SUM RPT 1933A, pp. 32,33
GSC MEM 149; 421
GSC MAP 1424A

DATE CODED: 1986/07/14
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 075**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO CORONADA**, YUMA, ACE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 06 43 N
LONGITUDE: 121 34 00 W
ELEVATION: 1219 Metres

NORTHING: 5885683
EASTING: 595940

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate location of adit.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Replacement Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Phyllite
Limestone
Quartzite
Meta Siltstone

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Downey succession is informal name.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Greenschist

CAPSULE GEOLOGY

The Cariboo Coronada showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The area, located adjacent to Wells, is underlain by phyllite, siltite, limestone and quartzite of the Downey succession, Snowshoe Group. As in the Mosquito Creek deposits nearby, gold and silver occur within pyritic quartz veins. There is also at least one pyritic replacement body adjacent to the contact between the informally named "Baker" and "Rainbow" members. The contact can be traced through the region for a distance of over 15 kilometres. Although there has been significant underground exploration, reported gold and silver values are relatively low.

In 1934, an adit was driven about 350 metres north into the mountain southeast of Martin Creek. The adit cut several veins a "few inches to 2 feet" wide, several bands of calcareous argillite and green schist partly replaced by pyrite.

Another adit was driven about 115 metres north into the mountain northwest of Martin Creek. The adit cut several narrow quartz veins, many quartz gashes and stringers of irregular shape. Some of the quartz is well-mineralized with pyrite. A band of replacement ore "2 inches wide cut by the adit assayed \$6 a ton in gold" (Geological Survey of Canada Memoir 181, p. 36).

Open cuts and a shaft on the mountain top expose several quartz veins "a few inches to 8 feet wide" mineralized with galena and pyrite. The veins strike 030 degrees east. The veins are mostly in argillaceous and sericite schists but one is in a body of undefined shape of quartz porphyry.

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BIBLIOGRAPHY

EMPR ASS RPT 8089, 8605, 8819, 9348, 14454, 15837, 17355
EMPR BULL 38, p. 74
EMPR EXPL 1980, pp. 329,330; 1986-C341; 1987-C288
EMPR AR 1933-A123; *1934-C25
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of
the Northeast Cariboo District, in 93H General Property File)
GSC MEM *181, 421
GCNL #93, #206, 1981; #134, 1987
INT PROS & DEV Jan/Feb 1984
VSW Jun.24, 1987
GSC MAP 1424A

DATE CODED: 1986/07/16
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 075**

MINFILE NUMBER: **093H 076**

NATIONAL MINERAL INVENTORY:

NAME(S): **MYSTERY**, LITTLE CHIEF, WHIPSAW,
HARD, ISLAND, WELLS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 07 29 N
LONGITUDE: 121 38 02 W
ELEVATION: 1375 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5887017
EASTING: 591413

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Hydrothermal Replacement
DIMENSION: 0004 Metres Epigenetic
COMMENTS: Vein is 3.7 metres wide. STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Downey Succession

LITHOLOGY: Phyllite
Argillite
Slate

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Downey succession is informal name.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 5.0000 Grams per tonne
COMMENTS: Sample from 3.7 metre wide quartz vein.
REFERENCE: Assessment Report 13255.

CAPSULE GEOLOGY

The Mystery and Little Chief adits lie within the Barkerville terrane of the Omineca Belt. The Barkerville terrane is in thrust contact with Triassic Quesnellia terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo terrane rocks to the east. The Barkerville terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. These rocks have been regionally metamorphosed to greenschist facies.

The area is underlain by phyllite, argillite and slate of the Snowshoe Group Downey succession. The showing consists of a 3.7 metre wide quartz vein from which a grab sample assayed 5 grams per tonne gold (Assessment Report 13255). Replacement mineralization similar to that of the Mosquito deposit (93H 010) has recently been located (Assessment Report 17276).

BIBLIOGRAPHY

EMPR ASS RPT 9560, 10620, *13255, 17276
EMPR AR 1902-H112
EMPR EXPL 1982-296; 1984-315
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)

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BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1986/07/17
DATE REVISED: 1989/08/17

CODED BY: GRF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 077**

NATIONAL MINERAL INVENTORY:

NAME(S): **TOM MOUNTAIN**, WELL-KNOWN, UNKNOWN,
MOUNT TOM

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

MINING DIVISION: Cariboo

LATITUDE: 53 10 58 N
LONGITUDE: 121 43 30 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5893362
EASTING: 585202

LOCATION ACCURACY: Within 1 KM
COMMENTS: Confluence of Sugar and Cooper creeks.

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Downey Succession	

LITHOLOGY: Argillite
Garnet Mica Schist
Phyllite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age. Downey succession is informal name.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland
RELATIONSHIP: Syn-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The Tom Mountain showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The showing consists of a number of quartz veins distributed over a distance of about two kilometres to the south of the junction of Sugar and Cooper creeks. The veins are hosted by phyllite, slaty argillite and garnet mica schist of the Downey succession, Snowshoe Group. While the regional metamorphic grade is greenschist facies, the presence of garnet in schists suggests retrogression from a higher grade metamorphic facies.

Mineralization consists of galena, sphalerite and pyrite with associated gold and silver values within some of the quartz veins.

BIBLIOGRAPHY

EMPR ASS RPT 1769, *10586, 12875, 15161
EMPR EXPL 1986-C340
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC ANN RPT *1887-88, v. 3, part 1, pp. 40-42
GSC MEM 181, pp. 37,38
GSC MAP 1424A
EMPR AR 1886-234,235; 1945-A82; *1947-A117-A123
GCNL #118, 1983; #127, 1984

DATE CODED: 1986/07/17
DATE REVISED: 1989/07/05

CODED BY: GRF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 078**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACK BULL**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 25 N
LONGITUDE: 121 33 15 W
ELEVATION: 1433 Metres

NORTHING: 5881436
EASTING: 596862

LOCATION ACCURACY: Within 500M
COMMENTS: In Lowhee Gulch.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 0245 x 0002 Metres
COMMENTS: Vein is exposed for 245 metres and is 1.2 to 3.7 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Snowshoe	Undefined Formation	

LITHOLOGY: Quartzite

HOSTROCK COMMENTS: Snowshoe Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Quesnel Highland

RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY

YEAR: 1948

Gold GRADE 11.0000 Grams per tonne

COMMENTS: Selected sample of pyrite rich vein material.
REFERENCE: Minister of Mines Annual Report 1948, page 90.

CAPSULE GEOLOGY

The Black Bull showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The area is underlain by strata of both the Downey and Hardscrabble Mountain successions of the Snowshoe Group. These are in fault contact with each other along Lowhee Gulch. A 1.2 to 3.6 metre wide quartz vein, exposed over a distance of 245 metres along the bottom of the gulch, contains pyrite and gold mineralization. Two grab samples taken from the vein assayed 4.8 and 11.0 grams per tonne (Annual Report 1948, p 90). The quartz vein appears to be truncated by a fault at its southeast end.

BIBLIOGRAPHY

EMPR AR *1945-80,81; 1946-90,91; *1948-87-90
EMPR BULL *38, pp. 72-74
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

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BIBLIOGRAPHY

GSC MEM 149
PR REL International Wayside Gold Mines Ltd.
WWW <http://www.wayside-gold.com/s/Default.asp>

DATE CODED: 1986/07/22
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 079**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEADMAN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 12 N
LONGITUDE: 121 31 13 W
ELEVATION: 1341 Metres

NORTHING: 5879227
EASTING: 599179

LOCATION ACCURACY: Within 500M

COMMENTS: On Williams Creek opposite Walkers Gulch.

COMMODITIES: Gold Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Arsenopyrite Pyrite

ASSOCIATED: Quartz Clay

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Tabular

MODIFIER: Sheared

DIMENSION: 0002

Metres

STRIKE/DIP: 120/90

TREND/PLUNGE:

COMMENTS: Attitude of quartz vein which is up to 2.0 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Snowshoe

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Schist

HOSTROCK COMMENTS: Snowshow Group is (?)Hadrynian to Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Quesnel Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1897

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

34.0000

Grams per tonne

REFERENCE: Minister of Mines Annual Report 1897, page 473.

CAPSULE GEOLOGY

The Steadman showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The area is underlain by strata of both the Downey and Hardscrabble Mountain successions, Snowshoe Group. A near vertical quartz vein up to two metres wide, bounded by clay gouge on both sides, crosscuts schist at about 120 degrees. Mineralization in the vein comprises pyrite, sphalerite, galena, chalcopyrite and arsenopyrite. Average assays of samples taken from the vein in 1897 were about 34 grams per tonne gold (Annual Report 1897, p 473).

BIBLIOGRAPHY

EMPR AR 1886-198,231; 1897-473; 1903-109
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MEM 149, p. 182; 181, p. 30
GSC SUM RPT 1932A, p. 53

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GSC MAP 1424A

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REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 080**

NATIONAL MINERAL INVENTORY:

NAME(S): **PANI**, PANI SOUTH

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 02 20 N
LONGITUDE: 121 30 46 W
ELEVATION: 1417 Metres

NORTHING: 5877631
EASTING: 599715

LOCATION ACCURACY: Within 500M
COMMENTS: Pani claim on Williams Creek.

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Snowshoe Undefined Formation

LITHOLOGY: Argillite
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Quesnel Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 171.4000 Grams per tonne
Lead 6.0000 Per cent
Zinc 2.0000 Per cent

COMMENTS: Selected sample of mineralization, trace gold.
REFERENCE: Minister of Mines Annual Report 1930, page 167.

CAPSULE GEOLOGY

The Pani showing lies within the Barkerville Terrane of the Omineca Belt. The Barkerville Terrane is in thrust contact with Triassic Quesnellia Terrane rocks to the west and Hadrynian to Lower Paleozoic Cariboo Terrane rocks to the east. The Barkerville Terrane in this region is underlain by the dominantly metasedimentary rocks of the Hadrynian to Lower Paleozoic Snowshoe Group. In this area the Snowshoe Group comprises limestone, phyllite and quartzite. These rocks have been regionally metamorphosed to greenschist facies.

The area is underlain mainly by argillite and siltstone of the Harveys Ridge succession, Snowshoe Group. Subparallel quartz veins trending northwest alternate with country rock over a width of about 18 metres. These veins contain galena, sphalerite and pyrite in places. A selected sample of the mineralization in 1930 assayed 171.4 grams per tonne silver, 6 per cent lead, 2 per cent zinc and trace gold (Annual Report 1930 p.167).

BIBLIOGRAPHY

EM EXPL 1999-13-24
EMPR AR *1930-167
EMPR BULL 38, p. 87
EMPR PF (Sutherland Brown, A., Holland, S.S., (1956) The Structure of the Northeast Cariboo District, in 93H General Property File)
GSC MAP 1424A

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GSC MEM 149

DATE CODED: 1986/07/24
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CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 081**

NATIONAL MINERAL INVENTORY:

NAME(S): **LA FONTAINE**, ELEVEN OF ENGLAND, LIGHTNING CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 05 N
LONGITUDE: 121 44 51 W
ELEVATION: 1173 Metres

NORTHING: 5878721
EASTING: 583954

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The La Fontaine placer occurs in a gravel, silt and clay-filled former channel of Lightning Creek. Auriferous gravels in this channel occur immediately above bedrock which in this area consists of rocks belonging to the Snowshoe Group.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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- EMPR AR 1875-608; 1876-418; 1896-509; 1898-976; 1903-57-59; 1904-43; 1905-52; 1906-39; 1907-39; 1921-113; 1922-121; 1931-85; 1935-C12-C13; 1946-198
- EMPR EXPL 1987, p. C289; 1989, pp. 147-169
- EMPR ASS RPT 16315, 16512
- EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp. 463-473
- EMPR PF (Mining Lease Indenture, Eleven of England Claim, 1895; Map of Lightning Creek Property, Consolidated Gold Alluvials of B.C. Ltd., c. 1935; MacKenzie, D.C., 1935, Report on Lightning Creek Properties, Consolidated Gold Alluvials of B.C. Ltd.; Map of Lightning Creek Property, 1946; Jones, R. 1989, Summary Report - Property Acquisitions and Phase I Drilling Program in the Wells

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
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PAGE: 900
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BIBLIOGRAPHY

Area, B.C.; La Fontaine claim, date unknown)
GSC MEM 149, pp. 167-170
GSC MAP 1424A

DATE CODED: 1986/08/06
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 082**

NATIONAL MINERAL INVENTORY:

NAME(S): **DUNBAR FLAT**, LIGHTNING CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 18 N
LONGITUDE: 121 40 46 W
ELEVATION: 1341 Metres

NORTHING: 5875496
EASTING: 588576

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold production came from a bench along Lightning Creek. "Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR ASS RPT 16315, 16512
EMPR EXPL 1987, p. C289; 1989, pp. 147-169
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A
GSC MEM 149, p. 160

DATE CODED: 1986/08/06
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CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 083**

NATIONAL MINERAL INVENTORY:

NAME(S): **STANLEY**, LIGHTNING CREEK, VAN WINKLE,
VANCOUVER, VICTORIA, COSTELLO,
VULCAN, SOUTH WALES, AH QUAY,
PEEBLES

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 02 11 N
LONGITUDE: 121 42 49 W
ELEVATION: 1158 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5877092
EASTING: 586255

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

There were a large number of workings near Stanley along Lightning Creek. In this vicinity gold bearing gravels lay mainly on bedrock. In some cases the gravels are at a considerable depth below the present creek level and are overlain by glacial material. In other cases, the gravels occur on bedrock benches along the sides of and above the present creek level.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1905-52; 1911-49; 1912-50; 1913-56; 1914-63; 1915-56; 1916-38;
1917-138; 1920-98; 1930-164; 1931-89; 1941-87; 1965-252; 1966-255;
1967-296
EMPR ASS RPT 16315, 16512
EMPR BULL 1948, No. 26, pp. 30-34
EMPR EXPL 1987, p. C289; 1989, pp. 147-169

RUN DATE: 26-Jun-2003
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MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 903
REPORT: RGEN0100

BIBLIOGRAPHY

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463-473
EMPR GEM 1970-484; 1974-360
EMPR PF (Claim Maps of claims in Costello and Vulcan Shaft areas,
dates unknown; Jones, R. 1989, Summary Report - Property Acquisi-
tions and Phase I Drilling Program in the Wells Area, B.C.)
GSC MAP 1424A
GSC MEM 149, pp. 158-172
GSC SUM RPT 1932A, pp. 74,75
GCNL #161(Aug.22), 2000

DATE CODED: 1986/08/05
DATE REVISED: 1989/02/21

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 084**

NATIONAL MINERAL INVENTORY:

NAME(S): **TWO BIT CREEK PLACER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 13 11 N
LONGITUDE: 121 38 45 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5897569
EASTING: 590414

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area underlain mainly by Slide Mountain Group volcanics.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The Two Bit Creek placer deposits occur within the Cariboo Terrane, however, rocks of the Barkerville Terrane outcrop at the top of Two Bit Creek. The Barkerville Terrane is separated from the Cariboo Terrane by the Pleasant Valley Thrust which crosses the top part of the creek.

A small amount of placer gold production has been recorded from Two Bit Creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1950-199; 1955-85; 1956-141
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

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

CODED BY: GRF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093H 085**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOAT RIVER PLACER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H07E
BC MAP:
LATITUDE: 53 26 25 N
LONGITUDE: 120 41 39 W
ELEVATION: Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5923726
EASTING: 653155

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by Issac Formation metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

The Goat River drains a region underlain by the Cariboo Terrane which, unlike the Barkerville Terrane, has not been a prolific producer of gold in the past. The area is underlain by Issac Formation metasedimentary rocks.

Placer gold has been recovered from a section of the Goat River underlain by glacial silt. This section, several kilometres in length, begins at a point about 11 kilometres upstream from the mouth of the river. Only a small amount of placer production is recorded.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR BULL 28, pp. 21, 25
EMPR PF (Lease on Goat River, Sketch of Claims on Goat River, and Plan of Creek Leases Fraser and Goat Rivers, dates unknown; Plan of Goat River Leases, c.1930's; Plan of Goat River Leases, 1931; Letter to Provincial Mineralogist from Resident Engineer re: Placer operations on Goat River, 1931))
GSC MAP 1424A

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 086**

NATIONAL MINERAL INVENTORY:

NAME(S): **WINGDAM CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 02 07 N
LONGITUDE: 121 58 41 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5876683
EASTING: 568526

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain by rocks of both Quesnellia and Barkerville terranes.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

Quesnel

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The Wingdam Creek area has produced a considerable amount of placer gold, however, only a small amount of production is recorded from this deposit. The area is underlain by rocks of both the Quesnellia and Barkerville Terranes.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1950-200; 1963-134
EMPR ASS RPT 6295, 7094, 7540, 7550, 8269, 16113, 16512
EMPR BULL 28, pp. 22,31
EMPR EXPL 1979, p. 219; 1980, p. 331; 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A
Placer Dome File
WWW <http://www.infomine.com/>

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 087**

NATIONAL MINERAL INVENTORY:

NAME(S): **HYDE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 07 32 N
LONGITUDE: 121 57 07 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5886751
EASTING: 570130

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which, are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded for Hyde Creek. The production has apparently been mainly from benches along the creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1926-170; 1939-107; 1940-93; 1946-197; 1947-192; 1948-175; 1949-241; 1950-199; 1951-203; 1952-237; 1953-175; 1955-85; 1956-141
EMPR EXPL 1989, pp. 147-169
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EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC SUM RPT 1933A, p. 58
GSC MAP 1424A

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 088**

NATIONAL MINERAL INVENTORY:

NAME(S): **KONG FU CREEK**, KWONG FOO CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 07 01 N
LONGITUDE: 121 55 46 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5885815
EASTING: 571650

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Underlain mainly by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group. A small amount of placer gold production is recorded from Kong Fu Creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR AR 1941-88; 1942-87; 1945-125; 1951-203; 1952-237; 1953-175; 1954-170
EMPR BULL 28, pp. 22,26
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 089**

NATIONAL MINERAL INVENTORY:

NAME(S): **TREGILLUS CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 07 44 N
LONGITUDE: 121 56 05 W
ELEVATION: Metres

NORTHING: 5887139
EASTING: 571277

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold mining has apparently taken place primarily on the benches of Tregillus Creek where gold was found in a thin stratum of gravel on top of the benches.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR BULL 28, pp. 22,30
EMPR AR 1953-175; 1962-138; 1963-132; 1964-175
EMPR GEM 1973-528; 1974-361
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp. 463-473
GSC SUM RPT 1933A, pp. 56,57
GSC MAP 1424A

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 090**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARRY CREEK**, BERRY CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 10 30 N
LONGITUDE: 121 51 33 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5892346
EASTING: 576250

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which, are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Coarse and rough placer gold is reported to have been obtained from a bench on Barry Creek just above the Willow River.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR BULL 28, pp. 21,24
EMPR AR 1878,1880,1884,1885 - tables
EMPR EXPL 1989, pp. 147-169
GSC SUM RPT 1933A, p. 59
GSC MAP 1424A

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 091**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROUCHON CREEK**, ROUCHEON CREEK, RUCHEON CREEK,
LARSEN GULCH

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 08 28 N
LONGITUDE: 121 52 18 W
ELEVATION: 1036 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5888563
EASTING: 575474

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Most of the placer gold production from Rouchon Creek has been from workings in the stream bed. These workings apparently extended for about 1,200 metres upstream from the mouth of the creek. Attempts were made to locate an old channel, particularly along Larsen Gulch, but it is not known if they were successful.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EM EXPL 1999-13-24
EMPR AR 1876,1878,1892,1895 - tables; 1889-274; 1902-104; 1942-88;
1943-82; 1944-76; 1945-125; 1946-197; 1947-192; 1952-237;
1953-175; 1954-170; 1956-141
EMPR BULL 28, pp. 22,29
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A
GSC SUM RPT *1933A, pp. 57,58

DATE CODED: 1986/08/08
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 091**

MINFILE NUMBER: **093H 092**

NATIONAL MINERAL INVENTORY:

NAME(S): **WORMWOLD CREEK**, WORMALD CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 02 48 N
LONGITUDE: 121 52 27 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5878054
EASTING: 575472

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded for Wormwold Creek. Mining was probably done mostly by hydraulicking although attempts were made at deep mining.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1907-39; 1908-42; 1910-43; 1911-50; 1939-107; 1948-177; 1951-204
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR BULL 28, pp. 22,31
EMPR ASS RPT 16512
GSC SUM RPT 1933A, p. 53
GSC MAP 1424A

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 093**

NATIONAL MINERAL INVENTORY:

NAME(S): **DONOVAN CREEK**, POORMAN CREEK, ROTTACKER PLACERS,
STRAND

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 03 16 N
LONGITUDE: 121 47 58 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5879001
EASTING: 580467

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold production on Donovan Creek has apparently been mainly from hydraulicking gravel immediately above bedrock. The gravel is overlain by glacial silt and gravel. In one pit at least, the gold bearing gravels were reported to be 1.5 metres thick. The gold is coarse, worn and nuggety.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1892,1895-tables; 1925-147; 1926-170; 1927-168; 1928-194;
1930-165; 1931-85; 1932-100; 1933-132; 1935-C36; 1939-106;
1940-93; 1941-88; 1942-87; 1945-126; 1946-198; 1947-193
EMPR BULL 28, pp. 21,25
EMPR ASS RPT 16512
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR EXPL 1989, pp. 147-169
GSC SUM RPT 1933A, p. 52
GSC MAP 1424A

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 093**

MINFILE NUMBER: **093H 094**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOULDER CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 03 24 N
LONGITUDE: 121 45 37 W
ELEVATION: 1219 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5879293
EASTING: 583087

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold production is reported from a narrow streak of weathered gravel overlying bedrock. The gravel is part of unconsolidated deposits with a total thickness of about 30 metres. The gold is coarse and flat.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR BULL 28, pp. 21,23
EMPR ASS RPT 16512
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR EXPL 1989, pp. 147-169
GSC MAP 1424A
GSC SUM RPT 1918B, p. 50; 1933A, p. 52

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 095**

NATIONAL MINERAL INVENTORY:

NAME(S): **JAWBONE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 03 43 N
LONGITUDE: 121 45 21 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5879885
EASTING: 583375

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded from Jawbone Creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR PF (Jones, R. 1989, Summary Report - Property Acquisitions and Phase I Drilling Program in the Wells Area, B.C.)
EMPR BULL 28, pp. 22,26
EMPR AR 1874-table; 1875-608
EMPR ASS RPT 16512
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR EXPL 1989, pp. 147-169
GSC MAP 1424A

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 096**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANDERSON CREEK**, TRELEASE PLACER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 02 44 N
LONGITUDE: 121 44 55 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5878070
EASTING: 583891

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded for Anderson Creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1927-168; 1930-165; 1941-88; 1942-87; 1946-198; 1949-242;
1950-200; 1951-204
EMPR EXPL 1989, pp. 147-169
EMPR ASS RPT 16512
EMPR BULL 26, p. 17; 28, pp. 21,23
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149, pp. 163,171
GSC MAP 1424A

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 097**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAST CHANCE CREEK**, BROWN SHAFT, KWONG LUNG KEE PLACER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 02 12 N
LONGITUDE: 121 43 20 W
ELEVATION: 1204 Metres

NORTHING: 5877113
EASTING: 585678

LOCATION ACCURACY: Within 500M

COMMENTS: Coordinates of Last Chance hydraulic.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Some superficial placer workings on Last Chance Creek were relatively rich. It was thought that perhaps the modern creek cut into a buried pre-glacial channel at certain points and reconcentrated the gold content of the ancient channel on the bedrock of the modern creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1877,1881,1883,1895-tables; 1875-608; 1882-356; 1902-104;
1910-44; 1925-147; 1927-168; 1931-86; 1932-100; 1933-132; 1935-C36;
1938-C51; 1939-106; 1948-177; 1949-242; 1950-200; 1951-204;
1952-238; 1955-85; 1956-141
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR BULL 28, pp. 22,27
EMPR ASS RPT 16512
EMPR PF (Jones, R. 1989, Summary Report - Property Acquisitions and
Phase I Drilling Program in the Wells Area, B.C.)
GSC MEM 149, p. 163

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 918
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BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1986/08/11
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 098**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHISHOLM CREEK**, SNOWDEN SHAFT, OREGON GULCH,
DRY GULCH

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 02 50 N
LONGITUDE: 121 42 26 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Coordinates of Snowden shaft.

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5878305
EASTING: 586662

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Some hydraulicking of a shallow deposit of gravel resting on clay was carried out in the bed of Chisholm Creek. A buried channel is covered by about 55 metres of glacial debris and gravel. A considerable amount of underground development work was carried out but there was probably only a relatively small amount of underground production.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR AR 1874,1877-1891,1894,1895-tables; 1875-608; 1902-104;
1914-64; 1915-55; 1916-38; 1917-128,138; 1918-130; 1930-164;
1932-101; 1933-132
EMPR PF (Plat of Black Diamond claim near Chisholm Creek, c.1895)
EMPR ASS RPT 16512
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EMPR EXPL 1989, pp. 147-169
GSC SUM RPT 1918B, p. 50; 1932A, p. 75
GSC MEM 149, pp. 166,172,173

MINFILE NUMBER: **093H 098**

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 920
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1424A

DATE CODED: 1986/08/11
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CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 922
REPORT: RGEN0100

BIBLIOGRAPHY

unknown)
GSC MAP 1424A
GSC MEM *149, p. 173
GSC SUM RPT 1918B, p. 49

DATE CODED: 1986/08/12
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 100**

NATIONAL MINERAL INVENTORY:

NAME(S): **ENNERDALE PLACER**, GRUB GULCH

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 01 44 N
LONGITUDE: 121 42 06 W
ELEVATION: 1219 Metres

NORTHING: 5876272
EASTING: 587071

LOCATION ACCURACY: Within 500M

COMMENTS: Coordinates of Ennerdale Placer.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Hydraulic operations for placer gold were carried out on Grub Gulch.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EM EXPL 2000-9-23
EMPR AR 1879-table; 1940-92; 1941-87; 1942-86; 1943-83; 1944-78;
1945-126; 1946-197; 1949-242; 1950-200; 1951-204; 1952-238;
1953-178; 1954-170; 1958-79; 1959-148
EMPR ASS RPT 16512
EMPR BULL 26, p. 58; 28, pp. 22,26
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (Jones, R. 1989, Summary Report - Property Acquisitions and
Phase I Drilling Program in the Wells Area, B.C.)
GSC MAP 1424A
WWW <http://www.infomine.com/>

DATE CODED: 1986/08/12
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 100**

MINFILE NUMBER: **093H 101**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOUSEMAN CREEK**, EAGLE CREEK, CARIBOO EAGLE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 01 08 N
LONGITUDE: 121 39 30 W
ELEVATION: 1332 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5875214
EASTING: 589998

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold has been produced from hydraulic mining operations on a buried channel of Houseman Creek. Some underground exploration work has also been undertaken.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1875-608; 1926-169; 1927-167; 1928-194; 1930-164; 1931-86; 1932-101; 1933-132; 1935-C36; 1941-87; 1942-86; 1944-78; 1945-126; 1946-197; 1948-177; 1949-242; 1951-204; 1954-170; 1956-141
EMPR EXPL 1989, pp. 147-169
EMPR BULL 26, p. 58; 28, pp. 22,26
EMPR PF (Leases on Junction of Lightning and Eagle creeks, c.1908)
EMPR ASS RPT 16512
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149, pp. 163,164
GSC MAP 1424A

DATE CODED: 1986/08/12
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 101**

MINFILE NUMBER: **093H 102**

NATIONAL MINERAL INVENTORY:

NAME(S): **DRAGON CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04W
BC MAP:
LATITUDE: 53 06 55 N
LONGITUDE: 121 45 46 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5885810
EASTING: 582807

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold occurs mainly on bedrock in a buried channel but some is also found in gravels for some distance above bedrock. The gravels are glacial and clayey. Mining was at one time apparently done mainly by underground methods but then hydraulicking was used. The gold is coarse, nuggety and quite pure.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1876-1883-tables; 1881-393; 1883-402; 1896-50; 1902-97;
101,104; 1921-112; 1927-167; 1928-194; 1929-200; 1930-164; 1931-87,
89; 1932-101; 1933-134; 1938-C51; 1939-106; 1940-92; 1941-87;
1950-198; 1952-237; 1954-170; 1955-83; 1956-139
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR BULL 28, pp. 21,25,28
EMPR EXPL 1984, pp. 315,316; 1989, pp. 147-169
EMPR ASS RPT 13149, 17687
EMPR PF (Photo of Placer Mining on Dragon Creek, 1956)
GSC MEM *149, p. 153-157
GSC MAP 1424A
GSC SUM RPT 1918B, p. 48; 1932A, p. 74

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 926
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL #200, 1983

DATE CODED: 1986/08/12
DATE REVISED: 1989/02/24

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 103**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONTGOMERY CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 06 43 N
LONGITUDE: 121 44 54 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5885456
EASTING: 583781

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded from Montgomery Creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1880-table; 1938-C51; 1939-106; 1940-92; 1941-87
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,28
EMPR ASS RPT 17687
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149, p. 157
GSC MAP 1424A

DATE CODED: 1986/08/12
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 104**

NATIONAL MINERAL INVENTORY:

NAME(S): **NEW CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 06 04 N
LONGITUDE: 121 43 45 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5884273
EASTING: 585085

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Only a small amount of placer gold production is recorded for New Creek even though there has been a considerable amount of prospecting work done.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1880-1883-tables; 1882-356; 1883-402; 1949-241; 1950-199
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,28
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149, p. 157
GSC MAP 1424A

DATE CODED: 1986/08/12
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 105**

NATIONAL MINERAL INVENTORY:

NAME(S): **SLOUGH CREEK**, POINT, DANG SING DANG,
SING DANG, SANGDANG, TOON SING TONG

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 05 18 N
LONGITUDE: 121 41 22 W
ELEVATION: 1250 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5882900
EASTING: 587770

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1907
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Gold 34.2800 Grams per tonne

COMMENTS: Borehole tests indicated up to 34.28 grams gold per cubic yard.
REFERENCE: Property File - Jones, R. 1989 Summary Report.

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Along Slough Creek, mainly between Devils Creek and Nelson Creek, a series of rock benches occur. These benches are overlain by glacial drift deposits varying in thickness from a few metres to over 30 metres. Placer gold, which has been recovered primarily by hydraulicking of the benches, is fairly coarse, flattened and worn. Opposite Nelson Creek bedrock is up to 87 metres deep. Mining of the bedrock gravels has been attempted but apparently with little success due to the flow of groundwater. Values of up to 34.28 grams of gold per cubic yard were indicated at bedrock by borehole tests (Property File - Jones, R. 1989, Summary Report)

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in

CAPSULE GEOLOGY

Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1879-237; 1880-table; 1881-391; 1882-table; 1883-402;
1884-418; 1885-488; 1891-560; 1892-526,table; 1894-726,table;
1895-657,table; 1896-508; 1897-493; 1898-976; 1899-626; 1902-95,
96,121-123; 1904-44; 1905-54; 1907-39; 1913-56; 1914-52,63;
1917-137; 1920-98; 1921-112; 1922-119; 1923-122; 1927-167;
1928-194; 1930-164; 1935-C36; 1937-C36; 1938-C51; 1939-106;
1940-92; 1941-87; 1942-86; 1945-125; 1946-196; 1948-175; 1949-241;
1950-199; 1951-203
EMPR EXPL 1989, pp. 147-169
EMPR BULL 26, p. 60; 28, pp. 22,29
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.
463-473
EMPR PF (Anderson Claim Map, date unknown; Geological Cross Section
of Slough Creek Valley, Claim Map, Plan of surface Workings, Plans
of Underground Workings, Incorporated Exploration Co. of B.C.Ltd.,
1904; Jones, R. 1989, Summary Report - Property Acquisitions and
Phase I Drilling Program in the Wells Area, B.C. p.7)
GSC MEM *149, pp. 142-153
GSC MAP 1424A
GSC SUM RPT 1918B, p. 48; 1932A, pp. 59,62,72-74
INT PROS & DEV Aug/Sept 1983

DATE CODED: 1986/08/13
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 106**

NATIONAL MINERAL INVENTORY:

NAME(S): **KETCH**, SLOUGH CREEK, DEVILS CANYON

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 57 N
LONGITUDE: 121 40 12 W
ELEVATION: 1213 Metres

NORTHING: 5882275
EASTING: 589084

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold has been produced by hydraulicking of benches on the east side of Devils Lake Creek near its mouth.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1884-1895-tables; 1884-418; 1898-978; 1921-112; 1922-119;
1926-168; 1927-167; 1928-194; 1930-164; 1935-C36; 1937-C36;
1938-C51; 1939-106; 1941-87; 1942-86; 1945-125; 1946-197; 1949-241;
1950-198; 1951-203; 1952-237; 1953-175
EMPR BULL 26, p. 59; 28, pp. 22,29
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.
463-473
EMPR EXPL 1989, pp. 147-169
GSC MEM 149, pp. 140,141
GSC MAP 1424A
GSC SUM RPT 1932A, p. 72

DATE CODED: 1986/08/13
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 107**

NATIONAL MINERAL INVENTORY:

NAME(S): **DEVILS LAKE CREEK**, RASK HYDRAULIC, EL DORADO,
BARTON LEASE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 03 52 N
LONGITUDE: 121 41 41 W
ELEVATION: 1311 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Coordinates of Rask Hydraulic.

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5880236
EASTING: 587465

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold has been produced by hydraulic methods along Devils Lake Creek.

Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion, is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1926-169; 1927-167; 1938-C52; 1943-82; 1944-77; 1945-125;
1946-196; 1947-191; 1948-175; 1949-241; 1950-198; 1951-203;
1952-237; 1954-170; 1959-147; 1960-122; 1961-130
EMPR EXPL 1989, pp. 147-169
EMPR BULL 26, p. 60; 28, pp. 21,24
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.
463-473
GSC MEM 149, p. 140
GSC MAP 1424A

DATE CODED: 1986/08/13
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 108**

NATIONAL MINERAL INVENTORY:

NAME(S): **BURNS CREEK**, CHINA HYDRAULIC PIT

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit Underground

MINING DIVISION: Cariboo

LATITUDE: 53 04 41 N
LONGITUDE: 121 39 33 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5881794
EASTING: 589819

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Early placer gold mining of benches and channels along Burns Creek was done by drifting and open cutting. Hydraulic methods were used later.

Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion, is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

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463-473
GSC MEM *149, pp. 136-139
GSC MAP 1424A

DATE CODED: 1986/08/13
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 109**

NATIONAL MINERAL INVENTORY:

NAME(S): **COULTER CREEK**, LAUGHING MAN PLACER, CALDER CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 06 01 N
LONGITUDE: 121 39 49 W
ELEVATION: 1280 Metres

NORTHING: 5884260
EASTING: 589475

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

In the early days an area in the lower part of Coulter Creek, where the depth to bedrock is very small, was placer mined. A little further upstream attempts were then made to tunnel on a buried channel on the south side of the creek. More recently, hydraulicking operations have taken place on a buried channel on the north side of the creek. The channel is about 10 metres above the present creek and the bedrock gravel is overlain by up to 30 metres or more of boulder clay.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.
463-473

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DATE CODED: 1986/08/14
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REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 110**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUGAR CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 12 41 N
LONGITUDE: 121 41 59 W
ELEVATION: Metres

NORTHING: 5896575
EASTING: 586833

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Gold
COMMENTS: Galena nuggets yield silver.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

One stretch of Sugar Creek has been placer mined extensively. The depth to bedrock in many parts of this stretch is quite shallow. Remnants of a low rock bench a short distance above creek level have also been worked. Most of Sugar Creek is underlain by Snowshoe Group rocks although the lower part of the creek is near the contact with the Slide Mountain and Cariboo groups.

Coarse gold and nuggets of galena, which yielded 3291 grams of silver in 1984, are present in the creek. Samples of bedrock also assayed high in silver. An attempt has been made to trace the source of the coarse gold, with no success.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR ASS RPT 12352

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BIBLIOGRAPHY

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GSC MEM 149, p. 135
GSC MAP 1424A
N MINER Oct.13, 1983; Feb.23, Apr.26, 1984
INT PROS & DEV Mar/Apr 1984
GCNL #197, 1983; #31, #78, 1984; #100, 1986

DATE CODED: 1986/08/14
DATE REVISED: 1989/02/27

CODED BY: GRF
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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 111**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARDSCRABBLE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit Underground

MINING DIVISION: Cariboo

LATITUDE: 53 08 05 N
LONGITUDE: 121 39 18 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5888102
EASTING: 589980

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold Tungsten

MINERALS

SIGNIFICANT: Gold Scheelite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

At least part of the placer mining done on Hardscrabble Creek involved underground work. The area is mainly underlain by Snowshoe Group rocks but the contact with Slide Mountain Group rocks is nearby.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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GSC MAP 1424A

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CODED BY: GRF
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FIELD CHECK: N

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BIBLIOGRAPHY

GSC MAP 1424A
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GSC SUM RPT 1933A, p. 59
GCNL #138, 1985

DATE CODED: 1986/08/14
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 113**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEWART CREEK**, STUART CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit Underground

MINING DIVISION: Cariboo

LATITUDE: 53 11 10 N
LONGITUDE: 121 36 31 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5893878
EASTING: 592972

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The main placer gold production from Stewart Creek was apparently from underground workings.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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GSC MEM 149, p. 135
GSC MAP 1424A

DATE CODED: 1986/08/14
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 114**

NATIONAL MINERAL INVENTORY:

NAME(S): **NINE MILE CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 09 40 N
LONGITUDE: 121 33 55 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5891154
EASTING: 595923

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded for Nine Mile Creek. The creek is in the vicinity of the contact between the Cariboo and Barkerville terranes.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

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EMPR BULL 28, pp. 22,28
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149
GSC MAP 1424A

DATE CODED: 1986/08/14
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 115**

NATIONAL MINERAL INVENTORY:

NAME(S): **RED GULCH**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 06 42 N
LONGITUDE: 121 36 06 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5885606
EASTING: 593598

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic Nicola Group sediments, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These rocks have been metamorphosed to greenschist facies and are predominantly metasedimentary.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources being the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold mining has been undertaken on Red Gulch.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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GSC MAP 1424A
GSC MEM 149, pp. 118,119

DATE CODED: 1986/08/14
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CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 116**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOSQUITO CREEK PLACER**, ALABAMA, WILLIAMS

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

LATITUDE: 53 06 38 N
LONGITUDE: 121 35 37 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 5885493
EASTING: 594139

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold production along Mosquito Creek has primarily been from buried channels consisting of a main pre-glacial channel and two tributary channels. The majority of the gold occurred in the gravels along the troughs of these channels, however, a bench varying in height from 30 to 45 metres above the deep channel also carried good gold values. The gold is generally coarse and ragged. The deposits were first mined by drifting but later a considerable amount of hydraulic mining was done.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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1897-465,470; 1898-975,979; 1899-628; 1900-737; 1901-963;
1902-99,104,120; 1914-60; 1915-55; 1917-127,137; 1918-130;
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EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.

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GCNL #137,1960
PR REL International Wayside Gold Mines Ltd., June 13, 2002
W MINER & OIL REV Sept. 1960
WWW <http://www.wayside-gold.com/s/Default.asp>;
<http://www.infomine.com/>

DATE CODED: 1986/08/14
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 117**

NATIONAL MINERAL INVENTORY:

NAME(S): **MCARTHUR GULCH**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 05 43 N
LONGITUDE: 121 32 00 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5883875
EASTING: 598209

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded for McArthur Gulch. Most of the production was apparently from hydraulicking.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR BULL 28, pp. 22,27
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149, p. 123
GSC MAP 1424A

DATE CODED: 1986/08/15
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FIELD CHECK: N
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RUN DATE: 26-Jun-2003
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EMPR ASS RPT 16517
EMPR PF (Plan showing location of Placer Properties of the Lowhee
Mining Co., date unkown; Poole, W.H., 1947, Placer Mining on
Lowhee Creek, Barkerville, B.C.)
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM *149, pp. 102-108; 181, p. 25
GSC MAP 1424A
GSC SUM RPT 1918B, p. 44-46; 1932A, pp. 70,71

DATE CODED: 1986/08/15
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GEOLOGICAL SURVEY BRANCH
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BIBLIOGRAPHY

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EMPR BULL 28, pp. 7,22,31
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp.
463-473
EMPR PF (Map of Claims on Williams Creek, 1896; Letter and Report on
Williams Creek exploration results by E.B. DeGolia,1938; Erberich,
G., 1974, British Columbia's frustrating "Gold Hole"; Holland, S.,
1974, Report on Williams Creek "Gold Hole" story)
GSC MAP 1424A
GSC MEM 149, pp. 122-125
Placer Dome File

DATE CODED: 1986/08/15
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 120**

NATIONAL MINERAL INVENTORY:

NAME(S): **STOUTS GULCH**, STOUTS CREEK, MUCHO ORO,
WYOMING, WINTRIP

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 04 02 N
LONGITUDE: 121 32 25 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5880744
EASTING: 597807

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer operations have been carried out over most of the length of Stouts Gulch. The preglacial channel is up to about 200 metres in width and there are also remnants of a wide bench 6 to 9 metres above the channel. The main gold values were found at bedrock in the gravels of the channel and on the bench. Some gold was also found on a false bedrock of boulder clay. Most of the production was from hydraulic methods although there was apparently some drift mining done in the early days.

Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion, is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

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1897-470; 1902-99,104; 1903-61; 1904-43; 1906-39; 1908-41; 1909-43;
1910-42; 1911-49; 1912-50; 1913-56; 1914-52,59,60; 1917-127,137;
1919-106; 1920-98; 1942-85; 1943-82; 1945-125
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,30
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (Information Bulletin, Canusa Cariboo Gold Mines Ltd.,
c.1945; Preliminary Compilation Map by S. Holland, 1947; Various
Claim Maps From S. Holland's files c.1948)

MINFILE NUMBER: **093H 120**

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BIBLIOGRAPHY

GSC SUM RPT *1918B, p. 46
GSC MEM 181, p. 27
GSC MAP 1424A

DATE CODED: 1986/08/15
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 121**

NATIONAL MINERAL INVENTORY:

NAME(S): **EMORY GULCH**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 03 56 N
LONGITUDE: 121 32 40 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5880553
EASTING: 597532

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold production is recorded for Emory Gulch.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1926-167; 1927-166; 1928-194; 1941-86; 1942-85; 1949-241;
1952-236; 1953-175; 1963-132
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 21,25
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MAP 1424A

DATE CODED: 1986/08/18
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 122**

NATIONAL MINERAL INVENTORY:

NAME(S): **CONKLIN GULCH**, AURORA, ERICSSON,
~~SAWMILL, CORA~~

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 03 49 N
LONGITUDE: 121 30 44 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5880381
EASTING: 599695

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

The main placer gold production from Conklin Gulch apparently took place prior to 1900. The valley was known to be gold-bearing for almost 3,000 metres upstream from the junction with Williams Creek. However, the richest claims were located near the mouth. Mining took place on a buried channel which is about 30 metres deep near the mouth and decreases in depth upstream. There was a considerable amount of underground work done but most of the production was probably by hydraulicking. The area is underlain mainly by Snowshoe Group rocks the contact with the Slide Mountain Group is nearby.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1875-1899-tables; 1902-103; 1927-166; 1952-236; 1955-83;
1956-139; 1960-122
EMPR GEM 1973-527
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 21,24
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473

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BIBLIOGRAPHY

GSC MEM *149, pp. 98-102
GSC MAP 1424A
GSC SUM RPT 1932A, pp. 69,70

DATE CODED: 1986/08/18
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CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 123**

NATIONAL MINERAL INVENTORY:

NAME(S): **WALKER GULCH**, WALKER CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 03 06 N
LONGITUDE: 121 31 25 W
ELEVATION: Metres

NORTHING: 5879037
EASTING: 598960

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold occurs on bedrock benches or in glacial gravels covering the benches. Mining has been by drifting and by hydraulicking.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1878-table; 1943-82; 1944-77; 1945-126; 1954-169
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 21,31
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (Placer Claims, Cross section and plan, date unknown)
GSC MEM 149, p. 102
GSC MAP 1424A

DATE CODED: 1986/08/18
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 124**

NATIONAL MINERAL INVENTORY:

NAME(S): **MINK GULCH**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H04E
BC MAP:
LATITUDE: 53 02 37 N
LONGITUDE: 121 31 09 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5878147
EASTING: 599276

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A small amount of placer gold has been produced from Mink Gulch by hydraulic methods.

Supergene leaching of gold, dispersed by Tertiary deep weathering and followed by Cenozoic erosion, is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1876-418; 1942-85; 1943-82; 1944-77; 1945-125; 1946-197;
1950-198; 1954-169; 1955-83; 1956-139
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 21,28
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GSC MAP 1424A

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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 125**

NATIONAL MINERAL INVENTORY:

NAME(S): **LITTLE VALLEY CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:
LATITUDE: 53 05 49 N
LONGITUDE: 121 29 05 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5884128
EASTING: 601460

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

A considerable amount of underground work was done in prospecting a buried channel which was found to be up to about 75 metres deep. Apparently some gold was found on bedrock. Another occurrence of placer gold in the valley occurred in surface gravels resting on boulder clay in a depression in the glacial drift. The creek is near the contact between the Snowshoe Group and rocks of the Cariboo terrane.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1902-121; 1908-43; 1909-46; 1910-44; 1911-49; 1913-56;
1914-53; 1915-55; 1940-91; 1941-85; 1942-85; 1943-82; 1944-77;
1947-191
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,27
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM *149, pp. 113-116
GSC MAP 1424A

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FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 125**

MINFILE NUMBER: **093H 126**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRENCH CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 04 03 N
LONGITUDE: 121 28 32 W
ELEVATION: Metres

NORTHING: 5880866
EASTING: 602143

LOCATION ACCURACY: Within 500M

COMMENTS: Coordinates of American tunnel, Geological Survey of Canada
Memoir 149, page 97.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold production along French Creek appears to have been mainly from benches. Extensive underground work was carried out in the late 1800's but then hydraulicking was the main mining method.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

BIBLIOGRAPHY

EMPR AR 1898-976; 1899-621; 1927-166; 1932-102; 1933-134; 1935-C36;
1938-C51; 1939-105; 1940-91; 1941-85; 1942-85; 1949-242; 1950-199
EMPR BULL 28, pp. 21,25
EMPR EXPL 1989, pp. 147-169
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM *149, pp. 96-98
GSC MAP 1424A
GSC SUM RPT *1932A, pp. 67-69

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PAGE: 961
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BIBLIOGRAPHY

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1953-175; 1966-256
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,26
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
EMPR PF (Big Strike Resources, Prospectus, 1988)
GSC MEM 149, p. 91
GSC MAP 1424A
GCNL Dec.30, 1986; #30,#124,#162 1989

DATE CODED: 1986/08/18
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REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 128**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEVENS GULCH**, STEVENS CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:
LATITUDE: 53 00 37 N
LONGITUDE: 121 24 25 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit Underground

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5874601
EASTING: 606881

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold operations took place on Stevens Gulch primarily prior to 1900. Gold was mainly recovered from the top of bedrock in the lower part of the creek. However, some gold was also found on clay in the upper part of the creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR AR 1941-86; 1943-82
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 22,30
EMPR FIELDWORK 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149, pp. 64-66
GSC MAP 1424A

DATE CODED: 1986/08/18
DATE REVISED: 1989/02/23

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 129**

NATIONAL MINERAL INVENTORY:

NAME(S): **CALIFORNIA GULCH**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093H03W
BC MAP:
LATITUDE: 53 00 19 N
LONGITUDE: 121 24 23 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

NORTHING: 5874045
EASTING: 606931

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Snowshoe Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Quesnel Highland

CAPSULE GEOLOGY

Placer gold deposits of the Quesnel Highland region, including the former rich producers of the Barkerville camp, have accounted for a large proportion of British Columbia's alluvial gold production. With the exception of a few producers in the Wingdam area, which are underlain by Upper Triassic sediments correlative with the Nicola Group, almost all the deposits are underlain by the Upper Proterozoic to Lower Paleozoic Snowshoe Group. These predominantly metasedimentary rocks have been metamorphosed to greenschist facies.

Placer gold deposits in the region are generally found in relatively young Pleistocene gravels. The morphology and mineral associations of the gold suggests that it was derived locally, the most obvious sources are the numerous auriferous veins in the Downey succession of the Snowshoe Group.

Placer gold mining operations have taken place on California Gulch. In the early days the main mining was near the mouth of the creek.

"Data from the Cariboo mining district indicate that supergene leaching of gold dispersed within massive sulphides by Tertiary deep weathering followed by Cenozoic erosion is the most likely explanation for the occurrence of coarse gold nuggets in Quaternary sediments" (Exploration in British Columbia 1989, page 147).

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EMPR AR 1878,1883-1885,1890-tables; 1904-47; 1927-166; 1928-193; 1929-198; 1933-133; 1961-130; 1962-139; 1963-132; 1964-176; 1966-256
EMPR GEM 1970-484; 1973-526
EMPR EXPL 1989, pp. 147-169
EMPR BULL 28, pp. 21,24,30
EMPR FIELDWORK 1988, pp. 377-385; 1990, pp. 331-356; 1992, pp. 463-473
GSC MEM 149, pp. 64-66
GSC MAP 1424A

DATE CODED: 1986/08/18
DATE REVISED: 1989/02/27

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 129**

MINFILE NUMBER: **093H 130**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEAR RIVER**, BOWRON RIVER, HEPBURN COAL EXPOSURES

STATUS: Developed Prospect

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093H13W

BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 50 00 N

LONGITUDE: 121 52 47 W

ELEVATION: Metres

NORTHING: 5965560

EASTING: 573725

LOCATION ACCURACY: Within 1 KM

COMMENTS: The Bear River coalfield corresponds to the Bowron River coal area.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform

CLASSIFICATION: Sedimentary

TYPE: A04 Bituminous coal

SHAPE: Irregular

MODIFIER: Folded

DIMENSION: 0003

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Strata generally dip northeast. Minor NW-SE trending folds are present and beds are in some cases disturbed surrounding gneiss intrusions. Basin may be fault bounded. Big Seam is 2.8 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cretaceous-Tertiary

Undefined Group

Bowron River

LITHOLOGY:

Coal
Shale
Sandstone
Claystone
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Bowron Trench

TERRANE: Slide Mountain

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE:

INVENTORY

ORE ZONE: BEAR RIVER

REPORT ON: Y

CATEGORY: Inferred

YEAR: 1912

QUANTITY: 15000000 Tonnes

COMMODITY

GRADE

Coal

100.0000 Per cent

COMMENTS: Coal in a 16.9 square kilometre basin is bituminous and of good coking quality.

REFERENCE: Coal Assessment Report 1.

CAPSULE GEOLOGY

Three workable coal seams and a number of thin seams and partings are present interbedded with shale, sandstone and minor conglomerate. The coal measures have not been age dated but are either Cretaceous or, more likely, belong to the Tertiary Bowron River Formation. The seams, exposed at the Hepburn Coal Exposures, are 3.1 metres (Big Seam), 1.5 metres (six foot seam) and 3.7 metres (eight foot seam) thick, of which 2.8 metres, 1.3 metres and 2.4 metres respectively is coal. The coal is interbedded with claystone, shale and sandstone beds, 1.3 centimetres to 28 centimetres thick. The coal is bituminous in rank and of good coking quality. Moisture contents in selected samples range from 3.0 per cent to 6.0 percent, volatile matter from 37.3 per cent to 44.4 per cent, fixed carbon from 46.9 per cent to 54.3 per cent, ash from 1.0 per cent to 8.0 per cent and sulphur from 1.0 per cent to 1.4 per cent. Calorific value ranges from 11,970 to 12,517 BTU. The coal content of the basin (16.9 km²) is estimated to be 150,000,000 tonnes.

The beds generally strike northwest to southeast with moderate

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 965
REPORT: RGEN0100

CAPSULE GEOLOGY

to shallow dips to the northeast. A number of northwest to southeast trending folds are present and the dips steepen towards the surrounding igneous rocks. The basin may be to some extent fault bounded.

BIBLIOGRAPHY

EMPR COAL ASS RPT *1, 19, 20
GSC P 89-4
GSC MAP 1424A
N MINER Aug.30, 1979
GCNL #245, 1979
EMPR PF (Douglass, K., 1979, The Proposed Norco Coal Mine)

DATE CODED: 1986/05/30
DATE REVISED: 1989/02/27

CODED BY: EVFK
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 131**

NATIONAL MINERAL INVENTORY:

NAME(S): **WISHAW**, WISHAW LAKE, MCGREGOR PASS

STATUS: Developed Prospect

Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093H16E

BC MAP:

LATITUDE: 53 58 38 N

LONGITUDE: 120 13 48 W

ELEVATION: 1700 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Test quarry located north of Wishaw Lake on the continental divide.

UTM ZONE: 10 (NAD 83)

NORTHING: 5984540

EASTING: 681650

COMMODITIES: Quartzite

Building Stone

Dimension Stone

Silica

MINERALS

SIGNIFICANT: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform

CLASSIFICATION: Sedimentary

Metamorphic

Industrial Min.

TYPE: R06 Dimension stone - sandstone

DIMENSION: 350

Metres

STRIKE/DIP: R07 Silica sandstone

070/28S

TREND/PLUNGE:

COMMENTS: Width of exposed Mahto Formation quartzite.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Gog

FORMATION

Mahto

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

A test quarry north of Wishaw Lake exposed massive, fine to medium-grained, cross-bedded, beige-coloured orthoquartzite which forms part of the Lower Cambrian Gog Group Mahto Formation. The quartzite splits along bedding planes that are 1.0 metre to 2.0 metres apart. Bedding has a uniform strike of 070 degrees and dips 28 degrees south.

The rock is brittle but very strong and competent. The exposed quartzite is between 300 and 350 metres wide of which one third would constitute commercially interesting rock. Several kilometres to the north near Babette Lake a similar occurrence has been investigated (093I 005).

Ava Resources Ltd. initiated road building to the property in 1995. In 1998, a small amount of pink quartzite was submitted for structural quality testing and polishing characteristics.

BIBLIOGRAPHY

EMPR BULL 35

EMPR EXPL 1995-44; 1996-A24; 1998-44

EMPR FIELDWORK *1983 p. 216; 1991, pp. 65-82

EMPR GEM 1970-487,488

EMPR INF CIRC 1995-9, p. 20; 1996-1, p. 20; 1997-1, p. 23

GSC MAP 12-1957, 1424A

GSC P 72-35

DATE CODED: 1986/09/09

DATE REVISED: 1989/08/30

CODED BY: GRF

REVISED BY: DEJ

FIELD CHECK: N

FIELD CHECK: N

MINFILE NUMBER: **093H 132**

NATIONAL MINERAL INVENTORY:

NAME(S): **YHW-1**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H10W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 37 00 N
LONGITUDE: 120 50 23 W
ELEVATION: 883 Metres

NORTHING: 5943042
EASTING: 642893

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the Yellowhead Highway #16 just north of Catfish Creek,
140 kilometres by road east of Prince George.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Calcite Ankerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Proterozoic-Cambrian

GROUP

Cariboo

FORMATION

Midas

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Phyllite
Schist
Sandstone
Quartzite
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

0.2800

Grams per tonne

COMMENTS: Detailed chip sample across 1 metre.

REFERENCE: Assessment Report 15463.

CAPSULE GEOLOGY

The YHW-1 showing is underlain by Cambro-Proterozoic clastic and carbonate Midas Formation rocks. These consist of grey phyllite with minor schist. The phyllite is crosscut by veinlets, blebs and wisps of quartz-calcite or ankerite ranging from a few millimetres to 3 centimetres in thickness and commonly paralleling the cleavage.

The Yanks Peak Formation overlies the Midas rocks to the west. The Yanks Peak rocks are comprised of sandstone, quartzite, and pebble conglomerate. They host disseminated pyrite and are crosscut by a series of quartz veins.

In 1986, chip samples taken from the phyllite exposed along a rock cut assayed 1.8 grams per tonne gold. The phyllite host a predominant set of veinlets which crosscut the bedding at right angles. Detailed 1 metre chip samples assayed 0.28 and 0.23 grams per tonne gold.

BIBLIOGRAPHY

EMPR ASS RPT *15463
GSC P 72-35
GSC MAP 1424A
CJES 1986, Vol. 23, #8, pp. 1047-1061
EMPR EXPL 1987-C293

DATE CODED: 1987/09/02
DATE REVISED: 1989/02/23

CODED BY: LLC
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 132**

MINFILE NUMBER: **093H 133**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOMINION CREEK**, AK, NORTH,
SOUTH, DOCK

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093H06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 26 56 N
LONGITUDE: 121 16 21 W
ELEVATION: 1405 Metres

NORTHING: 5923597
EASTING: 614722

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Gold Pyrite
ASSOCIATED: Quartz Pyrite Calcite Ankerite
ALTERATION: Graphite Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Isaac	
Hadrynian	Cariboo	Cunningham	

LITHOLOGY: Limestone
Siltstone
Argillite
Siliceous Quartz Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 43.0600 Grams per tonne
REFERENCE: Assessment Report 16549.

CAPSULE GEOLOGY

The property is located along Dominion Creek, a tributary of Haggan Creek, in the northern Cariboo Mountains of the Omineca Belt.

The Dominion Creek watershed was identified as being geochemically anomalous in lead, cobalt, iron, arsenic and antimony by a Regional Geochemical Survey conducted in 1984. In 1985 high grade gold vein mineralization was discovered near Dominion Creek by Nathan Kencayd. Noranda Exploration Company Limited, under option, explored the property from 1986-1988, in joint venture with International Rhodes Resources Inc. Diamond drilling, totalled 3484 metres in 53 holes. In 1989, Alan Raven purchased the property from Kencayd and resumed exploration. Between 1990 and 1992, with Aquila Resources Limited as a joint-venture partner, an 1180 tonne bulk sample from the South zone was mined and milled. Mill head grades averaged 14.1 grams per tonne gold and recovery averaged about 93 per cent (G. Hawthorn, personal communication, 1992). Approximately 80 tonnes of concentrate were recovered and shipped to the Cominco smelter in Trail for processing. The property was inactive until 1997 when the joint venture partnership of Applied Mine Technologies Inc. and Gold City Mining Corporation briefly optioned the property and staked additional claims. In 1998, Raven undertook a detailed float prospecting and soil geochemistry program.

CAPSULE GEOLOGY

The regional geology is comprised of Upper Proterozoic to Cambrian continental margin sediments including quartzite, sandstone, siltstone, shale and limestone. The rocks are considered part of the Cariboo sub-terrane which is part of the Cassiar Terrane consisting of displaced continental margin sediments. These rocks have been grouped with the Upper Proterozoic Windermere tectonic assemblage, which consists mainly of clastic continental margin sediments of the Lower Cambrian Gog tectonic assemblage which consists of rifted and passive continental margin sediments.

On the property only rocks of the Hadrynian (Upper Proterozoic), Isaac and Cunningham formations (Cariboo Group) occur. The area has been deformed into a series of northwest plunging fold structures. The northwest trending Isaac Lake fault which roughly cuts through the centre of the property separates the Isaac Lake synclinorium to the east and the Lanezi arch or anticlinorium to the west.

The Isaac Lake Formation consists predominantly of dark grey to black, fine-grained, finely laminated, fissile, phyllitic to slaty argillite. It is variably graphitic, calcareous and pyritic. Grey to black, micritic limestone also forms a major component of the Isaac Formation, especially near the upper gradational contact with the Cunningham Formation. The overlying Cunningham Formation consists of massive to faintly laminated, micritic to finely crystalline limestone.

The bedding attitudes are consistently northwest to west and moderate to steeply dipping southwest. Two prominent jointing sets were reported, the first is generally parallel to foliation (parallel to bedding) and the second set is generally perpendicular to foliation and dips steeply to the east.

Two mineralized zones, the South and North zones occur on the property. The South Zone consists of a massive white quartz and silicified quartz breccia vein with up to 10 per cent galena, sphalerite and chalcopyrite at the fault contact between siltstones and limestones. The structure parallels the fault and crosscuts the bedding. Other veins in the South Zone have similar mineralogy but tend to be parallel with bedding and dips at about 70 degrees. The best assay from this zone assayed for gold was 27.53 grams per tonne over 0.65 metre. The North Zone consists of two gold bearing quartz veins with widths ranging from 0.25 to 2.0 metres.

Generally, the mineralization occurs in quartz veins hosted by limestones and argillites near the top of the Isaac Lake Formation. The adjacent Dock claims have been investigated with disappointing results (Assessment Report 17612).

In 2000, Gold City Industries Ltd. carried out a regional prospecting, mapping and stream sediment sampling program followed by a 17 hole, 1100 metre drill program on the South zone.

BIBLIOGRAPHY

EM EXPL *1998-D1-D8; 2000-9-23
EMPR ASS RPT 16549, 17599, 17612, 18035
EMPR FIELDWORK 1985, pp. 115-120
GSC MAP 1424A
GSC P 72-35
GCNL #197, 1987; #78(Apr.20), #86(May 4), #172(Sept.8), #195(Oct.12),
#198(Oct.17), #204(Oct.25), #223(Nov.22), 2000
GJES 1986, Vol. 23, p. 1047
N MINER Mar.14, 1988
VSW Sept. 22, 1987
WWW <http://www.infomine.com/>

DATE CODED: 1988/03/11
DATE REVISED: 1999/05/10

CODED BY: GSA
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093H 134**

NATIONAL MINERAL INVENTORY:

NAME(S): **INTERSECTION MOUNTAIN**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H16E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 47 40 N
LONGITUDE: 120 00 50 W
ELEVATION: 2285 Metres

NORTHING: 5964789
EASTING: 696674

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Phosphate

MINERALS

SIGNIFICANT: Fluorapatite
ASSOCIATED: Fluorite
MINERALIZATION AGE: Lower Triassic

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
SHAPE: Tabular
DIMENSION: 1 Metres STRIKE/DIP:
COMMENTS: P205 horizon approximately 1 metre thick and of unknown extent.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Triassic	Spray River	Sulphur Mountain	

LITHOLOGY: Phosphorite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Bridge River

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks that were deposited in a continental shelf environment along the western margin of ancestral North America. This clastic and carbonate rock sequence ranges in age from Hadrynian to Upper Cretaceous and now lies within the Foreland tectonostratigraphic division of the Canadian Cordillera. Folds and southwest dipping, northeasterly directed thrust faults are the dominant structures of the region.

Phosphorite horizons are known from Upper Paleozoic and Lower Mesozoic strata in the region. In this area, phosphorite beds are present in the Whistler Member of the Lower Triassic Sulphur Mountain Formation, Spray River Group.

At this location, near Intersection Mountain, a phosphorite horizon outcrops on a cliff face and is estimated at no more than one metre in thickness. Nodular phosphorites and fossiliferous phosphorites with fluorite coated fracture surfaces were found in talus beneath the outcrops. Grab samples from this area contain between 18 and 20 per cent P205 (Fieldwork 1991, page 79, sample 1251 A,B).

BIBLIOGRAPHY

EMPR FIELDWORK 1991, pp. 65-82
EMPR OF 1992-10

DATE CODED: 1992/01/15
DATE REVISED: 1993/05/28

CODED BY: JP
REVISED BY: GSB

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093H 135**

NATIONAL MINERAL INVENTORY:

NAME(S): **INTERSECTION MOUNTAIN ZINC**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093H16E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 48 45 N
LONGITUDE: 120 00 06 W
ELEVATION: 1980 Metres

NORTHING: 5966831
EASTING: 697394

LOCATION ACCURACY: Within 500M

COMMENTS: Location of gossanous outcrop with mineralized float nearby.

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite
ASSOCIATED: Pyrite
MINERALIZATION AGE: Hadrynian

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Unknown
SHAPE: Tabular
DIMENSION: 20 x 6 Metres STRIKE/DIP:
COMMENTS: Gossanous lense or bed, associated with mineralized float.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian	Undefined Group	Mowitch	

LITHOLOGY: Pyritic Quartz Arenite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Bridge River

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks that were deposited in a continental shelf environment along the western margin of ancestral North America. This clastic and carbonate rock sequence ranges in age from Hadrynian to Upper Cretaceous and now lies within the Foreland tectonostratigraphic division of the Canadian Cordillera. Folds and southwest dipping, northeasterly directed thrust faults are the dominant structures of the region.

Massive sulphide mineralization, that is apparently stratiform in nature, in fine-grained sandstones of the Permian Mowitch Formation.

Near Intersection Mountain, a gossanous zone, approximately six metres thick and twenty metres in strike length, occurs in a stratigraphic position that should be occupied by Mowitch strata. In the same area, pieces of dark, bituminous sandstone containing up to 40 per cent pyrite were found in float beneath Mowitch outcrops. Samples of pyrite-rich sandstones contain anomalous concentrations of zinc, up to 0.189 per cent (Fieldwork 1991, pages 65-82).

BIBLIOGRAPHY

EMPR FIELDWORK 1991, pp. 65-82
EMPR OF 1992-10.

DATE CODED: 1992/01/15
DATE REVISED: 1993/05/28

CODED BY: JP
REVISED BY: GSB

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093H 136**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOW BARITE** BOW

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093H12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 53 35 57 N
LONGITUDE: 121 39 38 W
ELEVATION: 929 Metres

NORTHING: 5939760
EASTING: 588639

LOCATION ACCURACY: Within 500M

COMMENTS: Showing near a small tributary creek to Bowron River, about 8 kilometres west of Pinkerton Lake and 84 kilometres east-southeast of Prince George (Property File - Location map).

COMMODITIES: Barite

MINERALS

SIGNIFICANT: Barite
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Slide Mountain	Antler	

LITHOLOGY: Shale
Graphitic Shale

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain Cariboo

PHYSIOGRAPHIC AREA: Cariboo Mountains

CAPSULE GEOLOGY

At the Bow occurrence, approximately 5 metres of grey bedded barite occurs within shale of the Antler Formation of the Upper Paleozoic to Upper Triassic Slide Mountain Group. The contact of the barite and shale strikes 140 degrees and dips 72 degrees southwest with tops to the southwest.

A section through the barite showing from bottom to top is as follows: 5 metres of bedded barite; a rusty 30 centimetre band of interbedded barite and shale; 20 centimetres of rusty, black shale with graphite and occasional barite; 15 centimetres of a black earthy band; and at the top, graphitic shale with rusty stains (D. Hora, personal communication, 1993).

The showing was found on the basis of a Regional Geochemistry Survey (J. Nebocat, personal communication, 1993).

BIBLIOGRAPHY

GSC MAP 1424A; 1356A
GSC P 68-1A, pp. 14-23; 72-35
GSC OF 1215
EMPR PF (*Property description and location maps)
EMPR OF 2000-22

DATE CODED: 1993/11/03
DATE REVISED: 1993/11/03

CODED BY: GO
REVISED BY: ZDH

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **0931 001**

NATIONAL MINERAL INVENTORY: 09314 Cu1

NAME(S): **COPPER GULCH**, WET, MCGREGOR,
MM, FRAN, RUZ,
EAST 1, WEST 1

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093105W
BC MAP:
LATITUDE: 54 15 23 N
LONGITUDE: 121 45 41 W
ELEVATION: 700 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Trenching along Mine Creek.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 6012756
EASTING: 580689

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Malachite Covellite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica Carbonate Malachite
ALTERATION TYPE: Silicific'n Carbonate Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Gog	McNaughton	

LITHOLOGY: Limestone
Shaly Limestone
Quartzite
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: McGregor Plateau

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1928
SAMPLE TYPE: Chip	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	27.4000 Grams per tonne
Copper	25.5000 Per cent
COMMENTS: Across 0.23 metres, trace gold.	
REFERENCE: Ministry of Mines Annual Report 1928, page 193.	

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The Copper Gulch showing is underlain by limestone, shaly limestone, thin-bedded quartzite and phyllite of the McNaughton Formation of the Lower Cambrian Gog Group. These rocks strike northwest and this is common for the region as a whole. Mineralization consists of chalcopyrite, minor pyrite and covellite and malachite after the copper sulphides. Mineralization is hosted by silicified and carbonatized conformable shears with widths generally greater than one metre. Chalcopyrite occurs as disseminations, clots and near massive lenses while pyrite and covellite occur as disseminations.

A chip sample taken in 1928 across 23 centimetres of near

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CAPSULE GEOLOGY

massive chalcopyrite contained 25.5 per cent copper, 27.4 grams per tonne silver and a trace of gold (Annual Report 1928).

BIBLIOGRAPHY

EMPR ASS RPT *2759, 12890, 15200
EMPR AR 1928-192,193; 1956-30
EMPR GEM 1970-198
EMPR EXPL 1984-317; 1986-C343
GSC MAP 1424A
EMPR PF (Jones, W.C. (1960): Geology of McGregor River Dam site)

DATE CODED: 1985/07/24
DATE REVISED: 1986/09/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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BIBLIOGRAPHY

GSC MAP 1424A
EMPR EXPL 1981-14

DATE CODED: 1985/07/24
DATE REVISED: 1986/09/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARBARA ELLEN**

MINING DIVISION: Cariboo

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093104W
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 55 N
 LONGITUDE: 121 55 24 W
 ELEVATION: 640 Metres

NORTHING: 5989466
 EASTING: 570491

LOCATION ACCURACY: Within 1 KM
 COMMENTS: On southwesterly flowing creek.

COMMODITIES: Copper Zinc Silica Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Pyrite
 ASSOCIATED: Quartz
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 DIMENSION: 7 Metres STRIKE/DIP: 124/
 COMMENTS: Largest vein is up to 7.3 metres wide and strikes between 115 degrees and 133 degrees. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Gog	Undefined Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Schistose Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench
 TERRANE: Cariboo
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1933
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Copper	3.8000 Per cent
Zinc	5.1000 Per cent

COMMENTS: Selected sample of mineralization, trace gold and silver.
 REFERENCE: Minister of Mines Annual Report 1933, page 118.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The Barbara Ellen showing is located on the Bowron River which, apart from the incision of the river itself, is an area of very poor bedrock exposure. It is probable that rocks exposed in the Bowron River belong to the Lower Cambrian Gog Group. The showing comprises mineralized quartz veins in schistose argillite. The largest vein is up to 7.3 metres wide and is more or less conformable with the enclosing rocks, striking 115 to 133 degrees northwest. Mineralization consists of chalcopyrite, sphalerite and pyrite. A selected sample taken in 1933 assayed 3.8 per cent copper, 5.1 per cent zinc with traces of gold and silver (Annual Report 1933).

The quartz veins were examined for their silica potential. One sample assayed 99.43 per cent silica (Report of analysis, 1934).

BIBLIOGRAPHY

EMPR AR 1933-118; 1935-C6
 EMPR PF (*Letter to J.F. Walke re: Barbara Ellen Group, 1935;

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RUN TIME: 11:27:59

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BIBLIOGRAPHY

*Report on Mineral Claim and Silica Deposits South of Hansard,
1935; Report of Analysis, 1954)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1986/09/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **DAWN**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093104W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 03 11 N
LONGITUDE: 121 58 18 W
ELEVATION: 640 Metres

NORTHING: 5989914
EASTING: 567320

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Siderite
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>
Cambrian	Gog	Undefined Formation	

LITHOLOGY: Schistose Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland	PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench
TERRANE: Cariboo	
METAMORPHIC TYPE: Regional	RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1935
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 1.3700 Grams per tonne
COMMENTS: Sample of quartz siderite stringer 7.6 centimetres across.
REFERENCE: Minister of Mines Annual Report 1935, page C7.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The Dawn showing is located on the Bowron River which, apart from the incision of the river itself, is an area of very poor bedrock exposure. It is probable that rocks exposed in the Bowron River belong to the Lower Cambrian Gog Group. The showing consists of pyritic quartz-siderite stringers in schistose limestone which is interbedded with argillite. The stringers are both conformable with bedding and crosscutting. A sample taken from a 7.6 centimetre wide stringer assayed 1.37 grams per tonne gold (Annual Report 1935).

BIBLIOGRAPHY

EMPR AR 1935-C7
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1986/09/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 005**

NATIONAL MINERAL INVENTORY:

NAME(S): **BABETTE LAKE**, PB, KOGWA

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093101E
BC MAP:

MINING DIVISION: Cariboo
Liard
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 01 02 N
LONGITUDE: 120 14 16 W
ELEVATION: 1829 Metres

NORTHING: 5988969
EASTING: 680966

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of 1981 drilling (Assessment Report 9924).

COMMODITIES: Quartzite Dimension Stone Building Stone Silica

MINERALS

SIGNIFICANT: Quartz
MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Metamorphic Industrial Min.
TYPE: R06 Dimension stone - sandstone R07 Silica sandstone
DIMENSION: 39 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Maximum thickness of high quality material.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Gog	Mahto	

LITHOLOGY: Quartzite
Shale
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on, and to the west of, the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The Babette Lake prospect is underlain by quartzite of the Mahto Formation of the Lower Cambrian Gog Group. The formation, which is in excess of 213 metres thick, hosts high quality building stone within various stratigraphic intervals. The high quality intervals contain pink, purple, reddish, grey and white, thin bedded to massive, occasionally speckled quartzite that is weakly to moderately fractured. Intervening poorer quality beds are comprised of white, grey, pink, purple or variably coloured, massive to thin bedded, intensely to moderately fractured quartzite, which is commonly interbedded with shale or siltstone. Drilling perpendicular to bedding encountered six sections of the high quality material, at or near surface, ranging from 7.6 to 38.7 metres thick. Four sections are at least 18.3 metres thick.

Babette Lake Quartzite Products Ltd. conducted 276 metres of drilling in 3 holes in 1981. Several kilometres to the south, near Wishaw Lake, a test quarry, in a similar occurrence, was developed (093H 131).

BIBLIOGRAPHY

EMPR ASS RPT *9924
EMPR EXPL 1981-155
EMPR FIELDWORK 1991, pp. 65-82, 83-91
EMPR GEM 1970-494
EMPR INF CIRC 1988-6, p. 24; 1995-9, p. 20, 1996-1, p. 20
GSC MAP 1424A
GSC OF 286, 630

DATE CODED: 1985/07/24
DATE REVISED: 1991/03/13

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 005**

MINFILE NUMBER: **0931 006**

NATIONAL MINERAL INVENTORY:

NAME(S): **HANSARD**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093104W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 05 45 N
LONGITUDE: 121 53 26 W

NORTHING: 5994753
EASTING: 572555

ELEVATION: 649 Metres

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on sample site as described in Minister of Mines
Annual Report 1957, page 84.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite

Industrial Min.

TYPE: R09 Limestone

DIMENSION: 2400

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Deposit trends northwest for 2400 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Gog

FORMATION

Mural

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: McGregor Plateau

INVENTORY

ORE ZONE: OUTCROP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1957

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

55.1000

Per cent

COMMENTS: Taken across 60 metres of limestone. Grade given for CaO.

REFERENCE: Minister of Mines Annual Report 1957, page 84.

CAPSULE GEOLOGY

A body of limestone of the Lower Cambrian aged Mural Formation forms a ridge extending northwest along the south side of the old Highway 16, between 1.6 and 4 kilometres northwest of the railway crossing at Hansard.

The deposit consists of massive, fine to medium grained, light grey to black intensely fractured limestone. The limestone is intruded by a few dikes and cut by numerous white calcite veinlets. A chip sample taken across 60 metres of limestone 1.76 kilometres north west of the railway crossing contained 55.10% CaO, 0.42% MgO, 1.04% insolubles, 0.26% R2O3, 0.10% Fe2O3, 0.01% MnO, 0.01% P2O5, 0.02% sulphur and 43.38% ignition loss (EMPR Annual Review 1957, p. 84).

Two small quarries opened up on the deposit produced limestone for road building material.

BIBLIOGRAPHY

EMPR AR *1957-84-85; 1965-266
EMPR BULL 11, p. 21
EMR CANMET RPT 811, Part 5, pp. 220-221
GSC MAP 1424A
GSC OF 630

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/17

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **BELCOURT**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093101W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 13 50 N
LONGITUDE: 120 21 31 W
ELEVATION: Metres

NORTHING: 6012395
EASTING: 672164

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Zinc Barite

MINERALS

SIGNIFICANT: Sphalerite Barite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mississippian	Rundle	Undefined Formation	

LITHOLOGY: Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The Belcourt showing comprises sphalerite and barite in dolomitized, porous, bioclastic units of the Mississippian Rundle Group carbonates. Mineralization occurs within 50 metres of the erosional contact with the overlying Belcourt Formation sandstone. The zone occurs over a strike length of one kilometre but contains only a few discontinuous showings. The main mineralization occurs as massive interbeds a few centimetres thick and a couple of metres long.

BIBLIOGRAPHY

EMPR ASS RPT *8404
EMPR EXPL 1980-332
EMPR FIELDWORK 1991, pp. 65-82, 83-91
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1986/09/02

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **WAPITI**, FARM

MINING DIVISION: Liard

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 09310E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 31 04 N
LONGITUDE: 120 41 12 W
ELEVATION: 1575 Metres

NORTHING: 6043594
EASTING: 649737

LOCATION ACCURACY: Within 500M

COMMENTS: Trench TE-02 in stream bed below cirque (Assessment Report 8407).
See also Wapiti East (0931 022).

COMMODITIES: Phosphate

MINERALS

SIGNIFICANT: Phosphorite Phosphate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: F07 Upwelling-type phosphate
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Triassic

Spray River

Sulphur Mountain

LITHOLOGY: Massive Calcareous Siltstone
Algal Silty Limestone
Phosphatic Conglomerate
Silty Shale
Pelletal Phosphorite

HOSTROCK COMMENTS: Phosphatic beds near lower contact of Whistler Member.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

INVENTORY

ORE ZONE: TRENCHES

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Channel

COMMODITY

GRADE

Phosphate

16.6600

Per cent

COMMENTS: Average of 16 hand trenches and surface sections over 1.41 metres.

REFERENCE: Assessment Report 8407.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

Phosphatic units occur mainly within the Whistler Member of the Triassic Sulphur Mountain Formation, Spray River Group. The Whistler Member is dominated by cycles of algal laminated silty limestones grading into massive calcareous siltstone. Silty shales, pelletal phosphorite and phosphatic pebble conglomerates form important but minor interbeds. The basal three metres of the Whistler Member contains a concentration of pelletal phosphatic material culminating in a phosphatic conglomerate. The basic structural style in the area consists of northwest to southeast trending tight anticlines with relatively broad box-like synclines. Minor structures are responsible for both removal and repetition of the phosphatic section and therefore influence the distribution of the phosphatic units. The average of 16 hand trenches and surface sections in 1988 was 16.66 per cent phosphate over 1.41 metres (Assessment Report 8407).

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CAPSULE GEOLOGY

In 1998, the area was staked as the Farm claims.

BIBLIOGRAPHY

EMPR ASS RPT *8407
EMPR EXPL 1980-540; 1998-44
EMPR FIELDWORK 1992, pp. 537-546
EMPR PF (Coburn, S.S. (1954): Wapiti River area, B.C. and maps)
GSC BULL 247
GSC MAP 1424A
GSC P 71-30
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1985/08/27

CODED BY: GSB
REVISED BY: ASL

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **0931 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHIT, MAIN, PETE**

MINING DIVISION: Cariboo

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 093113W
 BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 50 35 N
 LONGITUDE: 121 49 39 W
 ELEVATION: 1280 Metres

NORTHING: 6077957
 EASTING: 575294

LOCATION ACCURACY: Within 500M
 COMMENTS: Main showing.

COMMODITIES: Copper Silver Lead Zinc Antimony

MINERALS

SIGNIFICANT: Chalcocite Tetrahedrite Chalcopyrite
 ASSOCIATED: Quartz Carbonate
 ALTERATION: Malachite Azurite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Podiform
 CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Cambrian	Undefined Group	Lynx	

LITHOLOGY: Dolomite
 Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
 TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Channel

YEAR: 1981

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	361.7000	Grams per tonne
Copper	10.9000	Per cent
Lead	0.0500	Per cent
Antimony	3.0500	Per cent
Zinc	0.8700	Per cent

COMMENTS: Channel sample across vein 10 centimetres wide.
 REFERENCE: Assessment Report 9693.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The Whit main showing consists of chalcocite and tetrahedrite in a narrow zone of steeply dipping discordant quartz carbonate veins hosted in Upper Cambrian Lynx Formation dolomite. This zone occurs an estimated 50 metres above the Middle Cambrian contact. Trenching indicated the high grade mineralization is discontinuous and mainly restricted to a vein 8 to 14 centimetres thick. Channel sampling across this vein in 1981 gave values up to 10.9 per cent copper, 0.05 per cent lead, 0.87 per cent zinc, 3.05 per cent antimony and 361.7 grams per tonne of silver (Assessment Report 9693). The mineralization consists of malachite, azurite and disseminations, stringers, and pods of black, sooty metallics (mainly chalcocite and tetrahedrite) within the veins. The nearby Pete showing consists of minor chalcopyrite in breccia zones.

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RUN TIME: 11:27:59

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EMPR ASS RPT *9693
GSC MAP 1424A
EMPR EXPL 1981-92

DATE CODED: 1985/07/24
DATE REVISED: 1986/09/03

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUINETTE (SHIKANO)**, ROMAN, QUINETTE TREND,
SHIKANO

STATUS: Past Producer Open Pit

MINING DIVISION: Liard

REGIONS: British Columbia

UTM ZONE: 10 (NAD 83)

NTS MAP: 093114E 093115W 093P03E

BC MAP:

LATITUDE: 54 59 00 N

NORTHING: 6094659

LONGITUDE: 121 03 35 W

EASTING: 624160

ELEVATION: 769 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of the property. Production is included with Quintette (093P 019).

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal

MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Fossil Fuel
TYPE: A04 Bituminous coal

SHAPE: Tabular

MODIFIER: Folded Faulted

COMMENTS: Varying degree of folding, with major thrusting common. All major features follow a northwest trend. Folding and faulting has divided the coal-bearing sequence into blocks with varying mineable potential.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous	Fort St. John	Gates	
Lower Cretaceous	Bullhead	Gething	

LITHOLOGY: Coal
Sandstone
Siltstone
Shale
Conglomerate

HOSTROCK COMMENTS: Approximately 74 per cent of regional coal reserves in Quintette are in the Gates Formation, the remainder is in the Gething Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

PHYSIOGRAPHIC AREA: Rocky Mountain Foothills-North

TERRANE: Overlap Assemblage

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: MVol Bituminous

INVENTORY

ORE ZONE: SHIKANO

REPORT ON: Y

CATEGORY: Proven

YEAR: 1996

QUANTITY: 12000000 Tonnes

COMMODITY Coal GRADE 100.0000 Per cent

COMMENTS: Clean coal reserves are contained mainly in the Shikano pit.

REFERENCE: Schroeter, T. and Lane, R., personal communication, 1996.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

Approximately 74 per cent of the regional coal reserves are contained in the Lower-Upper Cretaceous Gates Formation (Fort St. John Group), occurring as eight main seams, A, B, C, D, E, F, G/I and

CAPSULE GEOLOGY

K, from youngest to oldest. In the Middle Gates Formation the upper few seams (D, E, F) are a maximum of 3 metres thick (locally 5 metres) while the lower seams (G/I, J and K) show greatest continuity and seam thickness (seam J is up to 11 metres thick).

The coals are good quality medium volatile coking coals. The basal unit of the Gates Formation (262 to 274 metres), the Torrens Member, is overlain by the Middle Gates Formation which contains 3 or 4 cyclic sequences of coal deposition within 90 metres. This is overlain by the Babcock Member and a coal-bearing unit above. Two or three coal cycles (containing seams A, B and C) occur in this sequence, however, the seams are poorly developed with insufficient thickness, quality and continuity to be considered economic. The coals were deposited in a deltaic setting.

The Gates Formation is underlain by the marine Moosebar Formation and below that the coal-bearing Lower Cretaceous Gething Formation (Bullhead Group). The latter consists of coarse sandstone, carbonaceous shale, coal, sandy shale and conglomerate. Three or four coal zones (closely overlying the basal conglomerate, Middle Coal zone, Bird and Skeeter-Chamberlain zones) are present in some areas but may be poorly developed.

The Skeeter-Chamberlain zone is usually less than 4-metres thick, the Bird seam may be 6 to 7-metres thick (only in the Babcock area) and the Middle Coal zone is not very persistent. It is 6 to 7 metres thick in the Johnston area, and consists of a 25-metre seam with a 1-metre split in the Wolverine River area.

The main structure in the coal-bearing areas are broad synclines and sharper anticlines, separated by low to medium angle thrust faults that dip southwest, with vertical displacements up to approximately 100 metres. Minor thrusts are common.

Sulphur in the Quintette coals is generally less than 0.5 per cent. Local contents up to 0.8 per cent sulphur may occur associated with concentrations of pyrite.

Run-of-mine wet tonnes of metallurgical coal in 6 seams at Shikano are 10,646,400 tonnes; run-of-mine wet tonnes of thermal coal in 6 seams total 2,554,800 (Mine Development Assessment Process - Stage I Report, Quintette Coal Limited - Shikano Development, April 1985). Proven reserves at Quintette Trend are 26.1 million tonnes and at Roman, 26.5 million tonnes; all medium volatile coking coal respectively (Open File 1992-1). See Quintette (093P 019) for production statistics. The Shikano pit was mined from 1986 to 1998.

Clean coal reserves, of 12 million tonnes, are contained mainly in the Shikano pit. Exploration in 1995 identified two areas, Mesa Extension (093P 019) and mining along contour at Babcock (093I 011), that would add approximately 19 million tonnes of clean coal to the reserve total (Schroeter, T. and Lane, R., personal communication, 1996).

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- <http://www.infomine.com/index/>

DATE CODED: 1986/02/15
DATE REVISED: 1989/08/02

CODED BY: EVFK
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **BABCOCK (QUINETTE)**, QUINETTE (BABCOCK), BABCOCK,
LITTLE WINDY, BIG WINDY, MOUNT BABCOCK,
WINDOW

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 09315W
BC MAP:
LATITUDE: 54 56 10 N
LONGITUDE: 120 59 30 W
ELEVATION: 1767 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre between two pit areas, west and east of Babcock Mountain. Production is included with Quintette (093P 019).

Open Pit

MINING DIVISION: Liard
UTM ZONE: 10 (NAD 83)
NORTHING: 6089528
EASTING: 628665

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary
TYPE: A04 Bituminous coal
SHAPE: Tabular
MODIFIER: Folded
COMMENTS: Broad box anticline plunges approximately 7 degrees southeast.

Massive
Fossil Fuel

Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous	Fort St. John	Gates	

LITHOLOGY: Coal
Sandstone
Siltstone
Claystone
Mudstone

HOSTROCK COMMENTS: Economic coal seams are confined to the Middle Gates Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Rocky Mountain Foothills-North

RELATIONSHIP: GRADE: MVol Bituminous

INVENTORY

ORE ZONE: TOTAL
CATEGORY: Proven
QUANTITY: 18000000 Tonnes
COMMODITY: Coal
GRADE: 100.0000 Per cent
REMARKS: Mineable reserves in Babcock, Mesa (093P 019), and Mesa Extension (093P 019) at the end of 1998.
REFERENCE: Exploration in BC 1998, page 37.

REPORT ON: Y

YEAR: 1998

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

The Lower-Upper Middle Gates Formation (Fort St. John Group) (105 to 125 metres) contains coal seams D, E, F, G/I, J and K (youngest to oldest) in the Babcock area interbedded with sandstone, siltstone, claystone and mudstone. These are of medium volatile bituminous coking coal with thicknesses that are considered mineable

CAPSULE GEOLOGY

for each seam. D seam is 1.6 to 3.7 metres thick with few partings, E is 2.3 to 3.5 metres thick with at least two clastic intervals, F is 1.35 to 3.8 metres thick with variable numbers of partings, G/I is on average 2.4 metres thick with few partings, J (the thickest seam) 3.7 to 7.6 metres thick with variable number and continuity of partings and K averages approximately 2 metres thick with several minor and in some areas major clastic partings.

The structure consists of a main broad box anticline plunging approximately 7 degrees to the southeast. Refer to Quintette (093P 019) for production, further information and references.

Metallurgical plant-feed coal totals 100.9 million tonnes plus 6.3 million tonnes of thermal plant-feed coal in 6 mineable seams (Mine Development Assessment Process - Stage II Report, Volume 1, Quintette Coal Limited, May 1982).

Exploration in 1995 identified two areas, Mesa Extension (093P 019) (7 million tonnes) and mining along contour at Babcock (12 million tonnes), that would add approximately 19 million tonnes of clean coal to the reserve total at Quintette (T. Schroeter, personal communication, 1997).

Approximately one-third of 1998 production was from the Little and Big Windy developments, operated by Teck Corporation. Production is included with Quintette (093P 019). The remaining mineable reserves are contained in the Babcock, Mesa (093P 019) and Mesa Extension (093P 019) areas. Clean coal reserves, at the end of 1998, are an estimated 18 million tonnes. The Babcock development is expected to produce 2 million tonnes of clean coal per annum for the next five years. The balance of 1 million tonnes per year will come from Mesa and Mesa Extension. A planned exploration program consisting of percussion and large-diameter core drilling, together with bulk sampling, on the Window area at Babcock, was postponed indefinitely.

The Quintette Coal Mine closed on August 17, 2000 (Information Circular 2001-1, page 6).

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- GSC MAP 1424A
- GSC P 89-4
- WWW <http://www.teckcominco.com/operations/>;
- <http://www.infomine.com/index/>

DATE CODED: 1986/02/15
DATE REVISED: 1986/02/15

CODED BY: EVFK
REVISED BY: EVFK

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **ONION LAKE**

MINING DIVISION: Liard

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 09310W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 44 00 N
LONGITUDE: 120 48 05 W
ELEVATION: Metres

NORTHING: 6067336
EASTING: 641562

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of property.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A04 Bituminous coal

SHAPE: Irregular
MODIFIER: Folded Faulted
DIMENSION: 0014 Metres

STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Four northwest trending, northwest plunging folds, to the southwest of which is the northwest trending, southwest dipping Front Range thrust fault separating Cretaceous from Paleozoic strata.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous	Fort St. John	Gates	

LITHOLOGY: Coal
Sandstone
Siltstone
Mudstone
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Rocky Mountain Foothills-North

RELATIONSHIP: Post-mineralization GRADE:

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

The main coal seams occur in the Gates Formation (362 to 435 metres thick) which consists of interbedded sandstone, siltstone, mudstone, coal and conglomerate. Up to 11 seams are present ranging in thickness from 0.21 metres to approximately 14 metres. In general the seams thin towards the top of the formation, with thickest coal between 20 and 30 metres above the Torrens sandstone (first Gates coal zone). Drillhole ON81-1 encountered a 8.5 metre thick seam at the top of the coal-bearing section of the Gates Formation.

Coal also occurs in the Gething Formation, with possibly two zones of no more than 1 or 2 metres each.

The structure consists of four northwest trending, northwest plunging folds, of which the Wapiti anticline and the Onion syncline are the most northeasterly. The Cretaceous is thrust against the Paleozoic along the northwest trending, southwest dipping Front Range thrust at the western edge of the property.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 992
REPORT: RGEN0100

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accompanying maps)
GSC MAP 1424A
GSC P 89-4
Placer Dome File

DATE CODED: 1986/02/15
DATE REVISED: / /

CODED BY: EVFK
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **0931 013**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONKMAN**, MONKMAN-BELCOURT, MONKMAN PASS

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 09310E 093107E 093108W 093115W
BC MAP:

MINING DIVISION: Liard

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 46 50 N
LONGITUDE: 120 44 21 W
ELEVATION: 1737 Metres

NORTHING: 6072716
EASTING: 645398

LOCATION ACCURACY: Within 500M

COMMENTS: The property which is 80 kilometres long in a northwest direction. The project area includes the Five Cabin, Onion Syncline, North and South Wapiti, Belcourt, Secus, Nekik, Saxon Extension and Duke Mountain blocks. The location is for the area of the proposed Honeymoon (East and West) pits and the Duke Mountain pit.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Fossil Fuel
TYPE: A04 Bituminous coal
SHAPE: Tabular
MODIFIER: Folded Faulted
COMMENTS: A northwest trending anticlinorium is cut by a series of northeast or southwest dipping thrust faults.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous	Fort St. John	Gates	
Jurassic-Cretaceous	Minnes	Unnamed/Unknown Formation	

LITHOLOGY: Coal
Sandstone
Siltstone
Claystone
Conglomerate

HOSTROCK COMMENTS: The main coal-bearing formation is the Gates. Coal also occurs in the Minnes Group and the Gething and Boulder Creek formations.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Hart Ranges

RELATIONSHIP:

GRADE: MVol Bituminous

INVENTORY

ORE ZONE: MONKMAN

REPORT ON: Y

CATEGORY: Measured YEAR: 1981
QUANTITY: 68932000 Tonnes
COMMODITY: Coal GRADE: 100.0000 Per cent

COMMENTS: Run-of-mine reserves at a run-of-mine strip ratio of 6.3, for seven seams.

REFERENCE: MDAP-Stage II Rpt., Vol.1, Monkman Coal Project, Petro-Canada, Dec./81.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

Twelve coal seams of medium to high volatile bituminous rank

CAPSULE GEOLOGY

occur in the Gates Formation (Fort St. John Group) of Lower Cretaceous age. The lower 9 seams (B1 to B9 which are considered economic) vary in thickness from 1.6 to 5.2 metres (on average) while the upper seams are generally less than 1 metre in thickness. The Gates Formation consists of a cyclic succession of sandstone, claystone, siltstone, conglomerate and coal (average thickness 248 metres but ranges from 190 to 290 metres), deposited in a deltaic setting.

The coal seams which exhibit good coking characteristics have variable numbers of partings (zero to numerous) with sulphur content less than 1 per cent, averaging approximately 0.42 per cent.

The oldest unit in the area is the Minnes Group which contains strata with numerous thin coal seams, none of which are greater than 1.2 metres in true thickness. These strata are overlain and underlain by coarse nonmarine sandstone, claystone and siltstone.

Unconformably overlying Minnes Group strata is the Lower Cretaceous Cadomin Formation (Bullhead Group) followed by alternating nonmarine and marine sequences in the Bullhead and Fort St. John groups. The Gething Formation (Bullhead Group) (130 metres) contains similar lithologies to the Gates Formation including several coal seams of mineable thickness. The seam thicknesses are 2.5 and 4.1 metres in the upper and lower seams respectively. Sulphur is greater than 2 per cent in the upper seam which also includes numerous rock partings. Sulphur is less than 1 per cent in the lower seam and rock partings are common towards the base.

The Gates Formation is underlain by the marine Moosebar Formation (90 metres) and overlain by marine Hulcross Formation. The succeeding Boulder Creek Formation which consists of from 125 to 200 metres of nonmarine sandstone, siltstone, claystone and conglomerate also contains some minor coal seams. All formations are part of the Fort St. John Group.

The structure of the property is a major northwest trending anticlinorium which is cut in the Duke Mountain block by a series of northeast or southwest dipping thrust faults. The anticlinorium is bounded on the east and west by thrust faults and complicated internally by zones of intense folding and faulting.

The Gates Formation in the Wapiti and Belcourt blocks occurs on the eastern limb of the anticlinorium or west limb of a syncline dipping northeast approximately 65 degrees.

The Nekik block contains Lower Gates Formation, underlain by Moosebar Formation and Gething Formation. Mineable seams include B3, B4, B7 and B9 in the Gates Formation and seam A in the Gething Formation. Thicknesses range from 1.70 metres (B9) to 4.18 metres (B3). Coal is sulphur-poor, less than 0.35 per cent sulphur with ash content approximately 10 per cent. Free Swelling Index for seams B3 and A are 3 and 2.5 respectively.

The structure of the Nekik block consists of a northerly plunging syncline with a gently dipping east limb (10 to 20 degrees west) and an overturned west limb (east limb of the anticlinorium to the west of the Wapiti and Belcourt blocks).

Run-of-mine reserves at a run-of-mine strip ratio of 6.3 for seven seams are 68,932,000 tonnes coal (Mine Development Assessment Process - Stage II Report, Volume 1, Monkman Coal Project, Petro-Canada, December 1981).

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- GSC P 89-4
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- Placer Dome File

DATE CODED: 1986/02/15
DATE REVISED: 1989/08/02

CODED BY: EVFK
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **BELCOURT COAL**, RED DEER SOUTH, HOLTSLANDER NORTH,
HUGUENOT, OMEGA, WESTERN COAL

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093109W 093108W 093110E 093115E
BC MAP:
LATITUDE: 54 33 00 N
LONGITUDE: 120 18 50 W
ELEVATION: 1310 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of the property.

MINING DIVISION: Liard
UTM ZONE: 10 (NAD 83)
NORTHING: 6048036
EASTING: 673723

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Fossil Fuel
TYPE: A04 Bituminous coal
SHAPE: Tabular
MODIFIER: Folded Faulted
COMMENTS: Folded and faulted Lower Cretaceous strata is situated along the northeast limb of the northwest plunging Belcourt anticlinorium.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous	Fort St. John	Gates	
Lower Cretaceous	Bullhead	Gething	

LITHOLOGY: Coal
Sandstone
Siltstone
Claystone
Mudstone

HOSTROCK COMMENTS: The economic coal occurs in the Gates Formation with lesser coal in the Gething Formation and the Minnes Group.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Rocky Mountain Foothills-North

RELATIONSHIP:

GRADE: LVol Bituminous

INVENTORY

ORE ZONE: BELCOURT REPORT ON: Y
CATEGORY: Measured YEAR: 1998
QUANTITY: 18000000 Tonnes
COMMODITY: Coal GRADE: 100.0000 Per cent
COMMENTS: Western Coal Corporation, 1998.
REFERENCE: Information Circular 1999-1, page 12.

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Measured YEAR: 1980
QUANTITY: 123500000 Tonnes
COMMODITY: Coal GRADE: 100.0000 Per cent
COMMENTS: The combined Red Deer South and Holtslander North open pit mine areas.
REFERENCE: Coal Assessment Report 466, page 1-5.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

CAPSULE GEOLOGY

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

Economically significant coal measures (low to medium volatile metallurgical bituminous) occur in the Lower-Upper Cretaceous Gates Formation (Fort St. John Group), lying mainly in the northeast limb of the Belcourt anticlinorium.

Nine coal zones, 1 to 9, occur in the Middle and Upper Gates Formation, interbedded with carbonaceous sandstones, siltstones, claystones, coal and some conglomerates deposited in back barrier and delta marshes (Middle Gates) and flood plain environments (Upper Gates).

Zone 1 (3 to 10 metres thick) exists from Omega block in the south to Holtslander North. Although usually one mining section, up to four have been noted (Holtslander North).

Zone 2 is the basal seam in the north where it is also thickest (6 to 8 metres average) and persistent. To the south in the central part of the property it thins and in the far south again is significantly thick (2 to 3 metres).

Zone 3 is 4.5 metres thick in the north with many splits. It is variable laterally in thickness and number of splits. It thickens to the south (4.35 metres) (Ptarmigan/Red Deer) and then pinches out.

Zone 4 is 2.5 to 3.5 metres thick in the Red Deer blocks in the north and is a relatively low ash seam. The zone thins over the rest of the property.

Zone 5 is generally 5 to 6.5 metres thick and up to 10 metres in Holtslander South and Red Deer North. It thins to the far north to 1.17 metres.

Zone 6, 7 and 8 are locally persistent as coal or carbonaceous zones with fluvial channel deposits separating them.

The coals are low volatile (maximum reflectance 1.63) in the Ptarmigan and Omega blocks, and medium volatile (maximum reflectance 1.23) in the remaining areas. Average total reactives respectively are 67 and 63 per cent.

Volatile content increases to the northwest from 19.7 to 27.4 per cent and sulphur increases from 0.35 to 0.46 per cent in a southeast direction. Free Swelling Indexes are below 6 in the south and range from 6 to 8 in the medium volatile coals. Average phosphorous is 0.042 per cent with local highs noted as for sulphur.

The Lower Cretaceous Gething Formation (Bullhead Group) also contains significant coal (up to 5 seams greater than 0.5 metres). Seams appear to be laterally discontinuous. The Jurassic-Lower Cretaceous Minnes Group contains numerous thin seams whose lateral extent is often limited.

The Belcourt coal property covers the northeast limb of the Belcourt anticlinorium. The folds, of various types, generally have southwest dipping axial planes. Several major northwest trending, southwest dipping thrust faults occur on the property.

Two open pit areas were defined within the Gates Formation: 1) Red Deer South - a box-like to overturned asymmetric anticline/syncline plunging southeast 7 to 10 mining sections with 21.31 metres average aggregate mining section thickness. Coal dips 15 to 90 degrees; and 2) Holtslander North - a shallow, open synclinorium, plunging southeast; 8 to 12 mining sections with an average aggregate mining section thickness of 16.75 metres. Coal dips 15 degrees to 40 degrees.

The combined Red Deer South and Holtslander North open pit mine areas contain a total of 113.7 million tonnes of metallurgical coal plant-feed and 9.8 million tonnes of thermal coal plant-feed at a plant-feed stripping ratio of 8.8 cubic metres of waste material per tonne of plant-feed coal (Coal Assessment Report 466, page 1-5).

In 1998, Western Coal Corporation conducted drilling on the Holtslander reserve area. A resource of 18,000,000 tonnes of metallurgical coal has been outlined, with additional potential in the Red Deer area (Information Circular 1999-1, page 14).

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EMPR FIELDWORK 1988, pp. 571-576; 1991, pp. 405-417; 1992, pp. 537-546
EMPR MAP 65 (1989)
EMPR OF 1992-1
GSC MAP 1424A
GSC P 89-4
N.E. COAL STUDY 1977, pp. 46,47

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 997
REPORT: RGEN0100

BIBLIOGRAPHY

N MINER Apr.12, 1999
Placer Dome File

DATE CODED: 1986/02/15
DATE REVISED: 1987/02/27

CODED BY: EVFK
REVISED BY: CB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **SECUS MOUNTAIN**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093108W 093107E
BC MAP:

MINING DIVISION: Liard

LATITUDE: 54 22 00 N
LONGITUDE: 120 23 05 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 6027471
EASTING: 669901

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of the property. The area can be divided physiographically from north to south into Dumb Goat, Belcourt Creek, South Secus (or Secus Mountain) and Mount Nekik.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A04 Bituminous coal
SHAPE: Tabular
MODIFIER: Faulted
COMMENTS: Southwest dipping, northwest striking strata terminates against a major northwest trending, southwest dipping thrust fault, the Front Range thrust.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous	Fort St. John	Gates	
Lower Cretaceous	Bullhead	Gething	

LITHOLOGY: Coal
Sandstone
Siltstone
Mudstone
Conglomerate

HOSTROCK COMMENTS: Thin seams also occur in the Minnes Group.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Hart Ranges
RELATIONSHIP: Post-mineralization
GRADE:

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

The Gates Formation (362 to 435 metres thick) contains the Gates coal zone #1 and 6 other seams (at least) interbedded with sandstones, conglomerates, siltstones and mudstones. Gates coal zone #1 occurs 20 to 30 metres above the Torrens sandstone and consists of either a single thick seam (approximately 14 metres at one ridge on Mount Belcourt) or more often as two or more thinner beds.

Coal also occurs in the Minnes Group but seams are less than 1 or 2 metres thick and of little lateral extent. Two coal zones have been identified in the Gething Formation, the upper and lower coal zones, however, these are also less than a metre or two each. The Gates coal is probably good quality metallurgical coal (Hoffman 1979).

The structure consists of a series of southwest dipping strata which terminate against a major northwest trending, southwest dipping thrust fault, the Front Range thrust, which separates the

CAPSULE GEOLOGY

above from older Paleozoic sediments to the west.

To the south of the area a synclinal axis and west of that an anticlinal axis are present east of the Front Range thrust.

Two additional northwest trending, southwest dipping thrust faults are present east of the main fault in the Dumb Goat area, to the north.

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EMPR COAL ASS RPT 545, 546, 630, 631, 632
GSC MAP 1424A; 1869A
GSC P 89-4
EMPR EXPL 1979-349; 1980-561; 1983-573; 1984-427
EMPR FIELDWORK 1988, pp. 571-576

DATE CODED: 1986/02/15
DATE REVISED: 1989/08/11

CODED BY: EVFK
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **SAXON**, SAXON EAST, WESTERN COAL

MINING DIVISION: Liard

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093108E

BC MAP:

LATITUDE: 54 19 00 N

LONGITUDE: 120 07 35 W

ELEVATION: 1356 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of the property.

UTM ZONE: 10 (NAD 83)

NORTHING: 6022563

EASTING: 686906

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal

MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Fossil Fuel

TYPE: A04 Bituminous coal

SHAPE: Tabular

MODIFIER: Folded Faulted

COMMENTS: A northwest trending, centrally plunging synclorium is cut by numerous northwest trending, mainly southwest dipping thrust faults.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous	Fort St. John	Gates	

LITHOLOGY: Coal
Sandstone
Claystone
Siltstone
Conglomerate

HOSTROCK COMMENTS: Thin coal seams occur in the Minnes Group and Gething and Boulder Creek formations.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Overlap Assemblage

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Hart Ranges

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAXON EAST

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 26800000 Tonnes

YEAR: 1998

COMMODITY: Coal GRADE: 100.0000 Per cent

REFERENCE: Northern Miner, April 12, 1999.

ORE ZONE: SAXON

REPORT ON: Y

CATEGORY: Combined
QUANTITY: 426100000 Tonnes

YEAR: 1976

COMMODITY: Coal GRADE: 100.0000 Per cent

COMMENTS: Total inferred and indicated reserves in place, mineable by both surface and underground methods.

REFERENCE: Coal Assessment Report 627, page 2.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata.

CAPSULE GEOLOGY

These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

Six main coal seams occur in the Lower-Upper Cretaceous Gates Formation (Fort St. John Group) (average thickness 365 metres) and reach an average total thickness of 18 metres. The seams are concentrated towards the base of the formation and are identified as seams 1 to 5 and seam 10 from oldest to youngest. Seams 1, 2 and 4 form the bulk of the coal-bearing section and together with seam 3 in Saxon South, form the basis for the reserve calculations. The coal occurs interbedded with sandstone, claystone, siltstone and conglomerate.

Seam 1 thickens to the north where several splits are present. Seam 2 is present throughout the property but is characterized by a thick rock band in the south. Seam 3 is absent near the property centre but occurs in the north and south. Seam 4 increases in thickness at the centre of and to the south of the property. Seam 5 is characterized by abundant splitting and lensing. Seam 10 is present in the south and lenses out towards the north.

Thicknesses of the main seams appear to demonstrate no major lateral changes over short distances. Seam 4 in the Saxon South area is thickest along the axis of the main anticline and thins towards the limbs, probably as a result of tectonic thickening.

The structure of the property consists of a large, complex, northwest trending synclinalorium plunging from the north and south of the property, towards the centre. The area is cut by numerous northwest trending, predominantly southwest dipping thrust faults.

Total inferred and indicated reserves in place, mineable by both surface and underground methods are 426.1 million tonnes coal (Coal Assessment Report 627, page 2).

Western Canadian Coal plans to develop this deposit. Prior to 1983, exploration was largely conducted by Denison Mines. Resources calculated at Saxon East stand at 26.8 million tonnes (Northern Miner, April 12, 1999).

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EM INF CIRC 1998-1, p. 23
EMPR COAL ASS RPT 627, 628, 629
EMPR FIELDWORK 1988, pp. 571-576; 1991, pp. 405-417
EMPR MAP 65 (1989)
EMPR OF 1992-1
GSC MAP 1424A; 1869A
GSC P 89-4
COAL IN B.C. 1986-3, pp. 23
N MINER Apr.12, 1999
WWW <http://www.infomine.com/>

DATE CODED: 1986/02/15
DATE REVISED: 1989/08/02

CODED BY: EVFK
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **HANINGTON**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093108E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 15 35 N
LONGITUDE: 120 14 40 W
ELEVATION: Metres

NORTHING: 6015923
EASTING: 679477

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of the property.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Jurassic-Cretaceous

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A04 Bituminous coal
SHAPE: Irregular
MODIFIER: Folded Faulted
COMMENTS: A broad north or northwest trending syncline is cut by a north or northwest trending, southwest dipping thrust fault. Associated with the fault are tightly folded Minnes Group sediments.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Jurassic-Cretaceous	Minnes	Undefined Formation	

LITHOLOGY: Coal
Sandstone
Shale
Siltstone
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Hart Ranges

RELATIONSHIP: Post-mineralization GRADE:

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

Coal seams ranging up to 1 metre in thickness, but predominantly between 0.10 and 0.30 metres, occur in the Minnes Group interbedded with sandstone, shale, siltstone and conglomerate. Ash in the coal in two samples ranges from 9.52 per cent to 44.09 per cent, volatile matter 26.12 per cent to 35.96 per cent, fixed carbon 28.58 per cent to 52.98 per cent, sulphur 0.54 per cent to 0.70 per cent and BTU 7,740 to 13,410.

The main structural feature in the area is a broad, roughly north or northwest trending syncline. The west limb of the syncline is cut by a north to northwest trending thrust fault (west dipping) which places Triassic limestones against Cretaceous rocks close to the fault. The Minnes Group is tightly folded.

BIBLIOGRAPHY

EMPR COAL ASS RPT 536
GSC MAP 1424A; 1869A
GSC P 89-4

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1003
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1979-349

DATE CODED: 1986/02/15
DATE REVISED: 1989/08/02

CODED BY: EVFK
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **TORRENS RIVER**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093101E 093108E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 13 40 N
LONGITUDE: 120 03 50 W
ELEVATION: Metres

NORTHING: 6012845
EASTING: 691382

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of the property.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A04 Bituminous coal
SHAPE: Irregular
MODIFIER: Folded Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous	Fort St. John	Gates	
Lower Cretaceous	Bullhead	Gething	

LITHOLOGY: Coal
Sandstone
Siltstone
Claystone
Mudstone

HOSTROCK COMMENTS: Seams occur mainly in the Gates Formation, however one main seam is also present in the Gething Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Hart Ranges

RELATIONSHIP: Post-mineralization GRADE:

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

The Gates Formation is the main coal bearing unit on the property. It contains five main seams, seams #1 to #5. Seam #1 is 3.66 to 9.1 metres thick (average 6.1 metres) and occurs directly above the Torrens sandstone. Seam #2 is 3.7 to 4.6 metres thick. Seam #3 is 0.61 to 1.5 metres thick, while the next highest seam, seam #4, is 10.7 metres thick in places and the thickest seam in the area. Seam #5 is 0.9 to 3.05 metres thick.

The Gething Formation contains a coal seam, the Gething coal seam (2.44 to 3.05 metres thick) at the top of the formation. The 6 seams occur interbedded with sandstone, siltstone, claystone and carbonaceous mudstone. Analyses of coal samples from all the main seams show variations in content as follows; (on a dry basis) ash 3.18 per cent to 10.86 per cent, volatile matter 19.36 per cent to 27.51 per cent, fixed carbon 66.48 per cent to 73.59 per cent and sulphur 0.22 per cent to 0.70 per cent.

The structure consists of a series of northwest trending folds which make up the Torrens Ridge anticlinorium in the southwest and a synclinorium in the northeast. The property is cut in the northeast by a north-northwest to south-southeast

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CAPSULE GEOLOGY

trending thrust fault. Associated with this is a northwest trending normal fault which separates the anticlinorium and synclinorium.

BIBLIOGRAPHY

EMPR COAL ASS RPT 678, 679
EMPR FIELDWORK 1988, pp. 571-576; 1991, pp. 65-82, 83-91
GSC MAP 1424A
GSC P 89-4
Placer Dome File

DATE CODED: 1986/02/15
DATE REVISED: 1989/08/11

CODED BY: EVFK
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 019**

NATIONAL MINERAL INVENTORY:

NAME(S): **COAL RIDGE**, MOUNT GORMAN

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093101E

BC MAP:

LATITUDE: 54 13 00 N

LONGITUDE: 120 03 05 W

ELEVATION: Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of the property. Also includes the Coal Ridge area.

MINING DIVISION: Liard

UTM ZONE: 10 (NAD 83)

NORTHING: 6011643

EASTING: 692248

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal

MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Stratiform

CLASSIFICATION: Sedimentary

TYPE: A04 Bituminous coal

SHAPE: Tabular

MODIFIER: Folded

COMMENTS: Remnant of the northeast limb of a large and gentle syncline.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Cretaceous

GROUP

Fort St. John

FORMATION

Gates

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Coal

Sandstone

Siltstone

Mudstone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Overlap Assemblage

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Hart Ranges

RELATIONSHIP: Post-mineralization

GRADE:

INVENTORY

ORE ZONE: COAL RIDGE

REPORT ON: Y

CATEGORY: Indicated

QUANTITY: 4500000 Tonnes

YEAR: 1986

COMMODITY

GRADE

Coal

100.0000

Per cent

COMMENTS: Preliminary calculations indicate from 4 to 4.5 million tonnes of raw coal reserves in seams #1, #2, #4 and the Gething seam.

REFERENCE: Coal Assessment Report 549.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

The coal measures of the region occur mainly in Cretaceous sediments deposited unconformably on older miogeoclinal strata. These sediments were subjected to fold and thrust tectonics which also affected the older rocks.

Only the lowest four coal seams in the Gates Formation are present in this area. They are interbedded with siltstones, sandstones and mudstones. The lowest seam (#1) lying immediately above the Torrens sandstone, although 3.7 to 9.1 metres in adjoining areas (average 6.1 metres), is 1.8 to 2.7 metres thick in outcrop at Coal Ridge.

Seam #2 is approximately 3.7 to 4.6 metres thick. Seam #3 is thinner (0.3 metres) and locally up to 1.5 metres thick. Seam #4 is 5.5 to 6.1 metres thick in outcrop at Coal Ridge. It averages

CAPSULE GEOLOGY

9.1 metres in adjoining coal licences.

The Gething Formation contains a seam approximately 3.05 metres thick at the top of the formation.

The seams on a dry basis contain from 16.57 (seam #4) to 35.40 per cent (seam #1) ash, 22.24 per cent (seam #1) to 26.09 per cent (Gething seam) volatile matter, 42.36 per cent (seam #1) to 54.91 per cent (Gething seam) fixed carbon, 0.31 per cent (Gething seam) to 0.37 per cent (seams #1, #2 and #4) sulphur.

Preliminary reserve calculations indicate between 4,000,000 and 4,500,000 long tonnes of raw coal reserves present in the area (in seams #1, #2, #4 and the Gething seam).

Beds dip southwest, strike northwest and consist of a remnant of the northeast limb of a large and gentle syncline. No other folds or faults are apparent.

BIBLIOGRAPHY

EMPR COAL ASS RPT 549
EMPR FIELDWORK 1991, pp. 65-82
GSC MAP 1424A
GSC P 89-4
Placer Dome File

DATE CODED: 1986/02/15
DATE REVISED: 1986/02/15

CODED BY: EVFK
REVISED BY: EVFK

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **MEOSIN MOUNTAIN NORTH**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093108W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 17 05 N
LONGITUDE: 120 19 45 W
ELEVATION: 1920 Metres

NORTHING: 6018492
EASTING: 673855

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the northeast flank of Meosin Mountain.

COMMODITIES: Phosphate

MINERALS

SIGNIFICANT: Fluorapatite
MINERALIZATION AGE: Lower Triassic

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: F07 Upwelling-type phosphate
DIMENSION: 0001 Metres
COMMENTS: Phosphorite bed 1.3 metres thick.

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 Triassic	Spray River	Sulphur Mountain	

LITHOLOGY: Phosphorite
Phosphatic Siltstone
Calcareous Siltstone
Limestone

HOSTROCK COMMENTS: Near base of Whistler member and in upper part of Vega-Phroso member.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

In this region phosphatic beds are commonly found in Upper Paleozoic to Lower Mesozoic rocks. These are exposed to the west of a major thrust fault which has thrust these rocks over younger, mainly Cretaceous strata. The Cretaceous strata is exposed to the east.

A 1.3 metre thick phosphorite bed occurs near the base of the Whistler Member of the Sulphur Mountain Formation, Spray River Group. Host rocks for the phosphorite are siltstone, calcareous siltstone and minor limestone.

Two thin phosphatic siltstone beds occur in the upper part of the Vega-Phroso member of the Sulphur Mountain Formation. Phosphate occurs as fluorapatite.

BIBLIOGRAPHY

EMPR FIELDWORK *1987, p. 405
GSC P 71-30
GSC MAP 1424A; 1869A

DATE CODED: 1988/02/15
DATE REVISED: / /

CODED BY: SBB
REVISED BY:

FIELD CHECK: Y
FIELD CHECK:

MINFILE NUMBER: **0931 021**

NATIONAL MINERAL INVENTORY:

NAME(S): **MEOSIN MOUNTAIN SOUTH**, PERMIAN MEOSIN

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093108W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 16 30 N
LONGITUDE: 120 18 55 W
ELEVATION: 1900 Metres

NORTHING: 6017445
EASTING: 674800

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the eastern flank of Meosin Mountain.

COMMODITIES: Phosphate

MINERALS

SIGNIFICANT: Fluorapatite
ASSOCIATED: Quartz Calcite Clay
MINERALIZATION AGE: Lower Triassic

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: F07 Upwelling-type phosphate
SHAPE: Regular
DIMENSION: 0001 Metres
COMMENTS: Phosphatic intervals are 0.5 to 1 metre thick.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Triassic	Spray River	Sulphur Mountain	
Permian	Undefined Group	Mowitch	

LITHOLOGY: Phosphatic Siltstone
Arenaceous Limestone
Calcareous Siltstone
Siltstone

HOSTROCK COMMENTS: Phosphatic siltstone is part of the Whistler member.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY _____ GRADE _____
Phosphate 18.9600 Per cent

COMMENTS: Commodity is P2O5. Sample from siltstone bed at top of Permian Mowitch Formation.

REFERENCE: Personal Communication - S. Butrenchuk, 1988.

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

In this region phosphatic beds are commonly found in Upper Paleozoic to Lower Mesozoic rocks. These are exposed to the west of a major thrust fault which has thrust these rocks over younger, mainly Cretaceous, strata. The Cretaceous strata is exposed to the east.

Several very thin phosphatic siltstone or calcareous siltstone and arenaceous limestone occur throughout the Whistler member of the Sulphur Mountain Formation, Spray River Group. Phosphatic intervals are 0.5 to 1.0 metres thick. Phosphate is present as fluorapatite in pellets or rarely, in nodules. Phosphate values of 6.86 and 4.35 per cent P2O5 were obtained across widths of 50 centimetres (Fieldwork 1987).

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CAPSULE GEOLOGY

Also, at the top of the Permian Mowitch Formation is a siltstone bed, 1 metre or less thick that contains 35 to 50 per cent phosphate nodules. A sample from this bed contained 18.96 per cent P2O5 (Personal Communication, S. Butrenchuk, 1988).

BIBLIOGRAPHY

GSC P 71-30
EMPR FIELDWORK 1987, pp. 396-410
GSC MAP 1424A; 1869A

DATE CODED: 1988/02/15
DATE REVISED: 1989/08/11

CODED BY: SSB
REVISED BY: GO

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **0931 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **WAPITI EAST**, FARM

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093110E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 31 50 N
LONGITUDE: 120 40 05 W
ELEVATION: 1825 Metres

NORTHING: 6045056
EASTING: 650894

LOCATION ACCURACY: Within 500M
COMMENTS: See also Wapiti (0931 008).

COMMODITIES: Phosphate

MINERALS

SIGNIFICANT: Fluorapatite Phosphate
ASSOCIATED: Quartz Calcite Clay
MINERALIZATION AGE: Permian

DEPOSIT

CHARACTER: Stratabound Concordant
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: F07 Upwelling-type phosphate
SHAPE: Regular
DIMENSION: 100 x 30 x 1 Metres STRIKE/DIP: 120/60N TREND/PLUNGE:
COMMENTS: Steeply dipping east limb of a synclinal structure.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian	Unnamed/Unknown Group	Mowitch	

LITHOLOGY: Sandstone
Siltstone
Phosphatic Siltstone
Chert

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks consisting mainly of continental margin and shelf facies rocks. This assemblage was deposited on and to the west of the ancestral North American craton. These sedimentary rocks, for the most part typical miogeoclinal facies, range in age from Hadrynian to Upper Cretaceous. Structurally these rocks are part of the Foreland Thrust and Fold Belt of the North American Cordillera.

In this region phosphatic beds are commonly found in Upper Paleozoic to Lower Mesozoic rocks. These are exposed to the west of a major thrust fault which has thrust these rocks over younger, mainly Cretaceous strata. The Cretaceous strata is exposed to the east.

Phosphate nodules occur in a 1 to 2 metre thick sandstone bed at the top of the Permian Mowitch Formation. This sandstone bed is underlain by a 2 to 3 metre thick chert horizon. The phosphatic sandstone bed can be traced along strike for a minimum of 100 metres.

Phosphate nodules comprise 40 to 60 per cent of the sandstone bed by volume.

The Permian sequence is underlain by Mississippian carbonate strata and unconformably overlain by siltstone of the Vega-Phroso member of the Triassic Sulphur Mountain Formation.

In 1998, the area was staked as the Farm claims.

BIBLIOGRAPHY

EMPR ASS RPT *8407
EMPR EXPL 1980-540; 1998-44
EMPR FIELDWORK 1987, pp. 396-410; 1992, pp. 537-546
EMPR PF (Coburn, S.S. (1954): Wapiti River area, B.C. and maps)
GSC MAP 1424A

DATE CODED: 1987/07/09
DATE REVISED: 1999/07/28

CODED BY: SSB
REVISED BY: LDJ

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **0931 022**

MINFILE NUMBER: **0931 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **JARVIS LAKES**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093101W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 07 40 N
LONGITUDE: 120 14 25 W
ELEVATION: 1980 Metres

NORTHING: 6001259
EASTING: 680322

LOCATION ACCURACY: Within 500M

COMMENTS: Location of float in scree slope beneath cliffs, 3.5 kilometres north of Jarvis Lake (Fieldwork 1991, page 80).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrite

ASSOCIATED: Pyrite

MINERALIZATION AGE: Hadrynian

DEPOSIT

CHARACTER: Stratiform Massive

CLASSIFICATION: Volcanogenic

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Permian

GROUP

Rundle

FORMATION

Mowitch

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Pyritic Quartz Arenite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks that were deposited in a continental shelf environment along the western margin of ancestral North America. This clastic and carbonate rock sequence ranges in age from Hadrynian to Upper Cretaceous and now lies within the Foreland tectonostratigraphic division of the Canadian Cordillera. Folds and southwest dipping, northeasterly directed thrust faults are the dominant structures of the region.

Massive sulphide mineralization, that is apparently stratiform in nature, was formed in fine-grained quartz arenites of the Permian Mowitch Formation. Mineralization consisted of 1 to 3 centimetres thick pyritic beds or lenses that assayed up to 0.719 per cent zinc (Fieldwork 1991, page 80).

BIBLIOGRAPHY

EMPR FIELDWORK 1991, pp. 65-82, 83-91
EMPR OF 1992-10

DATE CODED: 1992/01/15
DATE REVISED: 1993/05/28

CODED BY: JP
REVISED BY: GSB

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **0931 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **NORTH RIDGE-EAST**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093101W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 10 40 N
LONGITUDE: 120 13 35 W
ELEVATION: 2040 Metres

NORTHING: 6006855
EASTING: 681011

LOCATION ACCURACY: Within 500M

COMMENTS: Location of outcrop, another occurrence of a sampled bed is 100-200 metres north, downslope (Fieldwork 1991, page 79, samples 1091, 1094).

COMMODITIES: Phosphate

MINERALS

SIGNIFICANT: Fluorapatite
MINERALIZATION AGE: Lower Triassic

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: F07 Upwelling-type phosphate
SHAPE: Tabular
COMMENTS: P205 horizon approximately 1.2 metres thick and of unknown extent.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Triassic	Spray River	Sulphur Mountain	

LITHOLOGY: Phosphorite
Shale
Argillaceous Limestone
Carbonaceous Siltstone
Silty Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks that were deposited in a continental shelf environment along the western margin of ancestral North America. This clastic and carbonate rock sequence ranges in age from Hadrynian to Upper Cretaceous and now lies within the Foreland tectonostratigraphic division of the Canadian Cordillera. Folds and southwest dipping, northeasterly directed thrust faults are the dominant structures of the region.

Phosphorite horizons are known from Upper Paleozoic and Lower Mesozoic strata in the region. In this area, phosphorite beds are present in the Lower Triassic Whistler Member of the Sulphur Mountain Formation, Spray River Group. At this locality, approximately 12 centimetres of phosphate rock overlies thin to medium-bedded, grey argillaceous limestone and calcareous siltstone. The phosphorite horizon, black to dark brown in colour, has a nodular texture and contains abundant ammonite fossils. It is overlain by 90 centimetres of grey, silty limestone, which is, in turn, overlain by 18 centimetres of phosphatic shales and siltstones. Sixteen centimetres of very fissile black shales overlie the phosphatic shale horizon and the sequence is capped by more grey limestones. The lower nodular and fossil-rich phosphate horizon is moderately high-grade, containing around 22 per cent P205, while the upper horizon of phosphatic shales and siltstones contains between 8 and 11 per cent P205. The entire phosphatic interval, in this area, is only 1.2 metres thick and limestones comprise a greater portion of it than do phosphorites and phosphatic shales.

BIBLIOGRAPHY

EMPR FIELDWORK 1991, pp. 65-82, 83-91

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1016
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1992-10

DATE CODED: 1992/01/15
DATE REVISED: 1993/05/28

CODED BY: JP
REVISED BY: GSB

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **0931 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **PHOSPHATE**

MINING DIVISION: Liard

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093101W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 10 50 N
LONGITUDE: 120 16 15 W
ELEVATION: 2010 Metres

NORTHING: 6007051
EASTING: 678099

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrop and sample location (samples 1079A, 1079B, Fieldwork 1991, page 79).

COMMODITIES: Phosphate

MINERALS

SIGNIFICANT: Fluorapatite
ASSOCIATED: Fluorite
MINERALIZATION AGE: Lower Triassic

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: F07 Upwelling-type phosphate
SHAPE: Tabular
DIMENSION: 1 Metres STRIKE/DIP:
COMMENTS: P2O5 horizon approximately 1 metre thick and of unknown extent.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Triassic	Spray River	Sulphur Mountain	

LITHOLOGY: Phosphorite
Calcareous Siltstone
Silty Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Hart Ranges

CAPSULE GEOLOGY

The region is underlain by an assemblage of sedimentary rocks that were deposited in a continental shelf environment along the western margin of ancestral North America. This clastic and carbonate rock sequence ranges in age from Hadrynian to Upper Cretaceous and now lies within the Foreland tectonostratigraphic division of the Canadian Cordillera. Folds and southwest dipping, northeasterly directed thrust faults are the dominant structures of the region.

Phosphorite horizons are known from Upper Paleozoic and Lower Mesozoic strata in the region. At this site, phosphorite beds are present in the Whistler Member of the Lower Triassic Sulphur Mountain Formation, Spray River Group and occur near the core of a syncline. The phosphatic horizon, at this location, is 10 to 15 centimetres thick and is exposed in a rubbly outcrop associated with calcareous siltstones and silty limestones. The phosphorite is dark grey or bluish to white-weathering, with a dark brown to black fresh surface. It has a gritty texture, a petroliferous odor and contains abundant ammonite and pelecypod fossils. Purple fluorite is present as veinlet infillings and fracture coatings. Grab samples of these phosphorites contained 21 to 23 per cent P2O5 (Fieldwork 1991, page 79).

BIBLIOGRAPHY

EMPR FIELDWORK 1991, pp. 65-82, 83-91
EMPR OF 1992-10

DATE CODED: 1992/01/15
DATE REVISED: 1993/05/28

CODED BY: JP
REVISED BY: GSB

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **0931 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEARPAW RIDGE**, BT, 26BT

MINING DIVISION: Cariboo

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093104E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 05 00 N
LONGITUDE: 121 40 05 W
ELEVATION: 1100 Metres

NORTHING: 5993614
EASTING: 587131

LOCATION ACCURACY: Within 1 KM

COMMENTS: Intrusive complex located 2 kilometres north of Sinclair Mills.

COMMODITIES: Magnetite Titanium Iron

MINERALS

SIGNIFICANT: Magnetite Ilmenite Rutile

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: M04 Magmatic Fe-Ti±V oxide deposits

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Silurian	Undefined Group	Nonda	

LITHOLOGY: Mafic Gneiss
Dioritic Ortho Gneiss
Anorthosite
Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: McGregor Plateau

CAPSULE GEOLOGY

The property lies north of the Fraser River, south of West Trophy River, and about 6 kilometres northeast of Sinclair Mills, at the northwest end of Bearpaw Ridge. Access is by old logging roads. Based on magnetic features on aeromagnetic maps, 26BT Resource Development Co. Ltd. staked the BT claims in 1992. This was followed by an aeromagnetic survey in 1993, and additional staking in 1994. Diamond drilling took place in 1994, 1995 and 1996. A total of 15 holes with an aggregate length of 883 metres tested the anomalies. Significant concentrations of magnetite, ilmenite and rutile were identified within a folded and foliated dioritic orthogneiss. Assays of grab samples are as high as 25 per cent FeO plus 5 per cent TiO. In addition to the drilling, 26BT Resources has covered much of their claims with helicopter-supported magnetic and electromagnetic surveys as well as ground follow-up. In 1995, a review of all data led to the staking of the BT 12 to BT 21 claims. In 1997, a magnetic-electromagnetic survey was flown by Dighem and a geological mapping program generated the first bedrock map of the property. A 1:10,000-scale assessment report map is included in 25280. The same report states a "crude reserve estimate", using a combination of magnetic field and magnetite content to 'calculate' the estimate of 62 million tonnes of recoverable magnetite in a 5 per cent contour zone area (a 2.5 square kilometre area). The area is mapped as Silurian volcanoclastics, felsic and intermediate tuffs, and agglomerates of the Nonda Formation over the Bearpaw Ridge; foliated hornblende gneiss on the western slope and coarse grained massive pink syenites in the southwest. Folded and foliated dioritic orthogneiss vary from a banded gneiss containing 5 to 10 per cent magnetite-ilmenite to a mafic gneiss with 15 to 20 per cent magnetite-ilmenite. Chemical analyses indicates Fe2O3 content of 6.9 and 14.5 per cent in two volcanic samples and 1.5, 7 and 11.2 per cent in three samples from mafic gneiss. Corresponding TiO2 content is 0.59 and 2.06 per cent in volcanics and 0.27, 0.80 and 2.01 per cent in mafic gneisses (Assessment Report 24573).

BIBLIOGRAPHY

EMPR ASS RPT 23183, 23619, 24152, 24198, 24573, 24682, 25034,

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1019
REPORT: RGEN0100

BIBLIOGRAPHY

25164, 25280, 25543
EMPR BULL 88, pp. 14-18
EMR AEROMAG MAP 1536G

DATE CODED: 1998/10/07
DATE REVISED: 1998/10/14

CODED BY: LDJ
REVISED BY: DJA

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 029**

NATIONAL MINERAL INVENTORY:

NAME(S): **STONE**, 26BT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093104E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 05 25 N

LONGITUDE: 121 33 47 W

ELEVATION: 850 Metres

NORTHING: 5994521

EASTING: 593984

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Stone claims.

COMMODITIES: Marble

Dimension Stone

MINERALS

SIGNIFICANT: Marble

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Sedimentary

Industrial Min.

TYPE: R04 Dimension stone - marble

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Silurian
Lower Cambrian

GROUP

Sandpile
Gog

FORMATION

Unnamed/Unknown Formation
Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Marble
Limestone

GEOLOGICAL SETTING

TECTONIC BELT:
TERRANE:

CAPSULE GEOLOGY

The property lies north of the Fraser River, south of Trophy River and northeast of Bearpaw Ridge. Access is by Pass Lake road, 25 kilometres east of McGregor, then 1.2 kilometres south of the new logging road.

Marble outcrops were discovered by 26BT Resource Development Co. Ltd. in 1996. The outcrops are an exposed anticlinal structure consisting of probable Silurian limestones, metamorphosed by volcanic intrusives located to the southwest.

Tests of samples identified three types of marbles that have potential as decorative building stones. These are: a predominantly black marble similar to the Grigio Cornico, an Italian marble; a buff coloured marble similar to Perlato Sicilia; and a white and grey marble with a reddish tinge.

BIBLIOGRAPHY

EMPR ASS RPT *25091, 25584

DATE CODED: 1998/10/07
DATE REVISED: 1998/10/08

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **0931 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **TREND COAL**

MINING DIVISION: Liard

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 093115W
 BC MAP: 0931086

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 52 48 N
 LONGITUDE: 120 57 43 W
 ELEVATION: 1780 Metres

NORTHING: 6083350
 EASTING: 630750

LOCATION ACCURACY: Within 500M

COMMENTS: Location is the 2002 Notice of Work UTM coordinates.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Layered
 CLASSIFICATION: Fossil Fuel

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous	Fort St. John	Gates	

LITHOLOGY: Coarse Grained Clastic Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
 TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Rocky Mountain Foothills-North

CAPSULE GEOLOGY

Trend Coal is located 6.5 kilometres south-southeast of Babcock (Quintette) MINFILE occurrence 0931I 011, and 23 kilometres southeast of Tumbler Ridge. Consolidated Goldbank Ventures Ltd. completed a nine rotary drill hole program in 2002 totalling 525 metres. The coal intersections are tabulated as follows:

TREND COAL PROJECT
 COAL INTERSECTION SUMMARY

Drill hole	Coal seam ID	From-To (m)	Int- erval (m)	thick- ness (m)	Esti- mated true
QTR2002-1	G	25.90-29.80	3.90	3.62	
	I	32.15-32.75	0.60	0.56	
	J	34.15-39.70	5.55	5.15	
QTR2002-2	F	4.50-7.45	2.95	2.67	
	F	16.40-20.60	4.20	3.64	
QTR2002-3	G	64.70-68.10	3.40	2.94	
	I	69.75-70.90	1.15	1.00	
	J	71.85-77.85	6.00	5.20	
QTR2002-4	F	16.50-23.20	6.70	2.83	
QTR2002-5	E	13.45-16.85	3.40	2.94	
	F	39.30-42.40	3.10	2.68	
	F	42.85-43.65	0.80	0.69	
QTR2002-6	G/I	25.30-29.60	4.30	3.80	
	J	45.80-51.20	5.42	4.79	
QTR2002-7	F	5.25-8.45	3.20	2.58	
	G	46.50-50.25	3.75	3.03	
	I	51.40-52.15	0.75	0.60	
QTR2002-8	J	58.40-63.75	5.35	4.56	
	E	12.35-15.40	3.05	2.54	
QTR2002-9	F	36.70-39.80	3.10	2.58	
	D	3.35-5.70	2.35	2.04	
	E	27.50-30.60	3.10	2.68	
	F	62.20-65.10	2.90	2.51	

- data from Press Release Consolidated Goldbank Ventures Ltd. January 27, 2003

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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ENERGY AND MINERALS DIVISION

PAGE: 1022
REPORT: RGEN0100

CAPSULE GEOLOGY

In addition to the 2002 drilling, approximately 20 trenches were excavated to verify seam thickness. Coal seams have been identified over a 3 kilometre strike length.

BIBLIOGRAPHY

DATE CODED: 2003/04/17
DATE REVISED: 2003/04/24

CODED BY: ICLW
REVISED BY: ICLW

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 001**

NATIONAL MINERAL INVENTORY: 093J1 Pb1

NAME(S): **SAMSON**, GISCOME, JHG,
TIN, CAN, EAGLE,
GIS, ACE, COM

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J01W
BC MAP:
LATITUDE: 54 04 17 N
LONGITUDE: 122 19 49 W
ELEVATION: 670 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate area of the majority of the drilling.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5991672
EASTING: 543825

COMMODITIES: Zinc Uranium Lead Silver Copper Niobium

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite Pyrite Pyrrhotite
Pyrochlore
ALTERATION: Epidote Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Podiform
CLASSIFICATION: Volcanogenic Skarn Replacement Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn
DIMENSION: 0250 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Sulphide zone on 75 degree trend.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mississippian	Slide Mountain	Undefined Formation	Wolverine Complex
Unknown			

LITHOLOGY: Limestone
Gneiss
Epidote Garnet Skarn
Argillite
Pillow Basalt
Granodiorite
Diorite
Gabbro
Dacite
Granite

HOSTROCK COMMENTS: The granodiorite is possibly Early Tertiary in age. GSC Map 1424A, Parsnip River indicates 36 my age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Slide Mountain
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 142.6000 Grams per tonne
Lead 2.3100 Per cent
Zinc 7.9500 Per cent
COMMENTS: Mineralization generally low grade with sporadic and discontinuous high grade areas. Drill hole 88-1 between 78 and 79 metres.
REFERENCE: Assessment Report 17561.

MINFILE NUMBER: **093J 002**

NATIONAL MINERAL INVENTORY: 093J8 W1

NAME(S): **ADA**, NORTH BEND, NORTH POINT

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J08W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 15 41 N
LONGITUDE: 122 21 44 W
ELEVATION: 700 Metres

NORTHING: 6012792
EASTING: 541543

LOCATION ACCURACY: Within 500M

COMMENTS: Ada adit on Lot 8447.

COMMODITIES: Tungsten Silver Lead Graphite

MINERALS

SIGNIFICANT: Scheelite Galena Graphite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
DIMENSION: 0001 Metres STRIKE/DIP: 123/60S TREND/PLUNGE:
COMMENTS: The two mineralized quartz veins are 1.0 to 1.2 metres wide and are parallel to schistosity of the host rocks which strike 123 degrees and dip 60 degrees south.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Unknown Wolverine Complex

LITHOLOGY: Quartz Muscovite Schist
Gneiss
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: McGregor Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The area is underlain by rocks of the Wolverine Complex which is comprised of granitoid gneiss, schist and small bodies of granodiorite. The Ada showing occurs in silicified quartz-muscovite schist which has an attitude of 123 degrees/60 degrees southwest. Mineralization consisting of pyrite, galena and scheelite occurs in two quartz veins having widths from 1.0 to 1.2 metres and whose attitude conforms with the schistosity of the enclosing rocks. Considerable graphite has been reported in places.

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EMPR ASS RPT 7717, *8680
EMPR AR 1920-96; 1922-122; 1928-191; *1935-C30; 1942-56
EMPR GEM 1970-198; 1971-163
EMPR EXPL 1979-221; 1980-333
EMPR BULL *10 (Revised), pp. 74-76
EMPR PF (Property Map)
GSC MEM 118, p.106
GSC EC GEOL *17, p. 61
GSC MAP 1204A; 1424A
EMPR OF 1991-17

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 003**

NATIONAL MINERAL INVENTORY: 093J8 W1

NAME(S): **SILVER**, BULL MOOSE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J08W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 15 13 N
LONGITUDE: 122 19 58 W
ELEVATION: 671 Metres

NORTHING: 6011945
EASTING: 543470

LOCATION ACCURACY: Within 500M

COMMENTS: On Averil Creek about 1.6 kilometres upstream from its mouth.

COMMODITIES: Lead Zinc Silver Tungsten Graphite

MINERALS

SIGNIFICANT: Galena Sphalerite Scheelite Graphite Pyrite
ASSOCIATED: Quartz Biotite Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Replacement Epigenetic Industrial Min.
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0102 x 0003 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: One quartz filled shear zone traced for 102 metres is up to 3.2 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Unknown Wolverine Complex

LITHOLOGY: Quartz Sericite Schist
Quartz Biotite Schist
Gneiss
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: McGregor Plateau
TERRANE: Cariboo
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The area is underlain by rocks of the Wolverine Complex which is comprised of granitoid gneiss, schist and small bodies of granodiorite. The Silver showing occurs in quartz-sericite schist and quartz-biotite schist which have schistosity striking at 103 degrees to 128 degrees and dipping steeply southwest. Several quartz filled shear zones are concordant with the planes of schistosity. One zone is up to 3.2 metres wide and has been traced for 102 metres. Mineralization consisting of a little pyrite, galena and sphalerite and abundant graphite occurs in lenticular quartz masses in this zone. A little scheelite was observed at one point.

BIBLIOGRAPHY

EMPR AR 1922-122; 1928-191; *1935-C31
EMPR BULL *10 (Revised), pp. 76,77
GSC EC GEOL *17, p. 61
GSC MAP 1424A
EMPR OF 1991-17

DATE CODED: 1986/09/04
DATE REVISED: 1989/02/20

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 004**

NATIONAL MINERAL INVENTORY: 093J14 Cu1

NAME(S): **ANT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J14E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 49 37 N
LONGITUDE: 123 06 03 W
ELEVATION: 853 Metres

NORTHING: 6075539
EASTING: 493522

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of ANT 2 claim, mineralized outcrops.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Upper Triassic
Unknown

GROUP

Takla

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Wolverine Complex

LITHOLOGY: Basaltic Andesite
Diorite Dike

HOSTROCK COMMENTS: Wolverine Complex is probably Proterozoic or Lower Paleozoic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Ant showing is underlain by the Upper Triassic Takla Group near its eastern contact with the Wolverine metamorphic complex of probable Proterozoic or Lower Paleozoic age. The contact between these two groups is a fault.

In the area of the showing the dominant lithology is basaltic andesite which has been intruded by north to northeast striking, vertically dipping diorite dikes 1.5 to 30 metres wide. Mineralization consists of chalcopyrite and pyrite within quartz veinlets hosted by both the basaltic andesite and diorite.

BIBLIOGRAPHY

EMPR ASS RPT 3308
EMPR GEM 1971-163
GSC MAP 1204A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/21

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 005**

NATIONAL MINERAL INVENTORY: 093J13 Au1

NAME(S): **SALMON LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 52 40 N
LONGITUDE: 123 56 36 W
ELEVATION: Metres

NORTHING: 6081598
EASTING: 439474

LOCATION ACCURACY: Within 1 KM
COMMENTS: Symbol on Geological Survey of Canada Map 1204A.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Takla Group volcanic rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Salmon Lake showing is located is underlain dominantly by Upper Triassic Takla Group volcanic rocks of the Quesnellia Terrane. These are overlain by a veneer of Pleistocene glacial and fluvio-glacial gravels. Placer gold has been recovered in small amounts in fluvial sediments of the Salmon River system.

BIBLIOGRAPHY

GSC MAP 2-1962; 979A; 1204A; 1424A
GSC OF 2801

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/21

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 006**

NATIONAL MINERAL INVENTORY: 093J13 Au1

NAME(S): **SALMON RIVER**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 55 00 N
LONGITUDE: 123 48 27 W
ELEVATION: Metres

NORTHING: 6085817
EASTING: 448239

LOCATION ACCURACY: Within 1 KM
COMMENTS: Symbol on Geological Survey of Canada Map 1204A.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Takla Group volcanic rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Salmon River showing is located is underlain dominantly by Upper Triassic Takla Group volcanic rocks of the Quesnellia Terrane. These are overlain by a veneer of Pleistocene glacial and fluvio-glacial gravels. Placer gold has been recovered in small amounts in fluvial sediments of the Salmon River system.

BIBLIOGRAPHY

GSC MAP 2-1962; 979A; 1204A; 1424A
GSC OF 2801

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 007**

NATIONAL MINERAL INVENTORY: 093J14 Au1

NAME(S): **MCDOUGALL RIVER**, NORTHERN REEF GOLD MINES, LITTLE MCLEOD RIVER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093J14W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 56 47 N
LONGITUDE: 123 17 07 W
ELEVATION: Metres

NORTHING: 6088863
EASTING: 481727

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Gold Platinum

MINERALS

SIGNIFICANT: Gold Platinum
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Slide Mountain Group metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Northern Rocky Mountain Trench

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The McDougall River placer deposit is underlain mainly by Mississippian Slide Mountain Group metasedimentary rocks of the Omineca Belt. The Slide Mountain Group consists of mafic volcanics, chert, argillite and greywacke which have been variably deformed and metamorphosed. Placer gold and platinum occur in shallow gravels along both banks of the McDougall River and in cracks and crevices in bedrock underlying the gravels.

BIBLIOGRAPHY

EM FIELDWORK 2001, pp. 303-312
EM GEOFILE 2000-2; 2000-5
EMPR AR 1932-88; 1933-103; 1934-C15; 1936-C31
EMPR ASS RPT 10231, 12164, 13215, 13750, 15879
EMPR BULL 28, p. 27
EMPR EXPL 1983-432; 1985-C306,C307; 1987-C295
EMPR PF (Assorted Claim Maps)
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 008**

NATIONAL MINERAL INVENTORY: 093J16 Mg1

NAME(S): **ANZAC**, CHUYAZEGA CREEK, ANZAC RIVER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J16W
BC MAP:
LATITUDE: 54 58 24 N
LONGITUDE: 122 23 11 W
ELEVATION: 1370 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Deposit on the western slopes of Mount Emmet.

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 6091996
EASTING: 539278

COMMODITIES: Magnesite

MINERALS

SIGNIFICANT: Magnesite
ASSOCIATED: Dolomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Replacement Hydrothermal Industrial Min.
TYPE: E09 Sparry magnesite
SHAPE: Irregular
MODIFIER: Folded
DIMENSION: 11 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Gog	Unnamed/Unknown Formation	
Proterozoic	Misinchinka	Unnamed/Unknown Formation	

LITHOLOGY: Dolomite
Quartzite
Slate
Carbonate
Limestone
Shale
Siltstone
Phyllite
Diamictite
Grit

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Hart Ranges
TERRANE: Ancestral North America

CAPSULE GEOLOGY

The Anzac deposit is located on the western slopes of Mount Emmet, 122 kilometres north-northeast of Prince George and 43 kilometres due east of McLeod Lake.

The area is underlain by the Precambrian Misinchinka Group and the Lower Cambrian Gog Group. The Misinchinka Group consists of fine to coarse-grained marine clastic rocks comprising slate, quartzite, grit, diamictite, phyllite and minor carbonate rocks. The Gog Group consists of quartzite, dolomite, sandy dolomite and slate, limestone, shale and siltstone.

Magnesite occurs in the Gog Group. Several sections have been measured across the gradational transition from the Misinchinka Group to the Gog Group. Magnesite-bearing rock occurs within a downfaulted block containing rocks of both the Gog and Misinchinka groups.

The Anzac deposit consists of 6 showings; the Fria, Knoll, Knob, Hela, Emmet and Odin showings. The showings are hosted in carbonate of the upper division of the Lower Cambrian Gog Group.

The magnesite is massive, sparry and has few preserved sedimentary features. The composition is the minimum (36.5 per cent MgO) grade considered for economic development. Zones of magnesite range from 3 to 11 metres wide. Magnesite is either white buff or medium to light grey in color. Mapping shows that a magnesite unit extends over a length of several kilometres but continuity between individual showings is not established.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1032
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1987-13, p. 19
EMPR PF (Map Legend and Descriptive Notes-Geological Survey of
Canada Map 2-1962)
EMPR FIELDWORK 1992, pp. 381-388
GSC MAP 2-1962; 1204A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/20

CODED BY: GSB
REVISED BY: GS

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 009**

NATIONAL MINERAL INVENTORY: 093J1 Pb2

NAME(S): **EAGLET LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J01W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 04 55 N
LONGITUDE: 122 22 02 W
ELEVATION: Metres

NORTHING: 5992824
EASTING: 541397

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol on Geological Survey of Canada Map 1204A.

COMMODITIES: Lead Zinc Molybdenum Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Molybdenite Chalcopyrite
ALTERATION: Serpentine Chlorite Epidote Calcite Quartz
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mississippian	Slide Mountain	Undefined Formation	

LITHOLOGY: Serpentinite
Pillow Basalt
Basalt
Argillite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Eaglet Lake showing is underlain by a northwest trending succession of pillow basalts and minor limestone and argillite. These rocks belong to the Mississippian Slide Mountain Group along with associated mafic and felsic intrusive rocks. Basalts of the Takla Group occur to the east separated from the Slide Mountain Group by a branch of the McLeod Lake fault. The sequence is partly intruded by and partly in fault contact with the Eaglet Lake stock to the east. A small serpenitized intrusion occurs along the branch of the McLeod Lake fault.

Mineralization consists of galena, sphalerite, molybdenite and chalcopyrite with traces of silver, tungsten and nickel in serpenitite.

BIBLIOGRAPHY

GSC MAP 2-1962; 1204A; 1424A
EMPR PF (Drill hole location Map 1958 and Drill logs - Dept. of Highways; Jones, W.C., (1959): Preliminary Report on Hansard Lake - Eaglet Lake Damsites)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 010**

NATIONAL MINERAL INVENTORY: 093J5 Hg1

NAME(S): **MOUNT PRINCE SOUTHEAST**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 23 12 N
LONGITUDE: 123 56 53 W
ELEVATION: Metres

NORTHING: 6026958
EASTING: 438434

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol on Geological Survey of Canada Map 1204A.

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
ASSOCIATED: Quartz
ALTERATION: Carbonate
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal Replacement
SHAPE: Irregular
MODIFIER: Sheared Faulted

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Takla	Undefined Formation	

LITHOLOGY: Mafic Volcanic
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Mount Prince southeast showing occurs in an area underlain by Upper Triassic Takla Group volcanic rocks. The Takla Group is in fault contact to the west with mainly Paleozoic rocks equivalent to the Cache Creek Group. The fault separating the two groups is the Pinchi Fault, a major structural feature marking the boundary of the Cache Creek and Quesnellia terranes. Adjacent to the fault within Takla Group rocks are a number of mercury occurrences of which some have, in the past, been worked.

The Mount Prince southeast showing consists of small amounts of cinnabar in carbonatized and sheared mafic volcanics of the Takla Group. The cinnabar commonly occurs within quartz stringers.

BIBLIOGRAPHY

GSC MAP 2-1962; 979A; 1204A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 011**

NATIONAL MINERAL INVENTORY: 093J5 Hg2

NAME(S): **MOUNT PRINCE NORTHWEST**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 25 27 N
LONGITUDE: 123 59 48 W
ELEVATION: Metres

NORTHING: 6031174
EASTING: 435336

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol on Geological Survey of Canada Map 979A.

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
ASSOCIATED: Quartz
ALTERATION: Carbonate
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Epigenetic Hydrothermal
SHAPE: Irregular
MODIFIER: Sheared Faulted

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Takla	Undefined Formation	

LITHOLOGY: Mafic Volcanic
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Mount Prince northwest showing occurs in an area underlain by Upper Triassic Takla Group volcanic rocks. The Takla Group, to the west, is in fault contact with mainly Paleozoic rocks equivalent to the Cache Creek Group. The fault separating the two groups of rocks is the Pinchi Fault, a major structural feature marking the boundary of the Cache Creek and Quesnellia terranes. Adjacent to the fault within Takla Group rocks are a number of mercury occurrences of which some have, in the past, been worked.

The Mount Prince northwest showing consists of small amounts of cinnabar in carbonatized and sheared mafic volcanics of the Takla Group. The cinnabar commonly occurs within quartz stringers.

BIBLIOGRAPHY

GSC MAP 979A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 012**

NATIONAL MINERAL INVENTORY: 093J14 Au2

NAME(S): **MCLEOD RIVER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093J14E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 55 54 N
LONGITUDE: 123 12 00 W
ELEVATION: Metres

NORTHING: 6087206
EASTING: 487185

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Gold Platinum

MINERALS

SIGNIFICANT: Gold Platinum
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Slide Mountain Group volcanic rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain

PHYSIOGRAPHIC AREA: Northern Rocky Mountain Trench

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1932
SAMPLE TYPE: Grab
COMMODITY: Platinum GRADE
Platinum 8.6000 Grams per tonne
COMMENTS: Sample result quoted by Rublee in 1986 report. Sample was gravel from the shore of McLeod River taken immediately above bedrock.
REFERENCE: George Cross Newsletter #112, 1989.

CAPSULE GEOLOGY

The McLeod River placer deposit is underlain by rocks of the Mississippian Slide Mountain Group in fault contact with the older Wolverine Complex to the west. Placer gold deposits of the McLeod River have been worked from gravels along the river. Platinum is also present in these deposits.
Gold in the McLeod River deposits is reported to occur within shallow gravels and in cracks and crevices of the underlying bedrock.

BIBLIOGRAPHY

EM FIELDWORK 2001, pp. 303-312
EM GEOFILE 2000-2; 2000-5
EMPR AR 1932-88; 1933-104; 1934-C13,14; 1936-C31
EMPR ASS RPT 10231, 12164, 13215, 13750, 15879
EMPR BULL 28, p. 27
EMPR EXPL 1981-239; 1983-432; 1984-318; 1985-C306,C307
GSC MAP 1424A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 013**

NATIONAL MINERAL INVENTORY: 093J14 Au3

NAME(S): **SYNDICATE SOL, HORN,
PLASWAY**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J14E
BC MAP:

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 58 44 N
LONGITUDE: 123 13 44 W
ELEVATION: 900 Metres

NORTHING: 6092466
EASTING: 485351

LOCATION ACCURACY: Within 1 KM

COMMENTS: North of McLeod and McDougall rivers, 22.5 kilometres west of McLeod Lake (Assessment Report 16880 and Property File).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0002 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Veins are generally narrow but one reaches about two metres in width.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Mississippian Slide Mountain Undefined Formation

LITHOLOGY: Argillite
Gabbroic Dike
Pyroxenite Intrusive
Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Northern Rocky Mountain Trench
TERRANE: Slide Mountain

INVENTORY

ORE ZONE: VEINS REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1932
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 2.4000 Grams per tonne
COMMENTS: Sampling of quartz veins returned up to 2.4 grams per tonne gold.
REFERENCE: Minister of Mines Annual Report 1932, page 102.

CAPSULE GEOLOGY

A dozen or more quartz veins in argillite of the Mississippian Slide Mountain Group are exposed in a creek. The veins are mainly quite narrow but one reaches a width of about two metres. They appear to cut across the bedding planes of the enclosing argillites which strike northwest and dip northeast at varying angles. A well pyritized dike is also present. Sampling of the quartz veins returned values up to 2.4 grams per tonne of gold (Minister of Mines Annual Report 1932, page 102).

Recent work in the area has concentrated on a mineralized gabbro dike and pyroxenite intrusives for gold and platinum group metals. Mineralization consists of pyrite, pyrrhotite and chalcopyrite. Soil sampling resulted in some anomalous values, however grab samples from outcrop contained insignificant values (Assessment Report 16880).

BIBLIOGRAPHY

EMPR AR *1933-102
EMPR PF (Claim maps)
EMPR EXPL 1987-C295
EMPR ASS RPT 16269, *16880
GSC MAP 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/26

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRINCE**, GEORGE, PG NIOBIUM,
MARGANA, FATA, OLE,
WICHEEDA LAKE

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 6043249
EASTING: 559226

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J09E 093J08E 093I05W
BC MAP:
LATITUDE: 54 32 00 N
LONGITUDE: 122 05 05 W
ELEVATION: 1500 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Anomalous values from a northwest trending belt of rocks which occurs
over a 7 kilometre length.

COMMODITIES: Niobium Rare Earths Lanthanum Cerium Phosphate

MINERALS

SIGNIFICANT: Pyrochlore Apatite
ASSOCIATED: Pyrite
ALTERATION: Carbonate
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Industrial Min.
TYPE: N01 Carbonatite-hosted deposits

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u> Proterozoic-Cambrian Unknown	<u>GROUP</u> Kechika	<u>FORMATION</u> Undefined Formation	<u>IGNEOUS/METAMORPHIC/OTHER</u> Unnamed/Unknown Informal
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LITHOLOGY: Carbonatite
Syenite
Calcareous Argillite
Limestone
Phyllite

HOSTROCK COMMENTS: Carbonatite & syenitic plutonics of unknown age intrude Kechika Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Plutonic Rocks Ancestral North America
COMMENTS: Plutonic rocks are host of mineralization.

PHYSIOGRAPHIC AREA: Northern Rocky Mountain Trench

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1986
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Cerium	0.5000 Per cent
Lanthanum	0.5000 Per cent
Niobium	0.1900 Per cent
Phosphate	8.4000 Per cent

COMMENTS: The lanthanum and cerium values were obtained from a separate sample.

REFERENCE: Assessment Report 15944.

CAPSULE GEOLOGY

A dike or sill-like carbonatite and a related syenite plug intrude Cambro-Ordovician Kechika Group rocks. The Kechika Group here consists of calcareous argillite, limestone and phyllite, which strike northwest and dip subvertically to the northwest and south-west.

The carbonatite intrudes the sediments sub-parallel to a central limestone unit and has been traced intermittently for a distance of 2700 metres. The composition and thickness of the carbonatite varies along its strike. Generally, it is medium to coarse-grained, quartz-free, with intergrowths of feldspar, carbonate, pyroxene and micas. Fine-grained pyrochlore has been identified by scanning electron

CAPSULE GEOLOGY

microprobe and is the source mineral for the anomalous niobium found in assays. Petrographic analysis indicate up to 3 per cent apatite. Pyrite is a common accessory mineral. Best assays returned values of 0.19 per cent niobium and 8.4 per cent phosphate.

A syenitic plug exists immediately to the west of the carbonatite zone. Soil geochemistry indicated this intrusive to be roughly circular with about a 400 metre diameter. Rare earth elements, lanthanum and cerium, are significantly anomalous in the syenitic rocks at this occurrence. Best assays are 0.5 per cent lanthanum and 0.5 per cent cerium (Assessment Report 15944).

BIBLIOGRAPHY

EMPR ASS RPT *15944, 16246
GSC OF 1987-17
GSC MAP 1204A; 1424A
GSC EC GEOL 18; 29
EMPR EXPL 1982-C294

DATE CODED: 1987/12/10
DATE REVISED: 1989/04/27

CODED BY: GJP
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **REDROCKY CREEK**

STATUS: Past Producer Open Pit

MINING DIVISION: Cariboo

REGIONS: British Columbia

NTS MAP: 093J10E

BC MAP:

LATITUDE: 54 37 56 N

LONGITUDE: 122 42 21 W

ELEVATION: 792 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone outcrop between Highway 97 and the pipeline (Property File - Jory, L.T., 1972, Figure 71-1).

UTM ZONE: 10 (NAD 83)

NORTHING: 6053906

EASTING: 518989

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Dolomite Quartz Pyrite

MINERALIZATION AGE: Ordovician-Silurian

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

SHAPE: Tabular

MODIFIER: Fractured

DIMENSION: 366

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Banding (bedding?) strikes northwest, dips gently northeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Ordovician-Silurian

GROUP

Sandpile

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

LITHOLOGY: Limestone

Dolomite

Quartzite

HOSTROCK COMMENTS: Sandpile Group is Upper Ordovician to Middle Silurian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: REDROCKY CREEK

REPORT ON: Y

CATEGORY: Unclassified

YEAR: 1972

QUANTITY: 91000000 Tonnes

COMMODITY

GRADE

Limestone

52.5000

Per cent

COMMENTS: Average grade between 52.5 and 53.8 per cent CaO.

REFERENCE: Property File - Jory, L.T., 1972, pages 11-12.

CAPSULE GEOLOGY

Limestone is exposed for 366 metres along a north trending bluff up to 90 metres high between the John Hart highway (Highway 97) and the Westcoast Transmission pipeline, just north of Redrocky Creek, 80 kilometers north of Prince George. The deposit lies near the north end of a 25-kilometre long northwest trending fault-bounded band of limestone with minor dolomite and quartzite of the Upper Ordovician to Middle Silurian Sandpile Group. The band varies up to 4 kilometres in width. Banding (bedding ?) at the bluff strikes northwest and dips gently northeast.

The limestone is comprised of numerous rounded and ellipsoidal nodules 1 to 10 millimetres in diameter of secondary origin in a fine-grained dark grey to black matrix displaying oolites and pisolites in thin section. The nodules are composed of calcite with minor dolomite and iron oxide. The limestone is well fractured and cut by abundant white calcite stringers. Occasional grains of quartz and pyrite are present. A sample composed of chips taken at 3.0 metre intervals for 183 metres across the base of the bluff

CAPSULE GEOLOGY

contained 53.82 per cent CaO, 0.38 per cent MgO, 2.80 per cent insolubles, 0.36 per cent R2O3, 0.21 per cent Fe2O3, 0.005 per cent MnO, 0.03 per cent P2O5, 0.02 per cent sulphur and 42.61 per cent ignition loss (Annual Report 1957, p. 86). Reserves are estimated at 9,100,000 tonnes with the following range in composition: 52.5 - 53.8 per cent CaO, 0.4 - 0.8 per cent MgO, 1.5 - 2.0 per cent insolubles and 1.0 - 1.4 per cent Fe2O3 + Al2O3 (L.T. Jory, 1972).

This deposit was assessed by Calox Industries in the late 1960's and early 1970's. A small amount of limestone was quarried by the company in 1968. The deposit was further developed by Tri-Lime Resources. Production began in 1983, continued for only a short while, and by September 1983 the company was in receivership. No production figures are available.

BIBLIOGRAPHY

- EMPR AR 1957-85-86
- EMPR GEM 1969-395
- EMPR PF (*Jory, L.T., Howey, H.O. (1971 & 1972): Redrocky Creek Limestone Deposit Summary Report; Calox Industries Ltd. Prospectus May, 1972; Cross Section of Drilling by Calox Industries, 1973; Memorandum by Z.D. Hora, 1979; Letter by Z.D. Hora, 1979)
- GSC MAP 1424A; 1204A; 2-1962

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/21

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **MILE 72, MCLEOD LAKE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093J15W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 48 42 N
LONGITUDE: 122 48 24 W
ELEVATION: 823 Metres

NORTHING: 6073851
EASTING: 512425

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on sample site S-3312, as shown on Map 93J in Industrial Minerals File.

COMMODITIES: Aggregate Limestone

MINERALS

SIGNIFICANT: Carbonate

COMMENTS: Limestone

ASSOCIATED: Silica

MINERALIZATION AGE: Ordovician-Silurian

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Stratiform

Massive

CLASSIFICATION: Sedimentary

Evaporite

Industrial Min.

TYPE: R09 Limestone

DIMENSION: 0035 x 0004

Metres

STRIKE/DIP: 170/58W

TREND/PLUNGE:

COMMENTS: Attitude of limestone beds in quarry. Limestone extends for 35 kilometres and varies up to 4 kilometres in width.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Ordovician-Silurian

GROUP

Sandpile

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

LITHOLOGY: Siliceous Limestone

Chert

Dolomite

Quartzite

HOSTROCK COMMENTS: Sandpile Group is Upper Ordovician to Middle Silurian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: McGregor Plateau

INVENTORY

ORE ZONE: MILE 72

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1965

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

31.8800

Per cent

COMMENTS: Taken across 15 metre thickness. Grade given for CaO. Grade is in per cent.

REFERENCE: Minister of Mines Annual Report 1965, page 266, Sample 1.

CAPSULE GEOLOGY

A small road material quarry (minor production) 1.25 kilometres east of the John Hart Highway (Highway 97), at mile 72, exposes black, siliceous limestone containing lenses and seams of dark chert. The limestone strikes 170 degrees and dips 58 degrees west. The quarry lies near the north end of a band of limestone with minor dolomite and quartzite of the Upper Ordovician to Middle Silurian aged Sandpile Group. The band extends southeastward from the south end of McLeod Lake for 35 kilometers and varies up to 4 kilometres in width.

A sample of chips taken at random across a 15 metre section contained 31.88% CaO, 13.59% MgO, 12.34% insolubles, 2.04% R2O3, 0.29% Fe2O3, 0.02% MnO, 0.03% P2O5 and 0.48% ignition loss (Minister of Mines Annual Report 1965, page 266).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1043
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1965-265-266
GSC MAP 1424A; 1204A; 2-1962
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/21

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **ANGUSMAC**, MCLEOD LAKE

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 37 42 N
LONGITUDE: 122 37 59 W
ELEVATION: 792 Metres

NORTHING: 6053496
EASTING: 523689

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on sample site S-3313, as shown on map 93J in Industrial Minerals File.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Ordovician-Silurian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Various fossils

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone

DIMENSION: STRIKE/DIP: /90

TREND/PLUNGE:

COMMENTS: Unit strikes north and is nearly vertical. Deposit dimension is 40,000 by 1,500 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Ordovician-Silurian	Sandpile	Undefined Formation	

DATING METHOD: Fossil
MATERIAL DATED: Various fossils

LITHOLOGY: Limestone
Dolomite
Quartz

HOSTROCK COMMENTS: Sandpile Group is Upper Ordovician to Middle Silurian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: McGregor Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1965

SAMPLE TYPE: Chip

COMMODITY GRADE

Limestone 50.5200 Per cent

COMMENTS: Chip sample taken across 45.7 metres. Grade given for CaO.

REFERENCE: Minister of Mines Annual Report 1965, page 266, Sample 2.

CAPSULE GEOLOGY

A logging roadcut 4 kilometres east of the John Hart Highway (Highway 97), 5 kilometres northeast of Angusmac exposes thinly bedded, fossiliferous, black limestone that strikes north and dips nearly vertical. The exposure lies near the southwestern edge of a 1.5 kilometre wide band of Upper Ordovician to Middle Silurian Sandpile Group limestone with minor dolomite and quartzite that trends northwest for at least 40 kilometres. A 45.7 metre long chip sample along the roadcut contained 50.52% CaO, 3.05% MgO, 2.53% insolubles, 0.76% R2O3, 0.14% Fe2O3, nil MnO, 0.01% P2O5, 0.005% sulphur and 43.04% ignition loss (Annual Report 1965, p. 266 - Sample 2).

BIBLIOGRAPHY

EMPR AR 1965-265-266
GSC MAP 1424A; 1204A; 2-1962
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/21

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **MCLEOD LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J15E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 53 00 N
LONGITUDE: 122 45 06 W
ELEVATION: Metres

NORTHING: 6081837
EASTING: 515932

LOCATION ACCURACY: Within 5 KM

COMMENTS:

COMMODITIES: Dolomite

MINERALS

SIGNIFICANT: Dolomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Syngenetic Industrial Min.
TYPE: R09 Limestone

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Ordovician-Silurian	Sandpile	Undefined Formation	

LITHOLOGY: Dolomite
Limestone
Quartzite
Calcareous Dolomitic Sandstone

HOSTROCK COMMENTS: Sandpile Group is Upper Ordovician to Middle Silurian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: McGregor Plateau

CAPSULE GEOLOGY

The McLeod Lake dolomite showing is shown on Geological Survey of Canada maps as being part of the Upper Ordovician to Middle Silurian Sandpile Group. This group is mapped in northwest trending zones in the northeast quadrant of map sheet 93J. The group consists of limestone, dolomite, quartzite and calcareous and dolomitic sandstone.

BIBLIOGRAPHY

GSC MAP 2-1962; 1204A; 1424A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 019**

NATIONAL MINERAL INVENTORY:

NAME(S): **TACHEEDA LAKES LIMESTONE**

MINING DIVISION: Cariboo

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 093J10E

BC MAP:

LATITUDE: 54 43 00 N

LONGITUDE: 122 31 49 W

ELEVATION: 762 Metres

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centered on roadside outcrop (quarry) (G. Klein, 1983, Figure 3).

UTM ZONE: 10 (NAD 83)

NORTHING: 6063364

EASTING: 530259

COMMODITIES: Limestone

Railroad Ballast

Aggregate

MINERALS

SIGNIFICANT: Carbonate

MINERALIZATION AGE: Lower Cambrian

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Archaeocyathus

DEPOSIT

CHARACTER: Stratiform

Massive

CLASSIFICATION: Sedimentary

Evaporite

Industrial Min.

TYPE: R09 Limestone

DIMENSION:

STRIKE/DIP: 110/50S

TREND/PLUNGE:

COMMENTS: Bedding attitude in quarry.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

MATERIAL DATED: Archaeocyathids

LITHOLOGY: Limestone

Dolomite

Quartzite

Shale

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: McGregor Plateau

INVENTORY

ORE ZONE: TACHEEDA LAKES LIMESTONE

REPORT ON: Y

CATEGORY: Inferred

YEAR: 1983

QUANTITY: 750000 Tonnes

COMMODITY

GRADE

Limestone

94.1000

Per cent

COMMENTS: Grade given for CaCO3.

REFERENCE: George Cross News Letter No.143, 1985.

ORE ZONE: TACHEEDA LAKES LIMESTONE

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1983

QUANTITY: 750000 Tonnes

COMMODITY

GRADE

Limestone

94.1000

Per cent

COMMENTS: Grade given for CaCo3.

REFERENCE: George Cross News Letter No.143, 1985.

CAPSULE GEOLOGY

The Tacheeda Lakes limestone prospect lies within a belt of Lower Cambrian limestone and dolomite with minor quartzite and slate. The belt trends northwest for 41 kilometres and varies up to 5 kilometres in width.

Limestone is exposed in an old rock quarry adjacent to the B.C. Railway, just northeast of the isthmus separating the Tacheeda Lakes. Smaller exposures occur in a road cut 130 metres northwest of the quarry. The limestone is estimated to be at or near surface in an 80 to 100 metre wide area extending for 280 metres northwest of the quarry. Indistinct bedding at the quarry strikes 110 degrees and dips 50 degrees south, while in a road cut to the northwest it

CAPSULE GEOLOGY

strikes 155 degrees and dips 45 degrees east.

The limestone is dark grey to black and very fine grained. The rock is cut by veins of creamy white calcite up to 0.5 metres wide. Nine chip samples taken perpendicular to the strike over widths of 5 metres averaged 94.1 per cent CaCO₃ (G. Klein, 1983, p. 6). The calcite veins were excluded from sampling because of their erratic nature. Probable (indicated) and possible (inferred) reserves are each estimated at 750,000 tonnes for a total of 1.5 million tonnes (G. Klein, 1983, p. 7).

B.C. Railway Co. initially quarried some of the limestone for railway ballast. Diamond Limestone Ltd. proposed developing the deposit to supply agricultural limestone. The deposit was mapped and sampled in 1983.

BIBLIOGRAPHY

EMPR PF (Monthly report by T. Faulkner, Sept. 1983; Klein, G., 1983 Report on Proposed Tacheeda Lakes Limestone Quarry)
GSC MAP 2-1962; 1204A; 1424A
GCNL *#143, 1985

DATE CODED: 1989/08/29
DATE REVISED: 1990/04/27

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 020**

NATIONAL MINERAL INVENTORY: 093J2 Ko11

NAME(S): **GISCOME RAPIDS**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093J02E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 09 06 N
LONGITUDE: 122 34 36 W
ELEVATION: Metres

NORTHING: 6000479
EASTING: 527648

LOCATION ACCURACY: Within 500M

COMMENTS: Lot 3991 (Minister of Mines Annual Report 1947 p. 208).

COMMODITIES: Clay

Kaolinite

MINERALS

SIGNIFICANT: Clay Kaolin

MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: B06 Fireclay

DIMENSION: 800 x 90 x 9 Metres

E07 Sedimentary kaolin

COMMENTS: Clay occurs in bed at least 9 metres thick and 90 metres wide exposed for 800 metres.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Unnamed/Unknown Informal

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Slide Mountain

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Giscome Rapids deposit is located on the west bank of the Fraser River near the foot of Giscome Rapids. In 1942, an area about 30 metres square on the river bank was stripped and 18 tonnes of clay was mined and shipped to Vancouver. In 1947, several holes were drilled by hand auger.

The deposit consists of good stoneware-china clay with up to cone 31 softening points and cream to white burning. The clay occurs in a Tertiary bed, at least 9 metres thick and 90 metres wide, exposed for about 0.8 kilometre along the river bank. The clay comprises a variety of different clays starting with a surface type (A) and ending with a darker brown clay (G). The clays in between (B to E) are classed as good white open firing clays of refractory grade, suitable for whitewares and refractories. These clays range from light-grey through blue-grey to brown in color. The material removed was surface clay

Samples of all the clays from the 1947 drill holes were found to have good plasticity, despite containing 20 to 45 per cent silica sand, and drying behavior was satisfactory. The extent of the large deposit has not been proven but high-grade clay is available.

BIBLIOGRAPHY

EMPR AR *1947-208,209
EMPR BULL 30, pp. 30-32
EMPR PF (Daren Resources Limited, 1998, update on Giscome Rapids Kaolin Project; letter by M. Shayner to Gerald Klein with analysis of clay sample, 1978; Report on Giscome Rapids China Clay by J.M. Cummings, August 31, 1943)
GSC MAP 1424A
GSC MEM 65, pp. 40,41

DATE CODED: 1985/07/24
DATE REVISED: 1991/08/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 021**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUMMIT**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J10W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 34 29 N
LONGITUDE: 122 54 00 W
ELEVATION: Metres

NORTHING: 6047473
EASTING: 506464

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of claims.

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite Pyrite
ASSOCIATED: Muscovite Microcline
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Podiform
CLASSIFICATION: Pegmatite Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Takla	Undefined Formation	

LITHOLOGY: Quartz Muscovite Microcline Pegmatite
Dike
Graphitic Argillaceous Schist
Graphitic Limestone

HOSTROCK COMMENTS: Pegmatites intrude Takla Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Summit showing is mainly underlain by Upper Triassic Takla Group rocks.

At the property graphitic, pyritic argillaceous schists overlie a series of graphitic, thinly bedded limestones. Quartz-muscovite-microcline pegmatites intrude into the sediments as large discontinuous irregularly shaped dikes or small boudins to boudinaged sills and dikes. Massive graphite occurs as pods and lenses within the pegmatite.

BIBLIOGRAPHY

EMPR ASS RPT 10212
EMPR EXPL 1981-234
GSC MAP 1204A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 022**

NATIONAL MINERAL INVENTORY: 093J14 Mic1

NAME(S): **CARP LAKE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J14E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 47 53 N
LONGITUDE: 123 11 47 W
ELEVATION: Metres

NORTHING: 6072337
EASTING: 487374

LOCATION ACCURACY: Within 1 KM

COMMENTS: Four mica occurrences are shown on the northern part of Geological Survey of Canada Map 979A.

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Muscovite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Syngenetic Pegmatite Industrial Min.
TYPE: O03 Muscovite pegmatite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Triassic	Takla	Undefined Formation	Wolverine Complex
Unknown			

LITHOLOGY: Pegmatite
Ortho Gneiss
Felsic Intrusive

HOSTROCK COMMENTS: Pegmatites intrude Wolverine Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Carp Lake showing is underlain by orthogneiss and felsic intrusive rocks of the Wolverine Complex and fault bounded blocks of Upper Triassic Takla Group rocks. The Carp Lake showing consists of muscovite "books" within Wolverine Complex pegmatitic bodies. The muscovite "books" are up to 7.6 centimetres square.

BIBLIOGRAPHY

GSC MAP 979A; 1424A
GSC EC GEOL 19, p. 83
Placer Dome File

DATE CODED: 1986/09/08
DATE REVISED: 1989/02/22

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 023**

NATIONAL MINERAL INVENTORY: 093J14 Au1

NAME(S): **RUBY**, MCDougall River, Northern Reef Gold Mines

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J14W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 56 54 N
LONGITUDE: 123 17 58 W
ELEVATION: 853 Metres

NORTHING: 6089083
EASTING: 480820

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0006 Metres
COMMENTS: Workings were on a 6 to 9 metre outcrop of quartz.
STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown Paleozoic	Cariboo	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Schistose Argillite

HOSTROCK COMMENTS: Probably Cariboo Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Northern Rocky Mountain Trench
RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1991
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 171.4000 Grams per tonne
COMMENTS: Highest assay from samples.
REFERENCE: George Cross News Letter No. 92, May 13, 1991.

CAPSULE GEOLOGY

The Ruby showing consists of a number of quartz veins which occur in an area that is mainly underlain by schistose argillites that are likely part of the Cariboo Group. Some of the veins conform with the strike and dip of the enclosing rock formations while others are crosscutting. The main workings were on a 6 to 9 metre wide outcropping of quartz that showed a little pyrite and galena mineralization. Gold and silver values of the quartz veins were quite low although fairly significant gold values were reported from some of the country rock. Samples from one vein, up to 6 metres wide, assayed up to 171.4 grams per tonne gold (George Cross News Letter #92, May 13, 1991).

BIBLIOGRAPHY

EMPR AR 1932-88; 1933-103; 1934-C14; 1936-C31
EMPR PF (Lay, D. (1936): Annual Report of Minister of Mines, Part C, Special Report)
EMPR ASS RPT 10231, 12164, 13215, 13750, 15879
EMPR EXPL 1983-432; 1985-C306,C307; 1987-C295
GSC MAP 1424A
GCNL #92, 1991

DATE CODED: 1986/09/11
DATE REVISED: 1989/02/22

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **WINDY**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093J13W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 56 27 N
LONGITUDE: 123 50 06 W
ELEVATION: 960 Metres

NORTHING: 6088527
EASTING: 446508

LOCATION ACCURACY: Within 500M

COMMENTS: Coordinates of trenched area, approximately 65 kilometres northeast of Fort St. James.

COMMODITIES: Copper Gold Palladium

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz Tourmaline
ALTERATION: Epidote Chlorite Sphene Sericite Carbonate
Malachite
ALTERATION TYPE: Propylitic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry Hydrothermal
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Sheared Fractured

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

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

LITHOLOGY: Diorite

HOSTROCK COMMENTS: Diorite intrusion has undergone propylitic alteration.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Manson Upland
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SOUTHWEST REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 0.5700 Grams per tonne
Copper 0.3600 Per cent
Palladium 1.2500 Grams per tonne
COMMENTS: Average of five samples. Maximum palladium value from several samples quoted.
REFERENCE: Assessment Report 15996.

CAPSULE GEOLOGY

The Windy showing is underlain by poorly exposed rocks of the Upper Triassic Takla Group to the north and an extensively chloritized and sheared diorite intrusion to the south. The Takla Group is comprised of augite porphyry flows and minor tuffaceous sediments. Alteration minerals consist of chlorite and minor epidote, carbonate and sericite. Epidote occurs with quartz, chlorite and minor sphene in veinlets and alteration blebs.

Mineralization exposed in pits and outcrops consists of pyrite, chalcopyrite and malachite with low and variable gold, silver and palladium values. Chalcopyrite with minor pyrite occurs as disseminations, in veinlets in diorite associated with quartz and epidote and in quartz tourmaline veins (an example of the latter is exposed in a pit).

The average of five samples in 1987 assayed 0.36 per cent copper and 0.57 grams per tonne gold; a maximum palladium value from the samples was 1.25 grams per tonne (Assessment Report 15996).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1053
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR ASS RPT *14449, *15996, 16597
EMPR EXPL 1986-C345; 1987-C294,B46
EMPR PF (Big Bar Gold Corporation Prospectus, 1987)
GSC MAP 1424A
GSC OF 2801
Placer Dome File

DATE CODED: 1986/10/27
DATE REVISED: 1989/02/22

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093J 025**

NATIONAL MINERAL INVENTORY:

NAME(S): **GISCOME**, GISCOME LIMESTONE, BUG,
KODE, LOT 9337, COM,
KODE-JERRAT, PACIFIC LIME

STATUS: Producer
REGIONS: British Columbia
NTS MAP: 093J01W
BC MAP:
LATITUDE: 54 03 40 N
LONGITUDE: 122 17 39 W
ELEVATION: 759 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Quarry located on the southern margin of Lot 9337 (G. Klein, personal communication, 1991).

Open Pit

MINING DIVISION: Cariboo
UTM ZONE: 10 (NAD 83)
NORTHING: 5990551
EASTING: 546199

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Mississippian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Fossils

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
DIMENSION: 200 x 100
COMMENTS: Area of outcrops.

Stratiform
Industrial Min.

Stratabound

Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Slide Mountain

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Fossiliferous Limestone

HOSTROCK COMMENTS: Slide Mountain Group ranges from Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Slide Mountain

PHYSIOGRAPHIC AREA: Bowron Trench

INVENTORY

ORE ZONE: TOTAL

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1990

SAMPLE TYPE: Bulk Sample

COMMODITY

Limestone

GRADE

98.0000

Per cent

COMMENTS: Quarried limestone averages at least 98 per cent CaCO₃.

REFERENCE: G. Klein, personal communication, 1991.

CAPSULE GEOLOGY

Limestone is being quarried 5 kilometres east-southeast of the village of Giscome, 90 kilometres northeast of Prince George.

Dark grey fossiliferous limestone of the Mississippian to Triassic Slide Mountain Group outcrops over a 100 by 200 metre area on Lot 9337. The limestone is reported to grade at least 98 per cent CaCO₃ (G. Klein, personal communication, 1991).

Pauline Ventures Ltd. (owner/operator) through Kode-Jerrat Quarries Ltd. of Prince George began quarrying operations in 1990, supplying high-calcium limestone for pulp mills at McKenzie and Quesnel. A total of 15,000 tonnes was quarried in 1990. Similar volumes were quarried in 1991 and 1992.

Kode-Jerrat Quarries Ltd. sells about 50,000 tonnes of limestone a year to customers in the central part of the province. The company plans to build its own kiln to calcine limestone on site and increase its market value four-fold (Information Circular 1996-1, page 9).

Pacific Lime reports no production in 1998. Plans for 1999 include exploration drilling and a push back of the north wall of the pit.

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EMPR INF CIRC 1996-1, p. 9; 1997-1, p. 12; 1998-1, p. 13

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RUN TIME: 11:27:59

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REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MINERAL MARKET UPDATE July, 1991
EMPR OF 1992-1; 1992-9; 1994-1
GSC MAP 1204A

DATE CODED: 1991/02/22
DATE REVISED: 1991/03/01

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 001**

NATIONAL MINERAL INVENTORY: 093K4 Pr11

NAME(S): **FRANCOIS**, MA, LOT 6946

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093K04E
BC MAP:

Open Pit

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 33 N
LONGITUDE: 125 39 05 W
ELEVATION: 792 Metres

NORTHING: 5991503
EASTING: 326399

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of Lot 6946 (Fieldwork, 1989).

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite

MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: R12 Volcanic glass - perlite
DIMENSION: 15 x 2 Metres
COMMENTS: Perlite bed at the quarry.

STRIKE/DIP: 040/30W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	

LITHOLOGY: Rhyolite
Tuff
Rhyolite Breccia
Banded Rhyolite

HOSTROCK COMMENTS: The Ootsa Lake Group is Upper Cretaceous to Lower Tertiary in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Perlite was quarried on the north shore of Francois Lake, 22 kilometres south of the town of Burns Lake.

The deposit is underlain mainly by Upper Cretaceous to Lower Tertiary rocks correlated with the Ootsa Lake Group. These comprise shallow to medium dipping, devitrified (in part), banded rhyolites, rhyolite breccias, spherulitic rhyolites and tuffs. This series of rocks has a general strike of 040 degrees and an average dip of 30 degrees to the northwest.

The quarry on the lake shore exposes a 2-metre thick bed of dark grey to black, medium grey weathering perlite over a distance of 15 metres in sharp contact above and below with cherty rhyolite. The bed strikes northeast and dips 15 to 35 degrees northwest. The rock exhibits typical onion-skin texture with radiating fractures perpendicular to strike. In places it is brecciated and siliceous with pronounced flow banding.

North of the lake, 300 metres, a similar perlite bed, 15 metres thick, striking northeast and dipping 30 degrees northwest, is exposed intermittently for 110 metres along an access road. At the north end of the roadcut, fresh perlite is exposed continuously for 50 metres. The bed is underlain by coarse grey tuff.

Perlite from both sites expanded a similar amount to that tested at the Frenier deposit (0930 072), when heated by a hand-held propane torch (Fieldwork 1989, p. 483). A sample of perlite tested by CANMET exhibited the following characteristics (Fieldwork 1990, pages 265 to 267):

Per cent water loss when heated to 800 degrees Celsius: 3.0
Softening temperature (degrees Celsius): 1250-1270

During the period 1949 to 1953 Western Gypsum Products Ltd. of Winnipeg mined approximately 1587 tonnes of perlite.

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475-481; 2002, pp. 165-174
GSC MAP 631A; 907A; 1424A
GSC MEM 252, pp. 198-199
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 002**

NATIONAL MINERAL INVENTORY: 093K3 Mo8

NAME(S): **KEN**, TATIN LAKE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 08 35 N
LONGITUDE: 125 05 16 W
ELEVATION: 884 Metres

NORTHING: 6001452
EASTING: 363626

LOCATION ACCURACY: Within 500M

COMMENTS: Boundary of Ken 1 and Ken 3.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Magnetite
ASSOCIATED: Quartz
ALTERATION: K-Feldspar Kaolinite
ALTERATION TYPE: Argillic Potassic
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared Fractured
DIMENSION: 1 Metres
COMMENTS: Veins are up to 1.5 metres in width. 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 Jurassic			Topley Intrusions

LITHOLOGY: Granite
Aplite Dike
Quartz Plagioclase Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Ken showing is located about 8 kilometres northwest of Endako.

The Ken 1-18 claims were staked in 1968 by Amax Exploration. In 1969, Amax conducted prospecting, geochemical surveying, mapping, trenching and geophysical surveying.

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The area of the Ken showing is underlain by 2 granitic phases of the Topley Intrusive Suite (the Casey granite and the Glenannan granite). These are intruded by aplite and quartz-plagioclase porphyry dikes. At the south end of the property the intrusive rocks are overlain by Tertiary volcanic and sedimentary rocks. Faults and shears, up to 91 centimetres wide, dip steeply and strike northeast and northwest.

The faults and shears in Casey granite host quartz vein stockworks which are mineralized with molybdenite. Pyrite, chalcopyrite and magnetite occur in trace amounts. Molybdenite occurs as flakes and fine bands. In areas containing the most mineralization, argillic and K-feldspar alteration is well-developed.

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REPORT: RGEN0100

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EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1995/02/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 003**

NATIONAL MINERAL INVENTORY: 093K7 Mo1

NAME(S): **KID**, SHASS MOUNTAIN, PIRATE

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K07W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 23 49 N
LONGITUDE: 124 52 37 W
ELEVATION: 1020 Metres

NORTHING: 6029310
EASTING: 378148

LOCATION ACCURACY: Within 500M
COMMENTS: Area of drilling.

COMMODITIES: Molybdenum Copper Tungsten

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Scheelite Pyrrhotite Pyrite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Upper Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Francois Lake Intrusive Suite

LITHOLOGY: Biotite Quartz Monzonite
Hornfels
Argillaceous Sediment/Sedimentary
Serpentinized Dike

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Nechako Plateau

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

The area is predominantly underlain by argillaceous sedimentary rocks of the Mississippian to Triassic Cache Creek Group. Intrusive into the Cache Creek Group in the occurrence area is a serpentinite dike, two quartz monzonite plugs and a series of dikes related to the plugs. The stocks are probably part of the Upper Jurassic Francois Lake Intrusions.

Mineralization is primarily associated with one of the stocks which is made up of fine-grained massive biotite-quartz monzonite. Hornfelsing of the sedimentary rocks is common along the contact with the stock. Molybdenite occurs in the quartz monzonite as fine disseminations and as fine flakes in a well developed quartz vein stockwork. In the adjacent hornfelsed rocks the molybdenite occurs as a coating along fractures and along small, irregular quartz veins. Pyrite, pyrrhotite and trace amounts of chalcopyrite are also present. Minor amounts of scheelite have been reported in narrow quartz and quartz-pyrrhotite veinlets. Silicification is common.

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EMPR AR 1968-136
EMPR OF 1991-17; 1993-9
EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR MIN POT MAP 1993-2
GSC OF 2593, 3182
GSC P 38-14, p. 12; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 630A; 907A; 971A; 1424A

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RUN TIME: 11:27:59

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BIBLIOGRAPHY

GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/16

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 004**

NATIONAL MINERAL INVENTORY: 093K16 Cu1

NAME(S): **HA-1, HAT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 51 21 N
LONGITUDE: 124 18 25 W
ELEVATION: 915 Metres

NORTHING: 6079531
EASTING: 416100

LOCATION ACCURACY: Within 500M

COMMENTS: HA-1 claim is located approximately 3 kilometres north of the junction of Taslincheko and Hatdudatehl creeks (Open File 1991-3). This should not be confused with the Hat Lake claims (093K 084).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite
COMMENTS: Disseminated in host and associated with stringers.

ALTERATION: Quartz Carbonate Hematite

COMMENTS: Quartz-carbonate stringers.

ALTERATION TYPE: Silicific'n Carbonate Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Takla	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Siliceous Black Argillite
Diorite
Gabbro

HOSTROCK COMMENTS: The host rocks have been assigned to the informally named Inzana Lake Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
COMMENTS: Zeolite to prehnite-pumpellyite grade metamorphism.

PHYSIOGRAPHIC AREA: Nechako Lowland
RELATIONSHIP:
GRADE: Zeolite

CAPSULE GEOLOGY

The HA-1 showing is located on the HA-1 claim approximately 3 kilometres north of the junction of Taslincheko and Hatdudatehl creeks. The showing is about 5.5 kilometres south of the Tas property (093K 080).

The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the informally named Inzana Lake, Rainbow, Witch Lake and Chuchi Lake formations. These have been intruded by alkaline intrusives believed to be coeval with the volcanics.

The Witch Lake Formation is composed predominantly of augite + plagioclase porphyry flows and agglomerates. It is underlain by the younger Inzana Lake Formation (epiclastic volcanic sediments) and the older Rainbow Formation made up of fine grained sediments derived (in part) from a continental source. Amygdaloidal maroon and green subaerial flows and lahars of the Chuchi Lake Formation overlie the Witch Lake Formation.

The showing consists of 5 per cent pyrite and less than 1 per cent chalcopyrite disseminated in siliceous black argillite of the Inzana Lake Formation. Quartz, plus or minus carbonate, stringers are abundant in the rocks and may contain minor pyrite. Abundant hematite coated fractures occur in silicified sediments in a trench exposure. Previous drilling on the property has shown the presence of sub-surface diorite and gabbro intrusions. Fine to coarse grained gabbro has 20 to 25 per cent hornblende phenocrysts and contains 2 to 3 per cent pyrite and pyrrhotite. Fine to medium grained,

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CAPSULE GEOLOGY

equigranular to weakly porphyritic diorite has less than 1 per cent pyrite. Hornfelsed sediments contain 2 to 5 per cent disseminated pyrite and quartz carbonate altered zones contain 5 to 10 per cent (Assessment Report 16272).

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EMPR GEM 1969-155
EMPR MP MAP 1992-4
EMPR OF *1991-3
EMPR PF (Claim Map Hat Group 1970)
GSC MAP 630A; 907A; 1424A
GSC MEM 252
GSC OF 2593, 2801, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1990/10/09

CODED BY: GSB
REVISED BY: KBE

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093K 005**

NATIONAL MINERAL INVENTORY: 093K14 Gem2

NAME(S): **GENESIS, GREEN, JADE QUEEN,
ONE-ELL CREEK, TEZZERON NEPHRITE**

STATUS: Past Producer Open Pit

MINING DIVISION: Omineca

REGIONS: British Columbia

NTS MAP: 093K14W

UTM ZONE: 10 (NAD 83)

BC MAP:

LATITUDE: 54 58 03 N

LONGITUDE: 125 26 47 W

ELEVATION: 1000 Metres

NORTHING: 6093913

EASTING: 343398

LOCATION ACCURACY: Within 500M

COMMENTS: Showing on O'Ne-ell Creek 6.4 kilometres upstream from Middle River,
between 915 and 1220 metres elevation.

COMMODITIES: Jade/Nephrite Gemstones

MINERALS

SIGNIFICANT: Jade Nephrite Sapphire Tremolite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Replacement Metamorphic Industrial Min.
TYPE: Q01 Jade

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian-Triassic			Trembleur Intrusions
Lower Jurassic			Topley Intrusions

LITHOLOGY: Serpentinite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Cache Creek
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Indicated YEAR: 1995
QUANTITY: 2800 Tonnes
COMMODITY GRADE
Jade/Nephrite 100.0000 Per cent
COMMENTS: An estimated 2.8 million kilograms of nephrite jade and tremolite
within the area surveyed.
REFERENCE: Information Circular 1996-1, page 21.

CAPSULE GEOLOGY

The Genesis deposit is located on O'Ne-ell Creek, 6.4 kilometres upstream from Middle River. It was first discovered in 1968 by Ms. W. Robertson, who traced jade boulders to the in situ nephrite outcrop.

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism. Ultramafic bodies of probable ophiolitic affinity, related to the oceanic Cache Creek assemblage, occur within the Cache Creek Terrane and adjacent to the Pinchi fault. These ultramafics, referred to as the Trembleur Intrusions are probably pre-Upper Triassic in age.

The Genesis deposit occurs along the contact between Trembleur Intrusive serpentinite and quartz monzonite of the Topley Intrusive Suite. It comprises lenses of nephrite, massive tremolite, and foliated tremolite-talc-chlorite rock within a structurally complex contact zone between serpentinite and an overlying assemblage of

CAPSULE GEOLOGY

metasedimentary and metavolcanic rocks that includes chert, quartzite, greenstone, slate and sandstone. The metasedimentary and metavolcanic rocks are inferred to be a tectonic inclusion within the ultramafic unit, although it is possibly that they represent part of the structurally overlying North Arm succession.

In 1968, 34.2 tonnes of jade was reportedly shipped out by helicopter. Shipments were also reported for 1969 and 1970. In 1968, reserves were estimated at 900 tonnes in boulders and 45,000 tonnes in open cliff faces (National Mineral Inventory card 093K14 Gem2).

In 1995, Global Metals Ltd. drilled 29 shallow holes in the O'Ne-ell Creek area. Within the area surveyed, an estimated 2.8 million kilograms of nephrite jade and tremolite exists. Further potential south of the river and to the north is indicated (Information Circular 1996-1, page 21).

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EMR MP CORPFILE (Athabasca Columbia Resources Ltd.; Jade Queen Mines Ltd.)
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DATE CODED: 1985/07/24
DATE REVISED: 1989/02/16

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 006**

NATIONAL MINERAL INVENTORY: 093K3 Mo1

NAME(S): **ENDAKO**, ENDAKO MINE, STELLA,
BOOT, JAY, MO,
TAN, COMO, FRANDER,
MISPAT

STATUS: Producer Open Pit
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 10 N
LONGITUDE: 125 06 36 W
ELEVATION: 1036 Metres

NORTHING: 5989599
EASTING: 361820

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of pit. See also Denak (093K 008).

COMMODITIES: Molybdenum Copper Zinc Tungsten Bismuth

MINERALS

SIGNIFICANT: Molybdenite Pyrite Magnetite Chalcopyrite Sphalerite
Bornite Scheelite Beryl Bismuthinite
COMMENTS: Trace sphalerite, bornite, scheelite, beryl and bismuthinite.
ASSOCIATED: Quartz
ALTERATION: Sericite Kaolinite K-Feldspar Specularite Pyrite
ALTERATION TYPE: Argillic Potassic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 3353 x 370 x 365 Metres STRIKE/DIP: 110/60S TREND/PLUNGE: /
COMMENTS: The orebody is a series of east striking en echelon veins forming an elongated zone.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic Francois Lake Batholith

ISOTOPIC AGE: 141 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Quartz Monzonite
Biotite Monzonitic Granite
Felsic Dike
Granite
Alaskite
Basalt Dike
Andesite Dike

HOSTROCK COMMENTS: Intrusive phases of the Francois Lake batholith range from 142 to 137 Ma (Canadian Institute of Mining and Metallurgy Special Volume 15).

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Stikine

INVENTORY

ORE ZONE: STOCKPILE REPORT ON: Y
CATEGORY: Proven YEAR: 2002
QUANTITY: 26500000 Tonnes
COMMODITY: Molybdenum GRADE: 0.0470 Per cent
REFERENCE: P. Wojdak, personal communication.

INVENTORY

ORE ZONE: ENDAKO REPORT ON: Y
CATEGORY: Combined YEAR: 1998
QUANTITY: 121757000 Tonnes
COMMODITY Molybdenum GRADE 0.0650 Per cent
COMMENTS: Proven and probable reserves (including stockpiles) as of January 1, 1998. Mine cutoff grade is 0.04 per cent molybdenum.
REFERENCE: Exploration in BC 1997, page 12.

ORE ZONE: ENDAKO REPORT ON: Y
CATEGORY: Proven YEAR: 2002
QUANTITY: 55400000 Tonnes
COMMODITY Molybdenum GRADE 0.0720 Per cent
COMMENTS: Endako pit.
REFERENCE: P. Wojdak, personal communication.

ORE ZONE: PIT REPORT ON: Y
CATEGORY: Proven YEAR: 2002
QUANTITY: 1500000 Tonnes
COMMODITY Molybdenum GRADE 0.0750 Per cent
COMMENTS: Denak pit.
REFERENCE: P. Wojdak, personal communication.

CAPSULE GEOLOGY

The Endako deposit is located on a hillcrest approximately 160 kilometres west of Prince George in central British Columbia. The mine area encompasses several showings (093K 007, 10, 13, 14) and includes the 1.7-kilometre Endako pit, the mined out Denak East pit and the partially developed Denak West pit (093K 008).

The claims were staked and worked over a time span from the mid-1960s to late 1980. The work during this time span consisted of geochemical sampling, diamond drilling and percussion drilling. In 1989, Placer Dome completed 14 diamond-drill holes in the mine area in an attempt to extend known ore reserves and to gather geotechnical information. Placer Dome completed 22 diamond-drill holes on the Endako deposit in 1992. Production began in 1965 and by 1993 a total of 231 million tonnes had been mined yielding more than 157.5 million tonnes of molybdenum.

The Endako orebody is centrally situated within the Late Jurassic Francois Lake batholith. At least ten phases based on distinct textural and compositional changes have been recognized in the composite batholith. The orebody consists of an elongate stockwork of quartz-molybdenite veins developed within the Endako quartz monzonite phase and three types of felsic pre-ore dikes. The Endako quartz monzonite is bounded on the south by Francois granite and on the north by Casey alaskite and Glenannan granite. Post-ore basalt and andesite dikes crosscut the quartz monzonite, pre-ore dikes and mineralized stockwork.

In general terms, the orebody is a series of major east-striking veins oriented en echelon to form a zone elongated in a northwesterly direction. Length and width dimensions of the zone are approximately 3360 by 370 metres, of which the western 1830 metres is offset to the north by the West Basalt fault with a 1150 metre relative right-hand movement. Divided by this fault into two distinct domains, the east half dips moderately south and plunges west, while the west half dips east. Molybdenite, pyrite and magnetite are the most abundant primary metallic minerals. Minor chalcopyrite and traces of sphalerite, bornite, specularite and scheelite are also present. Single occurrences of beryl and bismuthinite have been reported. Molybdenite occurs in two types of veins. Large veins (up to 1.2 metres wide) contain laminae and fine disseminations of molybdenite. Fine fracture-fillings and veinlets of quartz-molybdenite occur as stockworks adjacent to the major veins. Alteration types include pervasive kaolinization, envelopes with potassium feldspar and envelopes with sericite.

A pyrite zone bounds the orebody to the south across a major fault. In this zone, mineralization consists of quartz, pyrite, minor magnetite and rare molybdenite. The mineralization occurs as fracture-filling in a poorly developed stockwork. The orebody is localized at or near the intersection of regional northwest and east structures.

The orebody has been mined in three different open pits: the

CAPSULE GEOLOGY

Endako, Denak East and Denak West. The Denak East open pit is mined out and is currently being back-filled with waste (ca. 1994). The ore contains progressively less stockwork and dips shallower as one traverses from the Endako pit in the southeast to the Denak West pit in the northwest.

Production from the Denak pit (093K 008), which is now part of the Endako mine, is included. Mine life is estimated at 10 years (ca. 1996) at present levels of production.

Proven and probable ore reserves estimated by the company were 117,600,000 tonnes grading 0.077 per cent molybdenum at January 1, 1995; in addition measured and indicated mineral resources were estimated at 147,850,000 tonnes grading 0.061 per cent molybdenum (Information Circular 1996-1, page 8).

Reserves as of January 1, 1996 are 104,843,000 tonnes grading 0.077 per cent molybdenum (Information Circular 1997-1, page 9).

In early 1997, Placer Dome Canada Limited sold the Endako molybdenum mine to Thompson Creek Mining Company of Denver, Colorado (75 per cent) and Nissho Iwai Corp. of Japan (25 per cent). During 1997, Endako expected to mine 20.8 million tonnes and mill 10.6 million tonnes grading 0.131 per cent molybdenum to produce approximately 6500 tonnes of molybdenum. A modest drilling program and geophysical survey were carried out in 1997.

At January 1, 1997, proven and probable reserves are estimated at 124,887,000 tonnes grading 0.066 per cent molybdenum. An additional 131,003,000 tonnes grading 0.065 per cent molybdenum were listed as measured and indicated (T. Schroeter, personal communication, 1997). Proven and probable reserves (including stockpiles) on January 1, 1998 were 121,757,000 tonnes at 0.065 per cent molybdenum. Mine cutoff grade is 0.04 per cent molybdenum (Exploration in BC 1997, page 12). As at January 1, 2000, reserves are estimated at 80,000,000 tonnes grading 0.074 per cent molybdenum (Information Circular 2001-1, page 6).

The following is by Anderson, R.G., et. al, from the Appendix to the Nechako Project Newsletter, Volume 3, Number 5, May 30, 1997: "A northwesterly-trending Jura-Cretaceous batholith in eastern Stikinia hosts the Endako porphyry molybdenite deposit. It has been variously considered part of the Jurassic Topley Intrusions, Endako Intrusions and Early Cretaceous Francois Lake Plutonic Suite. New mapping, geochronology, and chemical and isotopic analyses define at least 3 constituent suites: poorly-mineralized Middle Jurassic (170-160 Ma) Stag Lake suite; well-mineralized Late Jurassic (160-150 Ma) Francois Lake suite (host to Endako-style, low-fluorine, porphyry Mo deposits); and unmineralized, satellitic mid- to Late Cretaceous Fraser Lake suite and Eocene(?) stocks.

Middle Jurassic Stag Lake intrusions define the eastern and northeastern batholith margins and include sequentially-intruded biotite-hornblende diorite and gabbro, and hornblende-biotite quartz monzodiorite and granodiorite; biotite quartz monzonite to monzogranite may represent related felsic phases. The rocks are commonly mesocratic and xenolith-, clinopyroxene- and titanite-bearing. Mineral and xenolith foliation is most common near contact zones between mafic and intermediate phases. The suite is compositionally heterogeneous but is generally of calc-alkaline, metaluminous, moderate-potash and volcanic arc affinities and closely resembles the coeval Three Sisters Plutonic Suite in northeastern Stikinia north of the Stikine River.

Late Jurassic Francois Lake biotite monzogranite plutons to the northwest are the most quartz-rich, leucocratic, and mineralized of all and are further subdivided based on grain size, biotite abundance, degree of alteration, intergranular textures, and intrusive relationships. The suite records a complex, protracted history that included: emplacement, solidification, locally intense veining, Mo and pyrite mineralization and alteration, and late dykes, fractures, and joints. The suite is coeval with Upper Jurassic volcanic rocks to the north and south. The structural control on the co-spatial but younger (<145 Ma) mineralizing system suggests a possible dextral, trans-tensional tectonic environment for emplacement. The rocks are distinctly high silica, calc-alkaline, weakly peraluminous, moderately to high potash, and of volcanic arc affinity with a relatively primitive or juvenile radiogenic and stable isotopic character."

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W MINER Aug. 1976; Feb., 1979; Jan., Feb., Apr., Sept., Dec. 1982;

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1070
REPORT: RGEN0100

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The Province Mar.11, 1982

DATE CODED: 1985/07/24
DATE REVISED: 1997/05/07

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 007**

NATIONAL MINERAL INVENTORY: 093K3 Mo7

NAME(S): **CO, COMO, ENDAKO,
FRÄNDER**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 28 N
LONGITUDE: 125 05 22 W
ELEVATION: 975 Metres

NORTHING: 5990115
EASTING: 363182

LOCATION ACCURACY: Within 500M

COMMENTS: Molybdenite occurrence (Minister of Mines Annual Report 1965,
figure 23).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Magnetite Pyrite
ASSOCIATED: Quartz
ALTERATION: Kaolinite K-Feldspar
ALTERATION TYPE: Argillic Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
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>
Upper Jurassic			Francois Lake Batholith

LITHOLOGY: Aplite Dike
Porphyritic Granite Dike
Quartz Feldspar Porphyry Dike
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Co showing is located about 10 kilometres south-southwest of Endako and is on the Endako mine (093K 006) property.

Quartz monzonite of the Jurassic Francois Lake batholith is intruded by pre-mineralization aplite, porphyritic granite and quartz-feldspar porphyry dikes.

Some molybdenite, pyrite and magnetite mineralization occurs in the granite and aplite as small disseminations, and in quartz-molybdenite veinlets up to about 24 millimetres thick. Kaolinization and potassic alteration is pervasive.

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GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252
EMR MP CORPFILE (Tormont Mines Limited)

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

and on the north by Casey alaskite and Glenannan granite. Post-ore basalt and andesite dikes crosscut the quartz monzonite, pre-ore dikes and mineralized stockwork.

In general terms, the orebody is a series of major east-striking veins oriented en echelon to form a zone elongated in a northwesterly direction. Length and width dimensions of the zone are approximately 3360 by 370 metres, of which the western 1830 metres is offset to the north by the West Basalt fault with a 1150 metre relative right-hand movement. Divided by this fault into two distinct domains, the east half dips moderately south and plunges west, while the west half dips east. Molybdenite, pyrite and magnetite are the most abundant primary metallic minerals. Minor chalcopyrite and traces of sphalerite, bornite, specularite and scheelite are also present. Single occurrences of beryl and bismuthinite have been reported. Molybdenite occurs in two types of veins. Large veins (up to 1.2 metres wide) contain laminae and fine disseminations of molybdenite. Fine fracture-fillings and veinlets of quartz-molybdenite occur as stockworks adjacent to the major veins. Alteration types include pervasive kaolinization, envelopes with potassium feldspar and envelopes with sericite.

A pyrite zone bounds the orebody to the south across a major fault. In this zone, mineralization consists of quartz, pyrite, minor magnetite and rare molybdenite. The mineralization occurs as fracture-filling in a poorly developed stockwork. The orebody is localized at or near the intersection of regional northwest and east structures.

The orebody has been mined in three different open pits: the Endako, Denak East and Denak West. The Denak East open pit is mined out and is currently being back-filled with waste (ca. 1994). The ore contains progressively less stockwork and dips shallower as one traverses from the Endako pit in the southeast to the Denak West pit in the northwest.

Proven and probable ore reserves estimated by the company were 117,600,000 tonnes grading 0.077 per cent molybdenum at January 1, 1995; in addition measured and indicated mineral resources were estimated at 147,850,000 tonnes grading 0.061 per cent molybdenum (Information Circular 1996-1, page 8).

Reserves as of January 1, 1996 are 104.8 million tonnes grading 0.077 per cent molybdenum (Schroeter, T. and Lane, R., personal communication, 1996).

Production and reserves are included with the Endako mine figures.

Drilling in 1995 in the Watkin's Creek area northwest of the Denak West pit was intended to test molybdenum mineralization along strike from the Denak West orebody. Drilling intersected molybdenite mineralization in sheared quartz veins and gouge with pyrite, chalcopyrite, magnetite and hypogene hematite as common accessories but without the significant potassic alteration that characterizes the highest grade molybdenite mineralization in the main zone of the Endako pit. Significant mineralization appears to occur in a northwest trending zone 60 to 91 metres wide (Assessment Report 24627).

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GSC MEM 252
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GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
WWW http://www.infomine.com/index/properties/ENDAKO_MINE.html

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 010**

NATIONAL MINERAL INVENTORY: 093K3 Mo6

NAME(S): **BELL, MISTY, MOB,
ENDAKO**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 01 53 N
LONGITUDE: 125 05 21 W
ELEVATION: 975 Metres

NORTHING: 5989033
EASTING: 363169

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate area of 1968 drilling.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite Chalcopyrite

COMMENTS: Chalcopyrite is rare.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
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>
Upper Jurassic			Francois Lake Batholith

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Bell showing is located about 10 kilometres south-southwest of Endako and is on the Endako mine (093K 006) property.

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The area is underlain by part of the Endako quartz monzonite phase of the Francois Lake batholith. This is one of five phases recognized on the basis of texture and composition.

Disseminated molybdenite, along with pyrite and rare chalcopyrite, mineralization occurs within the quartz monzonite.

BIBLIOGRAPHY

EMPR AR 1963-35; 1964-61; 1967-115; 1968-144
EMPR ASS RPT 382, 538, 19784
EMPR EXPL 1992-69-106; 1998-22
EMPR FIELDWORK 1992, pp. 475-482
EMPR PF (Claim Map, 1968; Dept. of Mines Summary of Exploration and Development Work, 1969; See 093K General file, Endako Area Maps)
GSC MAP 631A; 907A; 1424A
GSC MEM 252
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 011**

NATIONAL MINERAL INVENTORY: 093K3 Mo4

NAME(S): **CM**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 13 N
LONGITUDE: 125 03 07 W
ELEVATION: 914 Metres

NORTHING: 5989580
EASTING: 365624

LOCATION ACCURACY: Within 500M
COMMENTS: Area of 1963 drilling.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ALTERATION: Kaolinite K-Feldspar
ALTERATION TYPE: Potassic Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Porphyry Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic			Francois Lake Batholith

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1963
SAMPLE TYPE: Drill Core
COMMODITY Molybdenum GRADE 0.2400 Per cent
COMMENTS: Average over 37 metres. MOS2.
REFERENCE: Property File - 1963 Drill plans, sections and logs.

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The CM showing is underlain by part of the Endako quartz monzonite phase of the Francois Lake batholith. This is one of five phases recognized on the basis of texture and composition. Molybdenite and pyrite occur mainly as disseminations and along fractures in the quartz monzonite. Potassium feldspar alteration and kaolinization are common. A drill intersection of about 37 metres reported 0.24 per cent MoS2 (Property File - 1963 drill plans, sections and logs).

BIBLIOGRAPHY

EMPR AR 1963-34; 1965-133; 1967-116; 1968-143
EMPR PF (Drill Plans, Sections, & Drill Logs, Torwest Resources 1962; Drill plans, sections and logs 1963; Geological map of the MacDonald Lake area, Southwest Potash Corp. c.1964; Dept. of Mines Summary of Exploration and Development work, 1967-1968; See 093K General file, Endako Area Map)
EMPR EXPL 1992-69-106

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1077
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **MURRAY RIDGE MR**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K09E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 31 53 N
LONGITUDE: 124 11 30 W
ELEVATION: 1370 Metres

NORTHING: 6043300
EASTING: 422887

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite
ALTERATION: Serpentine Lizardite
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Disseminated Layered
CLASSIFICATION: Magmatic Industrial Min.
TYPE: M03 Podiform chromite
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: STRIKE/DIP: 295/82E
COMMENTS: Layered intrusive strikes 295 degrees and dips between 80 and 85 degrees northeast.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Permian-Triassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Harzburgite
Dunite
Ortho Pyroxenite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
YEAR: 1987

COMMODITY: Chromium
GRADE: 0.9000 Per cent

COMMENTS: The value reported here is for chromite, not chromium, from dunite layer.

REFERENCE: Assessment Report 16532.

CAPSULE GEOLOGY

The Murray Ridge ultramafite is exposed over the whole of the ridge above 300 metres elevation 11 kilometres northeast of Fort St. James. A ski recreation facility occupies the lower western slopes of the ridge and a Ministry of Forests radio repeater station and fire lookout tower occupy the crest of the ridge. No known exploration for chromite was done prior to 1987.

The ultramafite consists of 97 per cent harzburgite and 3 per cent dunite and rare coarse-grained orthopyroxene veins. Dunite occurs as elongate, irregularly shaped bodies parallel with the northwesterly trending ridge crest. The dunite zones vary in size from 10 centimetres to 25 metres across. The orthopyroxene veins trend parallel with easterly directed structures (Whittaker, P.J. and Watkinson, D.H., 1981). The rock is massive and moderately to intensely serpentinized. Mantle tectonism features and later high level deformation features as described in the regional geology section are present.

Chromite mineralization occurs as disseminations of less than

CAPSULE GEOLOGY

0.5 per cent in harzburgite and as disseminations and stringers in dunite. Chromite stringers are no more than 1 metre in length and contain, on average, 5 per cent chromite. Microprobe work by Whittaker and Watkinson (1981) has determined Cr/Fe ratios of 3.06. A geological mapping, geochemical survey and prospecting program was carried out in 1986 and 1987 by Morrison (1987) for chromite and platinum group elements on the MR claim group which covers the majority of the ridge. The initial results were not encouraging as the best values for Pt, Pa, Ir were 38, 13, 13 ppm respectively from 30 chip samples (Morrison, M., 1987). Detailed mapping by C. Ash of the Geological Survey Branch of the British Columbia Ministry of Energy, Mines and Petroleum Resources in the Murray Ridge area concluded that the chromite and associated platinum group element potential was very poor (C. Ash, personal communication, 1990).

BIBLIOGRAPHY

EMPR ASS RPT *16532
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 2846
GSC P 81-1A, pp. 349-355; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 630A; 907A; 1424a
Placer Dome File

DATE CODED: 1988/01/12
DATE REVISED: 1989/11/23

CODED BY: GJP
REVISED BY: KDH

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 013**

NATIONAL MINERAL INVENTORY: 093K3 Mo5

NAME(S): **FRAN, ROB, ELKA,
ENDAKO, MING**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 01 16 N
LONGITUDE: 125 08 06 W
ELEVATION: 1082 Metres

NORTHING: 5987980
EASTING: 360133

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of showings (Minister of Mines Annual Report 1965, figure 23).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP
Upper Jurassic

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Francois Lake Batholith

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Fran showing is located about 10 kilometres south-southwest of Endako and is on the Endako mine (093K 006) property.

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The area is underlain by part of the Francois quartz monzonite phase of the Francois Lake batholith. This is one of five phases recognized on the basis of texture and composition.

Disseminated molybdenite with more abundant pyrite occurs within the quartz monzonite.

BIBLIOGRAPHY

EMPR AR 1963-32; 1964-61; 1965-133,136
EMPR GEM 1971-166; 1974-253; 1975-137; 1976-143
EMPR ASS RPT 507, 3177, 3178, 5055, 5936, 18732, 19784
EMPR PF (Sketch of trenching on Rob and Fran claims SW of Endako pit, date unknown; Dept. of Mines Summary of Exploration and Development work, 1976; See 093K General file, Endako Area Maps)
EMPR EXPL 1975-137; 1976-143; 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **MO, COMO, ENDAKO,
FRÄNDER**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 39 N
LONGITUDE: 125 06 03 W
ELEVATION: 1036 Metres

NORTHING: 5990477
EASTING: 362447

LOCATION ACCURACY: Within 1 KM
COMMENTS: Minister of Mines Annual Report 1965, figure 23.

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>
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Quartz Monzonite
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Mo showing is located about 10 kilometres south-southwest of Endako and is on the Endako mine (093K 006) property.

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The area is underlain by rocks of the Francois Lake Suite. Five intrusive phases have been recognized in the Suite based on texture and composition.

Molybdenum mineralization occurs in the vicinity of the contact between the Endako and Casey quartz monzonite phases. An aplite dike is also present in this area.

BIBLIOGRAPHY

EMPR AR 1965-Fig.22,23
EMPR ASS RPT 19784, 22182
EMPR PF (See 093K General file, Endako Area Maps)
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 015**

NATIONAL MINERAL INVENTORY: 093K3 Mo9

NAME(S): **RON**, AX, JILL

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 04 36 N
LONGITUDE: 125 10 31 W
ELEVATION: 823 Metres

NORTHING: 5994240
EASTING: 357684

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of diamond drill holes 80-5 and 80-8.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ALTERATION: Kaolinite
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Quartz Monzonite
Alaskite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The general area of the Ron showing is underlain by rocks of the Francois Lake Intrusive Suite. Five phases have been recognized in the Suite based on texture and composition. In the immediate area of the showing, two of these phases occur, the Endako quartz monzonite and the Casey quartz monzonite-alaskite. Drilling intersected erratic molybdenite mineralization, occurring mainly along fractures but also as traces in quartz veining. Seams of molybdenite up to 3 millimetres wide have been reported. Pyrite occurs as disseminations and along fractures. Both phases show pervasive and locally intense argillic alteration.

BIBLIOGRAPHY

EMPR ASS RPT 7738, 8136
EMPR EXPL 1979-222; 1980-335; 1992-69-106
EMPR PF (Claim Map,1965; See 093K General file, Endako Area Maps)
EMPR AR 1965-133
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GCNL #156,1979; #47,#53,1980

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 015**

MINFILE NUMBER: **093K 016**

NATIONAL MINERAL INVENTORY: 093K3 Mo10

NAME(S): **GEM, ANN, LIM,**
OVAL LAKE, PATTAN, ENDAKO

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 03 53 N
LONGITUDE: 125 09 02 W
ELEVATION: 914 Metres

NORTHING: 5992862
EASTING: 359261

LOCATION ACCURACY: Within 1 KM
COMMENTS: Trench in northeast corner of Gem 11.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Gem showing is located about 10 kilometres south-southwest of Endako and is on the Endako mine (093K 006) property.

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The showing occurs in an area underlain by the Endako quartz monzonite phase. This is one of five intrusive phases recognized on the basis of texture and composition in the Francois Lake Intrusive Suite.

Mineralization consist of pyrite with minor associated molybdenite which occurs within a shear zone cutting the quartz monzonite.

BIBLIOGRAPHY

EMPR ASS RPT 1021, 3466, 6266, 18732, 21243
EMPR AR 1967-116; 1968-143; 1977-189
EMPR PF (Claim Maps, 1965,1966; Dept. of Mines Summary of Exploration and Development work,1967,1968,1971; See 093K General file, Endako Area Maps)
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 017**

NATIONAL MINERAL INVENTORY: 093K3 Mo11

NAME(S): **LORNE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 05 01 N
LONGITUDE: 125 15 12 W
ELEVATION: Metres

NORTHING: 5995172
EASTING: 352603

LOCATION ACCURACY: Within 500M

COMMENTS: Lorne 6 claim, contains showings.

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
ALTERATION: Hematite K-Feldspar
ALTERATION TYPE: Potassic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Unknown
TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The Lorne showing occurs in the vicinity of Sam Ross Creek where an outcrop of diorite of the Francois Lake Intrusive Suite is cut by a narrow fracture zone. This zone contains pyrite mineralization with associated potassium feldspar alteration. Minor specular hematite and fine scales of molybdenite have been identified in this area. Chalcopyrite occurs in trace amounts throughout the diorite.

BIBLIOGRAPHY

EMPR AR 1965-133; 1967-115; 1968-142
EMPR ASS RPT 787, 1018
EMPR PF (Claim Map, 1967; Geological map of the Sam Ross-Watkins creeks area, Southwest Potash Corp. c.1964)
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 018**

NATIONAL MINERAL INVENTORY: 093K3 Fsp1

NAME(S): **GROS**, SAM, RAIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 04 19 N
LONGITUDE: 125 16 43 W
ELEVATION: 884 Metres

NORTHING: 5993927
EASTING: 350908

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Sam 88-101 claims.

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite Pyrite

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Cretaceous-Tertiary

GROUP

Ootsa Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcanic
Quartz Diorite
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Overlap Assemblage

COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The Gros showing consists of pyrite and fluorite mineralization which occurs in silicified fractures cutting volcanics of the Ootsa Lake Group. These rocks overlie quartz monzonite to quartz diorite of the Francois Lake Intrusive Suite.

BIBLIOGRAPHY

EMPR GEM 1970-116
EMPR AR 1967-115
EMPR ASS RPT 2751, 7516
EMPR EXPL 1980-335; 1992-69-106
EMPR OF 1992-16
EMPR FIELDWORK 1992, pp. 475-482
EMPR PF (Dept. of Mines Summary of Exploration and Development work, 1967, 1969, 1971)
GSC MAP 631A; 907A; 1424A
GSC MEM 252
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 019**

NATIONAL MINERAL INVENTORY: 093K3 Mo2

NAME(S): **K 14, K, S,
OWL LAKE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 09 40 N
LONGITUDE: 125 08 03 W
ELEVATION: 914 Metres

NORTHING: 6003551
EASTING: 360657

LOCATION ACCURACY: Within 500M
COMMENTS: Diamond drillhole A-1 (Minister of Mines Annual Report 1965, figure 22).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Quartz Monzonite
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The K 14 showing occurs in an area underlain by variably altered quartz monzonite of the Francois Lake Intrusive Suite. The quartz monzonite is cut by aplite dikes and quartz veins that are less than one centimetre wide. Some of these quartz veins contain finely disseminated molybdenite. Fractures, which are mainly chloritic, are in some cases smeared with molybdenite and associated pyrite. Pyrite is also sparsely disseminated in the quartz monzonite.

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EMPR PF (Dept. of Mines Summary of Exploration and Development work, 1966,1967; See 093K General file, Endako Area Maps)
EMPR EXPL 1992-69-106
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GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252
EMR MP CORPFILE (United Buffadison Mines Limited)

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 019**

MINFILE NUMBER: **093K 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAX, CRIPPLE LAKE, RAINBOW ROAD,
FIRE, DIORITE, LAKE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16E
BC MAP:

MINING DIVISION: Omineca

LATITUDE: 54 55 30 N
LONGITUDE: 124 03 29 W
ELEVATION: 1372 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 6086958
EASTING: 432193

LOCATION ACCURACY: Within 500M
COMMENTS: Max showing (Open File 1991-3).

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Magnetite Chalcopyrite Fluorite
ASSOCIATED: Quartz
ALTERATION: Quartz Carbonate Epidote Malachite Hematite
Kaolinite Chlorite Biotite

COMMENTS: Propylitic alteration with minor potassic alteration.
ALTERATION TYPE: Propylitic Carbonate Silicific'n Oxidation Potassic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork Vein
CLASSIFICATION: Porphyry Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Sheared
COMMENTS: Shearing has been noted in the area.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Takla	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Augite Hornblende Porphyry
Coarse Grained Monzodiorite
Plagioclase Porphyry
Hornblende Porphyry Amygdaloidal Flow
Diorite
Hornblendite
Black Siliceous Argillite
Sandstone
Mudstone
Polymictic Agglomerate

HOSTROCK COMMENTS: Alkaline intrusives believed to be coeval with volcanic rocks. The host rocks have been informally assigned to the Witch Lake Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
COMMENTS: Zeolite to prehnite-pumpellyite grade metamorphism.

PHYSIOGRAPHIC AREA: Nechako Lowland
RELATIONSHIP:
GRADE: Zeolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.2800 Per cent
COMMENTS: Sample of diorite containing minor sulphides. Minor gold.
REFERENCE: Property File - United Pacific Gold Ltd. Prospectus Aug. 1988.

CAPSULE GEOLOGY

The Max occurrences consists of four main showings within 1 kilometre of each other in the Cripple Lake area, east of the Fort St. James-Germansen logging road. The Max property is approximately 14 kilometres east of the Tas property (093K 080) and 22 kilometres south of the Mt. Milligan deposit (093N 194).
The region is underlain by sedimentary and volcanic rocks of the

CAPSULE GEOLOGY

Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the informally named Inzana Lake, Rainbow, Witch Lake and Chuchi Lake formations. These have been intruded by alkaline intrusives believed to be coeval with the volcanics.

The Witch Lake Formation is composed predominantly of augite ± plagioclase porphyry flows and agglomerates. It is underlain by the younger Inzana Lake Formation (epiclastic volcanic sediments) and the older Rainbow Formation made up of fine grained sediments derived (in part) from a continental source. Amygdaloidal maroon and green subaerial flows and lahars of the Chuchi Lake Formation overlie the Witch Lake Formation.

The claims cover an extensive area of propylitic alteration and sporadic mineralization associated with a polyphase intrusive body. The location coordinates are at the highest elevation on the claims, which is the approximate centre of the alteration and the area containing several showings in and around the main intrusive body.

The complex intrusive suite includes texturally variable diorites and monzodiorites containing hornblende, plagioclase, augite and more rarely potassium feldspar. Hornblendite and aplite dikes have also been noted on the property. In one locality, hornblendite apparently grades into amygdaloidal extrusive equivalents. Similar hornblendite dikes have been documented on the Tas property.

The intrusions cut variable heterolithic augite ± plagioclase porphyry flows and agglomerates, black siliceous argillite and volcanic siltstones and sandstones of the Witch Lake Formation.

Propylitic alteration is extensive in the intrusive rocks; epidote and secondary chlorite are abundant. Minor potassic alteration also occurs. The sediments are intensely hornfelsed and display abundant secondary biotite whereas abundant epidote is present in the volcanic rocks.

Significant magnetite, up to 20 per cent pyrite, 3 per cent average sulphide content, chalcopyrite, hematite and malachite have been noted in the intrusives. Up to 30 per cent pyrite occurs in the Takla Group rocks. Minor disseminated pyrrhotite is found with chlorite in veinlets. The Rainbow Road West showing contained pyrite, chalcopyrite and fluorite in narrow quartz stringers.

A chip sample of diorite containing minor sulphides assayed 0.28 per cent copper and minor gold and arsenic (Property File - United Pacific Gold Limited Prospectus Aug. 1988).

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21949, 22271
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EMPR FIELDWORK *1990, pp. 89-110; 1992, pp. 475-482
EMPR MP MAP 1992-4
EMPR OF *1991-3
EMPR PF (United Pacific Gold Ltd. Prospectus Aug. 1988)
GSC MAP 630A, 907A, 1424A
GSC MEM 252
GSC OF 2593, 2801, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
Chevron File

DATE CODED: 1989/08/05
DATE REVISED: 1990/08/29

CODED BY: DEJ
REVISED BY: MM

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093K 021**

NATIONAL MINERAL INVENTORY: 093K3 Mo2

NAME(S): **S, K, OWL LAKE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 09 26 N
LONGITUDE: 125 09 51 W
ELEVATION: 914 Metres

NORTHING: 6003178
EASTING: 358685

LOCATION ACCURACY: Within 500M

COMMENTS: Trench (Minister of Mines Annual Report 1965, figure 22).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork

CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The area of the S showing is underlain by quartz monzonite of the Francois Lake Intrusive Suite. Molybdenite occurs as fine disseminations in narrow quartz veins in quartz monzonite. These veins are exposed in outcrop and in trenches a short distance to the west.

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GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252
EMR MP CORPFILE (United Buffadison Mines Limited)

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINCHI LAKE LIMESTONE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 37 30 N
LONGITUDE: 124 24 36 W
ELEVATION: 725 Metres

NORTHING: 6053976
EASTING: 408968

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location centred on sample site number 2, as described in Geological Survey of Canada Memoir 252, page 36.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Silica
ALTERATION: Dolomite Silica
COMMENTS: Product of hydrothermal alteration of limestone.

MINERALIZATION AGE: Paleozoic-Mesozoic

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Forams

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone
COMMENTS: Limestone trends northwest for 18 kilometres. Deposit dimension is 18,000 by 2,000 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

ISOTOPIC AGE: Forams

DATING METHOD: Fossil

LITHOLOGY: Limestone
Dolomite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1949

SAMPLE TYPE: Grab

COMMODITY

GRADE

Limestone

55.6000 Per cent

COMMENTS: Grade given for CaO.

REFERENCE: Geological Survey of Canada Memoir 252, page 36, Sample 2.

CAPSULE GEOLOGY

Various exposures of white to blue-grey to buff coloured limestone occur in the vicinity of the Pinchi Lake mercury mine on the northeast side of Pinchi Lake, 25 kilometres northwest of Fort St. James.

The limestone is contained within a belt of chert, argillite, quartzite and greenstone of the Mississippian to Triassic Cache Creek Group. The belt outcrops for 18 kilometres northwest of Pinchi Lake with widths up to 2 kilometres. To the east, the belt is separated from andesitic to basaltic Takla Group volcanics by the northwest trending Pinchi fault. The belt is bounded to the west by a thick sequence of Cache Creek Group massive limestone. In the vicinity of the Pinchi fault the limestone is variably dolomitic.

A sample from an outcrop of blue-grey limestone near the office of the Pinchi Lake mercury mine contained 55.60% CaO, 1.62% MgO, 0.87% insolubles and 0.81% (FeAl)₂O₃ (Geological Survey of Canada Memoir 252, p. 36 - Sample 2). A sample of buff coloured limestone containing cinnabar from the glory hole at the Pinchi Lake mine contained 26.90% CaO, 12.01% MgO, 22.75% SiO₂, 0.99% (FeAl)₂O₃ and

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RUN TIME: 11:27:59

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CAPSULE GEOLOGY

24.64% insolubles (Geological Survey of Canada Memoir 252, p. 36 - Sample 4).

BIBLIOGRAPHY

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B.C., page 25 (in Ministry Library))
EMPR MIN POT MAP 1993-2
EMPR OF 1993-9
GSC MAP 630A; 907A; 1424A
GSC MEM 252, pp. 32-36
GSC OF 2593, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1989/08/14
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093K 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORT ST. JAMES NORTH**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093K08W
BC MAP:

Open Pit

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 28 30 N
LONGITUDE: 124 19 33 W

NORTHING: 6037182
EASTING: 414087

ELEVATION: 710 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on quarry site as indicated on Geological Survey of Canada Map 630A in Industrial Minerals File.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Paleozoic-Mesozoic

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Forams

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Evaporite Industrial Min.
TYPE: R09 Limestone

COMMENTS: Limestone trends northwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

MATERIAL DATED: Forams

LITHOLOGY: Limestone

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1968

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

53.7500 Per cent

COMMENTS: Sample taken across 18.3 metres. Grade given for CaO.

REFERENCE: Minister of Mines Annual Report 1968, page 310.

CAPSULE GEOLOGY

A small quarry 90 metres northeast of Stuart Lake, 6.3 kilometres northwest of Fort St. James, exposes medium grey, fine grained, well fractured limestone with scattered crinoid remains. The deposit lies on the southwest margin of a 200 kilometre long belt of limestone with minor argillite, chert and greenstone (andesite) of the Mississippian to Triassic Cache Creek Group that extends northward along the northeast shore of Stuart Lake.

A sample composed of chips taken at 0.6 metre intervals across the 18.3 metre long quarry face contained 53.75% CaO, 0.22% MgO, 3.30% insolubles, 0.14% R2O3, 0.08% Fe2O3, 0.05% MnO, 0.01% P2O5, 0.008% sulphur and 42.52% ignition loss (Annual Report 1968, p. 310).

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EMPR MIN POT MAP 1993-2
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GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, pp. 32-36

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RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1093
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BIBLIOGRAPHY

GSC MAP 630A; 907A; 1424A

DATE CODED: 1989/08/14
DATE REVISED: / /

CODED BY: PSF
REVISED BY:

FIELD CHECK: N
FIELD CHECK:

MINFILE NUMBER: **093K 024**

NATIONAL MINERAL INVENTORY: 093K6 Cu1

NAME(S): **RADIO GOLD, DON**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K06W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 25 23 N
LONGITUDE: 125 22 41 W
ELEVATION: 792 Metres

NORTHING: 6033197
EASTING: 345719

LOCATION ACCURACY: Within 500M

COMMENTS: From Map accompanying Geological Survey of Canada Paper 37-13.

COMMODITIES: Copper

Molybdenum

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Molybdenite Magnetite Specularite
COMMENTS: Insignificant amounts of gold and silver.
ASSOCIATED: Quartz Hornblende Chlorite Epidote
ALTERATION: Epidote Chlorite Pyrite
ALTERATION TYPE: Epidote Chloritic Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0060 x 0009 Metres STRIKE/DIP:
COMMENTS: Quartz lenses are up to 9 metres thick and 30 to 60 metres long.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Gneiss
Schist
Banded Foliated Sediment/Sedimentary
Hornblende Diorite
Granodiorite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Cache Creek
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The Radio Gold showing occurs in the vicinity of the contact between metamorphosed Cache Creek Group rocks and Francois Lake Intrusive Suite rocks.

The Cache Creek Group consists of gneisses, schists and banded foliated sediments. Several types of mineralization are present. Irregular lenses of glassy quartz up to 9 metres thick and 30 to 60 metres long carry minor pyrite, chalcopyrite and molybdenite. Adjacent to these are areas, up to 15 metres in diameter, composed mainly of epidote and carrying disseminated pyrite, magnetite and glassy quartz, and a little intermixed chlorite, hornblende, pyrite, magnetite, specularite and chalcopyrite. A quartz vein in hornblende rich diorite carries minor amounts of pyrite, chalcopyrite and molybdenite. Assays gave insignificant amounts of gold and silver.

BIBLIOGRAPHY

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EMPR EXPL 1984-320; 1985-C307,C308; 1992-69-106

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
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ENERGY AND MINERALS DIVISION

PAGE: 1095
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR AR 1933-99
GSC OF 2593, 3184
GSC P 37-13, p. 22; *36-20, pp. 158-159; 38-10, p. 17; 90-1F, pp.
115-120; 91-1A, pp. 7-13
GSC MEM 252, pp. 135,182
GSC MAP 631A; 907A; 971A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 025**

NATIONAL MINERAL INVENTORY: 093K6 Ag3

NAME(S): **SILVER ISLAND**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K06W
BC MAP:

Underground

MINING DIVISION: Omineca

LATITUDE: 54 27 17 N
LONGITUDE: 125 24 28 W
ELEVATION: 732 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 6036785
EASTING: 343911

LOCATION ACCURACY: Within 500M

COMMENTS: Mine symbol on 1:50,000 topographic sheet.

COMMODITIES: Silver Copper Zinc Lead Barite

MINERALS

SIGNIFICANT: Tetrahedrite Argentite Silver
 Chalcopyrite Pyrite Barite
 Quartz Ankerite Barite
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
DIMENSION: STRIKE/DIP: 120/45W TREND/PLUNGE:
COMMENTS: Quartz veins occur in shear zones striking 120 degrees and dipping 45 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Endako	Undefined Formation	
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Hornblende Diorite
 Rhyolite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age. The Endako Group ranges from Oligocene to Miocene in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Cache Creek

INVENTORY

ORE ZONE: TUNNEL REPORT ON: N

<u>CATEGORY:</u>	Assay/analysis	<u>YEAR:</u>	1925
<u>SAMPLE TYPE:</u>	Grab		
<u>COMMODITY</u>		<u>GRADE</u>	
Silver		2.3800	Grams per tonne
Copper		8.0000	Per cent
Zinc		3.0000	Per cent

COMMENTS: Silver is expressed as per cent. Selected sample across 3.8 centimetres from No. 2 tunnel.

REFERENCE: Minister of Mines Annual Report 1925, page 143.

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The Silver Island prospect is underlain by volcanic rocks and argillite of the Cache Creek Group, hornblende diorite of the Francois Lake Intrusive Suite and rhyolite considered to belong to the Oligocene to Miocene Endako Group.

Quartz-ankerite-barite veins occur in shear zones striking 120

CAPSULE GEOLOGY

degrees and dipping at about 45 degrees southwest. These veins occur mainly within diorite although at least one occurs in rhyolite. Mineralization consists of tetrahedrite and minor amounts of argentite, native silver, galena, sphalerite, chalcopyrite, pyrite, malachite and azurite. Numerous stringers of calcite cut the diorite. A selected sample over a width of 3.8 centimetres from No.2 tunnel assayed 23,780.6 grams per tonne silver, 8.0 per cent copper and 3.0 per cent zinc (Annual Report 1925, page 143).

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GSC MEM 252, p. 174
GSC P 37-13, p. 19; 38-10, p. 17; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 971A; 1424A
GCNL #97, Dec.17, 1986; #21, 1987
N MINER Jun. 2, Dec.22, 1986

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 026**

NATIONAL MINERAL INVENTORY: 093K6 Ag1

NAME(S): **SILVER FOX**, TALTAPIN, WIND

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093K06W
BC MAP:

Underground

MINING DIVISION: Omineca

LATITUDE: 54 24 28 N
LONGITUDE: 125 25 43 W
ELEVATION: 884 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 6031610
EASTING: 342381

LOCATION ACCURACY: Within 500M
COMMENTS: Along Pinkut Creek on Lot 4097.

COMMODITIES: Silver Gold Copper Zinc Lead

MINERALS

SIGNIFICANT: Galena Tetrahedrite Sphalerite Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Carbonate Silica
ALTERATION TYPE: Carbonate Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
SHAPE: Irregular
DIMENSION: 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralization occurs mainly in northeast striking vein set, veins range from 0.05 to 1.2 metres in width.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Cache Creek Undefined Formation
Upper Jurassic Francois Lake Intrusive Suite

LITHOLOGY: Andesitic Greenstone
Graphitic Schist
Andesite
Granodiorite
Quartz Monzonite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1928
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 2646.9000 Grams per tonne
Gold 1.0300 Grams per tonne
Copper 1.9000 Per cent
Zinc 5.1000 Per cent

COMMENTS: Drill intersection over 2.1 metres.
REFERENCE: Minister of Mines Annual Report 1928, page 177.

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism. The Silver Fox and adjacent showings occur along Pinkut Creek within metamorphosed Cache Creek Group rocks. These consist of

CAPSULE GEOLOGY

carbonatized and silicified andesitic greenstone and some graphitic schist. These rocks have been intruded by granodiorite and quartz monzonite stocks of the Francois Lake Intrusive Suite.

A stockwork of quartz veins striking predominantly to the northeast and east cuts Cache Creek Group rocks. Mineralization, consisting of galena, sphalerite, chalcopyrite, tetrahedrite and pyrite, occurs mainly in the northeast striking vein set. These veins are irregular in shape, ranging in width from 5 centimetres to 1.2 metres. The best showings occur within 30 metres of a 60 metre wide tongue of granodiorite. Other showings in the area occur within andesitic roof pendants in the intrusive rocks. A 2.1 metre drill intersection in 1928 assayed 1.03 grams per tonne gold, 2646.9 grams per tonne silver, 1.9 per cent copper and 5.1 per cent zinc (Annual Report 1928 p.177). In 1921, 2.7 tonnes of sorted ore were shipped from this occurrence.

BIBLIOGRAPHY

EMPR ASS RPT 10647, *11584, 13201, *14134
EMPR EXPL 1984-319; 1983-433; 1982-301; 1985-C307; 1992-69-106
EMPR AR 1919-105; 1920-92; 1925-143,360; 1926-145; 1927-150; 1928-177
EMPR PF (Campbell, R. 1926, A Mining Report for Taltapin Mining Co.; Report from V. Dolmage to Minister of Mines, 1926; Lay, D. Report on Taltapin Mining Co. Ltd., 1928; Interim geological sketch map on 1941 base map; Sharp, W.M. 1966 Geological Report on the Taltapin Properties by Kleanza Mines Ltd.; Geological sketch maps, Canadian Superior, date unknown)
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 36-20, pp. 159-161; 37-13, p. 20; 38-10, p. 17; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 175
GSC MAP 631A; 907A; 971A; 1424A
EMR MP CORPFILE (Taltapin Mining Company Limited; Hercules Consolidated Mining, Smelting and Power Corporation; Kleanza Mines Ltd.; Dome Babine Mines Ltd.)
N MINER Aug.15, 1985; Apr. 21, Jun.16, 1986
GCNL #79, 1986
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 027**

NATIONAL MINERAL INVENTORY: 093K6 Pb1

NAME(S): **ANDERSON**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K06W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 22 59 N
LONGITUDE: 125 22 59 W
ELEVATION: 1036 Metres

NORTHING: 6028759
EASTING: 345244

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of Lot 2490.

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
ALTERATION: Carbonate Chlorite Mica Silica
ALTERATION TYPE: Carbonate Silicific'n Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Banded Greenstone
Granite
Augite Andesite Dike

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The area of the Anderson showing is underlain mainly by Francois Lake Intrusive Suite rocks. However, the showing is in a roof pendant of well banded greenstones of the Cache Creek Group. These rocks are carbonatized and silicified. Grey augite andesite dikes cut both the greenstones and granitic rocks. Galena and pyrite mineralization occur in quartz veins 5 centimetres to 25 centimetres wide striking approximately 120 degrees. The veins also contain a little chlorite and white mica. Only a few sparsely mineralized zones were exposed by considerable stripping and 15 metres of adit.

BIBLIOGRAPHY

EMPR AR 1919-369
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 37-13, p. 22; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 176
GSC MAP 631A; 907A; 971A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1102
REPORT: RGEN0100

CAPSULE GEOLOGY

by W. Halleran and A.A. Halleran in 1990 and 1991.

BIBLIOGRAPHY

EMPR AR 1925-142; 1928-179,419; 1929-182
EMPR ASS RPT *15358, 21284, *22157
EMPR EXPL 1986-C346; 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 38-10, p. 18; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1998/01/29

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1103
REPORT: RGEN0100

MINFILE NUMBER: **093K 029**

NATIONAL MINERAL INVENTORY: 093K5 Cu2

NAME(S): **THREE STAR**, BOO MOUNTAIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 19 26 N
LONGITUDE: 125 56 22 W
ELEVATION: 914 Metres

NORTHING: 6023543
EASTING: 308846

LOCATION ACCURACY: Within 1 KM

COMMENTS: From map accompanying Geological Survey of Canada Paper 37-13.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Specularite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION: 0091 x 0006 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Attitude and dimension of shear zone trending 80 degrees and dipping 85 degrees south.

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: Nechako Plateau

CAPSULE GEOLOGY

The area of the Three Star occurrence is primarily underlain by the Jurassic Hazelton Group volcanic rocks. A zone of shearing up to approximately 6 metres wide and traceable for about 91 metres occurs in andesite. The zone trends 080 degrees and dips 85 degrees to the south. A quartz gangue in the zone hosts chalcopyrite, pyrite and specularite mineralization in the form of bands 1.6 millimetres to several centimetres wide. Mineralized vugs and disseminated pyrite also occur in the andesite.

BIBLIOGRAPHY

EMPR AR 1929-181; 1930-145
EMPR PF (Plan of Boo Mountain Open Cuts, 1929)
EMPR P *1990-2
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 37-13, p. 25; 40-18, p. 15; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 185
GSC MAP 631A; 907A; 971A; 1424A
EMR MR CORPFILE (Topley Richfield Mining Company Limited)

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 029**

MINFILE NUMBER: **093K 030**

NATIONAL MINERAL INVENTORY: 093K5 Cu1

NAME(S): **SILVER GLANCE**, DECK, GER,
DECKER LAKE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K05W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 17 10 N
LONGITUDE: 125 52 57 W
ELEVATION: 760 Metres

NORTHING: 6019189
EASTING: 312377

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Zinc Lead Silver Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Jurassic Hazelton Undefined Formation

LITHOLOGY: Andesite Flow
Andesite Breccia
Rhyolite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1930
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	106.2900 Grams per tonne
Gold	0.6900 Grams per tonne
Lead	29.8000 Per cent
Zinc	18.2000 Per cent

COMMENTS: Selected sample.

REFERENCE: Minister of Mines Annual Report 1930, page 147.

CAPSULE GEOLOGY

The Silver Glance is located about 10 kilometres northwest of Burns Lake on the west side of Decker Lake. The Silver Glance and nearby Golden Glory (093K 031) occurrences together comprise the Deck property.

Recent work consists of prospecting, soil sampling, silt sampling, magnetic surveying and rock sampling in 1990 by Escondido Resources. In 1992, prospecting, magnetic surveying and rock sampling was completed by J.A. Chapman and G.H. Rayner.

The area is primarily underlain by andesitic flows and breccias of the Jurassic Hazelton Group. In the vicinity of the occurrence a rhyolite dike cuts the volcanics.

A vein, which in at least one place is 0.6 metres wide, contains seams of mineralization consisting of sphalerite, galena, chalcopyrite and pyrite. A selected sample in 1930 assayed 0.69 grams per tonne of gold, 106.29 grams per tonne of silver, 29.8 per cent lead and 18.2 per cent zinc (Minister of Mines Annual Report 1930, p. 147).

BIBLIOGRAPHY

EMPR ASS RPT 3065, 3586, 4849, *6917, 7114, 7498, *8726, 17529,
21586, 22537
EMPR BULL 78 (in press)
EMPR EXPL 1978-214; 1979-223; 1980-336; 1992-69-106
EMPR GEM 1971-166; 1973-331

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1105
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR P *1990-2
EMPR AR 1926-145; *1930-147; 1931-75; 1955-25
EMPR PF (White, G.E.(1978) Geophysical Report for Commonwealth
Minerals)
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 37-13, p. 23; 36-20, p. 161; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 971A; 907A; 1424A
GSC MEM 252, p. 177
GCNL #136,#137,#192,1980

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 031**

NATIONAL MINERAL INVENTORY: 093K5 Cu1

NAME(S): **GOLDEN GLORY, SILVER GLANCE, DECK,**
REID, GER, DECKER LAKE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K05W
BC MAP:
LATITUDE: 54 17 12 N
LONGITUDE: 125 52 46 W
ELEVATION: 760 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6019242
EASTING: 312578

COMMODITIES: Copper Silver Zinc Lead Gold

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Pyrite Barite
COMMENTS: Possibly tetrahedrite.
ALTERATION: Limonite Pyrolusite Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Vein
CLASSIFICATION: Volcanogenic Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic	Hazelton	Undefined Formation	

LITHOLOGY: Pillow Lava
Brecciated Pillow Lava
Andesite Flow
Andesite Breccia
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 219.4300 Grams per tonne
Copper 6.5000 Per cent
COMMENTS: Highest values from selected samples.
REFERENCE: Assessment Report 8726.

CAPSULE GEOLOGY

The Golden Glory prospect is located about 10 kilometres northwest of Burns Lake on the west side of Decker Lake. The Golden Glory and Silver Glance (093K 030) showings together are known as the Deck property.

Recent work consists of prospecting, soil sampling, silt sampling, magnetic surveying and rock sampling in 1990 by Escondido Resources. In 1992, prospecting, magnetic surveying and rock sampling was completed by J.A. Chapman and G.H. Rayner.

The area is primarily underlain by the Jurassic Hazelton Group andesite flows and breccia and a few small dioritic intrusions.

Most of the main showing is underlain by pillow lava. Massive sulphide mineralization consisting of pyrite, chalcopyrite, barite, limonite, pyrolusite and malachite occur as irregular masses and lenses. These are up to 5 centimetres in diameter and occur near the tops of pillow lavas and in shears in brecciated pillow lavas. Selected samples in 1980 assayed as high as 6.5 per cent copper and 219.43 grams per tonne of silver (Assessment Report 8726).

A second type of mineralization occurs in veinlets, shears and breccia zones generally less than 10 centimetres wide cutting the

CAPSULE GEOLOGY

volcanics at the Silver Glance showing.

BIBLIOGRAPHY

EMPR ASS RPT 3065, 3586, 4849, *6917, 7114, 7498, *8726, 17529,
21586, 22537
EMPR BULL 78 (in press)
EMPR EXPL 1978-214; 1979-223; 1980-336; 1992-69-106
EMPR GEM 1971-166; 1973-331
EMPR AR 1926-145; 1927-152; *1930-147; 1931-75; 1940-83; 1955-25
EMPR PF (White, G.E. 1978, Geophysical Report for Commonwealth
Minerals)
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 37-13, p. 23-24; 36-20, p. 161; 90-1F, pp. 115-120; 91-1A, pp.
7-13
GSC MEM 252, p. 176-177
GSC MAP 631A; 907A; 971A; 1424A
GCNL #136,#137,#192,1980

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 032**

NATIONAL MINERAL INVENTORY: 093K4 Pb1

NAME(S): **MONA**, NORTHERN LIGHT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K04E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 06 10 N
LONGITUDE: 125 44 24 W
ELEVATION: 792 Metres

NORTHING: 5998428
EASTING: 320858

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Lead Zinc Silver Copper Barite
 Fluorite

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite Barite

ASSOCIATED: Quartz Calcite Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous-Tertiary Ootsa Lake Undefined Formation

LITHOLOGY: Andesite Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1929
 SAMPLE TYPE: Grab
 COMMODITY GRADE
Silver 27.4000 Grams per tonne
Copper 0.8000 Per cent
Lead 23.0000 Per cent
Zinc 8.0000 Per cent

COMMENTS: Selected sample, trace gold.
REFERENCE: Minister of Mines Annual Report 1929, page 181.

CAPSULE GEOLOGY

The area of the Mona showing is primarily underlain by Upper Cretaceous to Lower Tertiary Ootsa Lake Group rocks. Quartz-calcite-barite veins cut coarse-grained andesite flows and are mineralized with pyrite, chalcopyrite, galena and sphalerite. The andesitic rocks contain disseminated pyrite and also some fluorite. A selected sample of vein material returned trace gold, 27.4 grams per tonne of silver, 0.8 per cent copper, 23 per cent lead and 8 per cent zinc (Annual Report 1929 p.181).

BIBLIOGRAPHY

EMPR ASS RPT 7150, *7895
EMPR EXPL 1978-213; 1979-223; 1992-69-106
EMPR BULL 78 (in press)
EMPR OF 1992-16
EMPR P *1990-2
EMPR AR 1925-143; 1928-179; *1929-181
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 36-20, p. 162; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 177
GSC MAP 631A; 907A; 971A; 1424A
EMR MP CORPFILE (Mona Mines, Limited)

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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BIBLIOGRAPHY

Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 033**

NATIONAL MINERAL INVENTORY: 093K5 Mo1

NAME(S): **LING LAKE**, JIM, TOR

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K05E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 20 00 N
LONGITUDE: 125 39 06 W
ELEVATION: Metres

NORTHING: 6023852
EASTING: 327596

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite
ASSOCIATED: Quartz Orthoclase
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Pegmatite Skarn

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Upper Jurassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Francois Lake Intrusive Suite

LITHOLOGY: Quartz Diorite
 Quartz Monzonite
 Diorite
 Pegmatite Vein
 Skarn
 Amphibolite
 Hornblende Biotite Schist
 Greenstone

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The geology of the region consists of: 1) a Mississippian to Triassic Cache Creek Group oceanic volcanic and sedimentary assemblage 2) the Upper Triassic dominantly mafic volcanic Takla Group 3) the Lower to Middle Jurassic Hazelton Group mafic to felsic volcanic and sedimentary rocks 4) the Upper Cretaceous to Lower Tertiary Ootsa Lake Group sedimentary and volcanic rocks and 5) the Oligocene and Miocene Endako Group. The region has been intruded by the Lower Jurassic quartz monzonite to granodiorite Topley Intrusive Suite, Upper Jurassic plutons of the Francois Lake Suite and plugs and stocks related to Upper Cretaceous and Tertiary volcanism.

The area of the Ling Lake showing is underlain mainly by Francois Lake Intrusive Suite rocks. These comprise quartz diorite, quartz monzonite and diorite. Amphibolite, hornblende biotite schist and greenstone of the Cache Creek Group also outcrop in the area.

A pegmatite vein cuts intrusive rocks and carried flakes of molybdenite. This vein consists of an inner 20 centimetre wide zone of quartz and a 5 centimetre wide outer orthoclase zone. A 46 square metre area of skarn contains some chalcopyrite mineralization.

BIBLIOGRAPHY

EMPR ASS RPT 2287, 2912, *10396
EMPR GEM 1969-151; 1970-116
EMPR AR 1963-30
EMPR EXPL 1981-280; 1992-69-106
EMPR PF (Dept. of Mines Summary of Exploration and Development work, 1970,1971)
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 37-13, p. 28; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 193

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1111
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 631A; 907A; 971A; 1424A
EMR MP CORPFILE (Lucky Strike Mines Ltd.)

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 035**

NATIONAL MINERAL INVENTORY: 093K2 Zn1

NAME(S): **SONYA-HECTORIA**, KO, CAT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K02W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 01 17 N
LONGITUDE: 124 57 55 W
ELEVATION: 732 Metres

NORTHING: 5987689
EASTING: 371251

LOCATION ACCURACY: Within 1 KM

COMMENTS: Eight kilometres southwest of Fraser Lake on the east side of Stellako River.

COMMODITIES: Zinc Copper

MINERALS

SIGNIFICANT: Sphalerite Pyrite Chalcopyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Granodiorite
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Sonya-Hectoria showing occurs in an area underlain mainly by granodiorite of the Francois Lake Intrusive Suite and volcanic rocks which are probably correlative with the Cretaceous to Tertiary Ootsa Lake Group. Several approximately parallel, narrow fractures (a few centimetres wide) occur entirely within the granodiorite or at the contact with volcanic rocks. Mineralization consisting of sphalerite, pyrite and a little chalcopyrite occurs in the fractures. Assays indicated only traces of gold and silver.

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GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 630A; 907A; 1424A
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 036**

NATIONAL MINERAL INVENTORY: 093K8 Sb1

NAME(S): **SNOWBIRD, MCMULLEN, STUART LAKE ANTIMONY MINE,
BAY, NORTH, EAST,
SOWCHEA**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093K07E
BC MAP:
LATITUDE: 54 27 10 N
LONGITUDE: 124 30 28 W
ELEVATION: 762 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Upper shaft, 16 kilometres west of Fort St. James near the southwest end of Stuart Lake (Economic Geology 85).

Underground

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6034946
EASTING: 402245

COMMODITIES: Gold Antimony

MINERALS

SIGNIFICANT: Stibnite Arsenopyrite Pyrite
ASSOCIATED: Quartz Ankerite Mariposite Magnesite Chromite
Serpentine Magnetite
ALTERATION: Ankerite Quartz Mariposite Magnesite Serpentine
ALTERATION TYPE: Quartz-Carb.
MINERALIZATION AGE: Middle Jurassic
ISOTOPIC AGE: 165.7 +/- 1 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircons - McKnab Lake Pluton

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Mesothermal Epigenetic
TYPE: I01 Au-quartz veins I09 Stibnite veins and disseminations
SHAPE: Bladed
DIMENSION: 64 x 1 Metres STRIKE/DIP: 120/40N TREND/PLUNGE:
COMMENTS: Bulletin 108, pp 34-35 - McKnab Lake Pluton is part of Topley Intrusive Suite. McKnab Lake Pluton is less deformed than host rock.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Paleozoic-Mesozoic Triassic-Jurassic
GROUP: Cache Creek
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER: Topley Intrusions

LITHOLOGY: Argillite
Carbonaceous Argillite
Listwanite
Slate
Chert
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Nechako Lowland
RELATIONSHIP: Pre-mineralization
GRADE: Greenschist

INVENTORY

ORE ZONE: SNOWBIRD
CATEGORY: Unclassified
QUANTITY: 4535 Tonnes
COMMODITY: Gold 6.8600 Grams per tonne
Antimony 3.0000 Per cent
REFERENCE: News Release, X-Cal Resources, October 9, 1986.
REPORT ON: Y
YEAR: 1986

ORE ZONE: NORTH
CATEGORY: Inferred
QUANTITY: 226775 Tonnes
COMMODITY: Gold 6.8600 Grams per tonne
COMMENTS: Possible reserves.
REFERENCE: Northern Miner - March 27, 1989.
REPORT ON: Y
YEAR: 1989

CAPSULE GEOLOGY

Gold-antimony mineralization at the Snowbird property occurs within the Carboniferous-Jurassic Cache Creek Complex (Group) of the allochthonous Cache Creek terrane, which is truncated to the east by the Pinchi fault, a complex, northwesterly trending, transcurrent fault system. Northeast of the fault zone, the Upper Triassic Takla Group is composed of greywacke and siltstone with minor conglomerate and limestone. Southwest of the fault zone, the Cache Creek Complex is composed of chert, argillite, basalt, alpine-type ultramafics, extensive carbonates and minor blueschist.

The dominant structural feature at the Snowbird property is the Sowchea shear zone, a zone of brecciation and open-space fracturing up to 50 metres wide, which strikes northwesterly and dips 40 to 50 degrees northeasterly. Multiple episodes of ankerite and silica flooding over a strike length of at least 1200 metres have produced a classic listwanite lithology along the shear zone, comprised of ankerite, quartz and mariposite.

North and south of the shear zone, the listwanites grade into a steeply dipping, silicified, carbonaceous argillite sequence. Occurrences of diorite-andesite intrusions in the argillite may be associated with the granite-diorite Early Jurassic-Late Triassic Topley Intrusions, which crosscut the Cache Creek Complex. The McKnab Lake pluton is 166 Ma, mariposite is approximately 162 and sericite show Snowbird stock is 157 Ma.

The gold-antimony mineralization is associated with the Sowchea shear zone whose permeability appears to have controlled the vertical and lateral extent of mineralization. Three sulphide-bearing quartz veins occur (Economic Geology 85).

The Main vein is located in the hanging wall of the shear zone. It strikes 120 degrees with a dip of 40 to 50 degrees to the northeast. Trench sampling along 64 metres of the Main vein has yielded gold assay values that average 4.45 grams per tonne across an average width of 0.9 metre (Economic Geology 85). Figure 3.7, Bulletin 108 shows 20.02 grams per tonne and 21.84 grams per tonne gold on drill fragments (10 centimetres?).

The Peg-leg vein is located in the footwall of the shear zone. It strikes at 120 degrees with a dip of 40 to 50 degrees to the northeast. Trench sampling along 66 metres of the Peg-leg vein has yielded gold assay values of 13.03 grams per tonne across an average width of 0.8 metre (Economic Geology 85). A 10-centimetre drill core yields 8508 grams per tonne gold and 2900 grams per tonne silver (Bulletin 108, page 37).

A third vein, which crosses into the argillites is stibnite rich and strikes at 010 degrees, approximately at a right angle to the Sowchea shear zone.

Carbonate (ankerite)-quartz-mariposite listwanites are fine to medium-grained, dark olive green to grey-coloured rocks with centimetre-scale patches of bright apple-green mariposite. Some samples have a greasy-soapy feel suggesting the presence of talc. An extensive network of ferroan magnesite and quartz veinlets and stringers crosscut the rocks. Mariposite is found most often as an alteration product of chromites. Chromite is fractured, fragmented, and suggests an alpine-type ultramafic. Remnant olivine, extensively altered to serpentine family minerals (usually chrysotile or antigorite) and magnetite, is present in several thin sections (Economic Geology 85).

In the Main vein, stibnite mineralization is sporadically distributed as pods or vuggy fillings in fractured, milky white quartz gangue. The mineralogy of the quartz-sulphide veins generally consists of three sulphide minerals, stibnite, arsenopyrite and trace amounts of anhedral pyrite, occurring in the quartz gangue. Anhedral stibnite is intimately embayed with the quartz, fills interstices within it, and often appears to replace it. Clusters of subhedral arsenopyrite are found either within the anhedral quartz gangue or intermixed with the stibnite.

Deposition of stibnite-bearing quartz veins at the Snowbird property occurred after pervasive listwanitization along the Sowchea shear and complex, greenschist facies metamorphism of the Cache Creek Complex during the Jurassic. Several geologic characteristics of the Snowbird occurrence are similar to other documented mesothermal deposits (Economic Geology 85).

Unclassified reserves at Snowbird are 4535 tonnes grading 6.86 grams per tonne gold and 3.0 per cent antimony (News Release, X-Cal Resources, October 9, 1986). Possible reserves in the North zone are 226,775 tonnes grading 6.86 grams per tonne gold (Northern Miner - March 27, 1989).

Approximately 78 tonnes of stibnite ore were mined from the Snowbird property between 1938 and 1940 (Economic Geology 85).

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*16766
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1992-69-106
EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR GEM 1970-117; 1971-166; 1974-254
EMPR MAP 65 (1989)
EMPR MIN POT MAP 1993-2
EMPR OF 1992-1; 1993-9
EMPR PF (Fort Fraser Mineral Occurrence Map to accompany GSC Paper
38-14; Geology Stuart Lake Area, 1940; Stevenson, J.S. 1939 Notes
on Snowbird Property; Rough Geological Map assumed Snowbird Area,
1940; James, D.H. 1963 Report on Magnetometer Survey; Trench Loca-
tions, Consolidated Shunsby Mines Ltd., 1971; Claim Map, 1971;
Dept. of Mines Summary of Exploration and Development work, 1972,
1975; X-Cal Resources Quarterly Report Nov. 1986; Articles
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Westwind Mines Ltd.; X-Cal Resources Ltd.)
EMR MR MIN BULL 223 B.C. 224
EMR MP RESFILE (British Columbia)
GSC MAP 630A; 907A; 971A; 1424A
GSC MEM *252, pp. 186-189
GSC OF 2593, 3182
GSC P 38-14, p. 7; 90-1F, pp. 115-120; 91-1A, pp. 7-13
ECON GEOL *85 (1990), pp. 1260-1268 (Madu, B.E., Nesbitt, B.E. and
Muehlenbachs, K.)
GCNL #133, #215, 1980; #59, #146, 1981; #67, #197, 1986; #10, #24, #47,
#108, #208, 1987; #40, #73, #191, 1988; #6 (Jan.10), #10 (Jan.16), #33,
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#9 (Jan.14), 1991
N MINER Apr.21, Aug.8, Oct.20, Dec.8, Dec.22, 1986; Jan.26, Feb.
2, Feb.9, Mar.23, 1987; Mar.6,27, Aug.14, 1989
NW PROSP Jan. 1987; Jan/Feb, Mar/Apr, May/June, 1989
PR REL X-Cal Resources Oct.9, 1986; Jan.12, Feb.2, June 2, July 20,
Oct.26, 1987; Feb.10, Apr.8, 1989
TSE Review Oct. 1987
WWW <http://www.infomine.com/>
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1991/08/20

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 037**

NATIONAL MINERAL INVENTORY: 093K13 Cr1

NAME(S): **TSITSUTL MOUNTAIN CHROMIUM**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K13E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 56 29 N
LONGITUDE: 125 39 11 W
ELEVATION: 1524 Metres

NORTHING: 6091491
EASTING: 330061

LOCATION ACCURACY: Within 500M

COMMENTS: Approximately 4267 metres south of Tsitsutl Mountain (Geological Survey of Canada Map 907 A and Memoir 252 p.191).

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform
CLASSIFICATION: Magmatic Stratabound
TYPE: M03 Podiform chromite Syngenetic Industrial Min.
SHAPE: Irregular
DIMENSION: 0002 Metres
COMMENTS: Chromite lens is 1.5 to 2.1 metres long.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Paleozoic	Cache Creek	Undefined Formation	Ultramafic Intrusions
Upper Paleozoic			

LITHOLOGY: Serpentinized Dunite

HOSTROCK COMMENTS: The Cache Creek Group contains rocks of Mississippian to Triassic age. Thrust slice of ophiolite in Cache Creek marine sediments.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Nechako Plateau
RELATIONSHIP: Post-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The Tsitsutl Mountain showing is located 4267 metres south-south west of Tsitsutl Mountain at an elevation of about 1524 metres.

The showing is hosted within Upper Paleozoic ultramafic rocks. This suite of rocks is of probable ophiolitic affinity related to the oceanic Upper Paleozoic Cache Creek Group on which it lies.

A massive lens, 1.5 to 2.1 metres long, of almost pure chromite occurs within rust coloured serpentinized dunite. The margins of the lens dip outwards at 60 degrees and are sharply defined. Chromite nodules, 5 to 7.6 centimetres in diameter, also occur in the area. See also 093N 016, 033, 034, 035 and 040 for related geological information.

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EMPR FIELDWORK 1982 pp. 234-243; 1992, pp. 475-482; 1997, pp. 3-1-3-13; 1998, pp. 33-68
GSC MAP 631A; 907A; 1424A
GSC MEM *252, pp. 135, 191
GSC OF 2593, 3183
GSC P 82-1A pp. 239-245; 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1990/01/09

CODED BY: GSB
REVISED BY: KDH

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 039**

NATIONAL MINERAL INVENTORY: 093K14 Cr1

NAME(S): **MT. SIDNEY WILLIAMS CR**, MOUNT SIDNEY WILLIAMS, CR,
VAN 1, P.G.4, PG-3,
MOUNT SYDNEY WILLIAMS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:
LATITUDE: 54 53 25 N
LONGITUDE: 125 21 21 W
ELEVATION: 1500 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Symbol on Geological Survey of Canada Map 907A.

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6085123
EASTING: 348904

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Syngenetic Industrial Min.
TYPE: M03 Podiform chromite
DIMENSION: 0085 x 0010 Metres STRIKE/DIP:
COMMENTS: Dunite body has exposed surface area of about 10 by 85 metres which averages 3 to 5 per cent chromite.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	Trembleur Intrusions
Permian-Triassic			

LITHOLOGY: Dunite
Harzburgite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A body of serpentinized dunite is located about 3200 metres east southeast of the peak of Mt. Sidney Williams. The dunitic body is approximately 9 by 85 metres, bounded by harzburgite. Disseminated chromite is found throughout the dunite in concentrations of 3 to 5 per cent with one zone, 2 by 9 metres, containing 6 to 9 per cent chromite (Armstrong, J.E., 1949). No work has been recorded on the showings which most recently were covered by the VAN 1, P.G.4 and PG-3 claims.

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EM OF 1999-11
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GSC MEM 252, p. 191
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1990/03/20

CODED BY: GSB
REVISED BY: KDH

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 040**

NATIONAL MINERAL INVENTORY: 093K14 Cr3

NAME(S): **PAULINE**, MIDDLE RIVER RIDGE, PG,
P.G.

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:
LATITUDE: 54 54 53 N
LONGITUDE: 125 20 22 W
ELEVATION: 1600 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Symbol on Geological Survey of Canada Map 907A.

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6087808
EASTING: 350046

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic
TYPE: M03 Podiform chromite
DIMENSION: 0004 x 0001 Metres
COMMENTS: Surface area of one of two chromite lenses.

Disseminated
Syngenetic
Industrial Min.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	Trembleur Intrusions
Permian-Triassic			

LITHOLOGY: Serpentinized Harzburgite
Serpentinized Dunite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Pauline showing, located on the northeast slope of Mt. Sidney Williams, occurs within ultramafic rocks of the Permian to Triassic Trembleur Intrusions (the Mt. Sidney Williams ultramafite). This suite of rocks is of probable ophiolitic affinity related to the oceanic Mississippian to Triassic Cache Creek Group on which it lies. The Mt. Sidney Williams ultramafite hosts three known chromite occurrences: Van Decar Creek (093K 041), Pauline (093K 040) and Mt. Sidney Williams (093K 039). These showings were discovered during mapping by Armstrong (1949) in 1940. Only the Van Decar Creek and Pauline showings have since been re-examined. The Pauline showing is located southeast of the Van Decar Creek showing at 1524 metres. The showing consists of a large zone of serpentinized harzburgite with dunite that contains one pod of massive chromite and one zone of aggregate chromite. The massive pod is 2.4 by 1.5 metres and the aggregate zone, 20 metres west, is 1 by 3.6 metres containing 20 to 30 per cent chromite. Dunite adjacent to the lenses contains 2 to 5 per cent chromite. For a complete work history refer to the Van Decar Creek capsule geology (093K 041).

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EM OF 1999-11
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EMPR FIELDWORK 1992, pp. 475-482; 1998, pp. 33-68
GSC MAP 631A; 907A; 1424A
GSC MEM 252, p. 191
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/11/20

CODED BY: GSB
REVISED BY: KDH

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 040**

MINFILE NUMBER: **093K 041**

NATIONAL MINERAL INVENTORY: 093K14 Cr2

NAME(S): **VAN DECAR CREEK**, PG, P.G.

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 56 10 N
LONGITUDE: 125 22 01 W
ELEVATION: 1128 Metres

NORTHING: 6090246
EASTING: 348364

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol on Geological Survey of Canada Map 907A.

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Magmatic Syngenetic Industrial Min.
TYPE: M03 Podiform chromite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Permian-Triassic			Trembleur Intrusions

LITHOLOGY: Serpentinized Dunite
Sediment/Sedimentary
Volcanic

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Van Decar Creek showing is on the west side of a small knob about 1 kilometre south of the major fork in Van Decar Creek, at an elevation of 1109 metres. It is the largest known chromite body in the Fort St. James area

The showing, located on the northeast slope of Mt. Sidney Williams occurs within ultramafic rocks of the Permian to Triassic Trembleur Intrusions (the Mt. Sidney Williams ultramafite). This suite of rocks is probably of ophiolitic affinity related to the oceanic Mississippian to Triassic Cache Creek Group on which it lies.

The Mt. Sidney Williams ultramafite hosts three known chromite occurrences: Van Decar Creek (093K 041), Pauline (093K 040) and Mt. Sidney Williams (093K 039). These showings were discovered during mapping by Armstrong (1949) in 1940. Only the Van Decar Creek and Pauline showings have since been re-examined.

The main showing is a lens of massive and aggregate chromitite 1.5 by 12 metres in size. The chromitite is hosted by serpentinized dunite. Prospecting in 1975 yielded one sample of chromitite containing 9.8 per cent Cr2O3. Further prospecting and hand trenching of the showing have yielded samples containing 17.7 to 38.9 per cent chromium (Guinet, V., 1980). The Cr/Fe ratios, from 2.3 to 3.9, are some of the highest in the province.

A second showing of serpentinized dunite, approximately 305 metres south of the main showing is recorded as being 1 by 12 metres containing about 10 per cent disseminated chromite. Prospecting in 1979 failed to find this showing.

Work on the Van Decar Creek and Pauline showings began in 1974 when they were staked as the Pauline 1-4 claims and a small amount of prospecting was done. Later, the Cr 1-6 claims were staked, covering the northeast flank of Mt. Sidney Williams and the previous Pauline claims. Prospecting in 1979 identified the two showings and they were sampled at that time. In 1982, a low level airborne aeromagnetic survey was flown over the Cr 1-6 claims by Western Geophysical Aero Data Ltd.. The survey outlined several regional features but the results were inconclusive due to a lack of

CAPSULE GEOLOGY

geological corroboration. The showings were most recently covered by the PG-1, P.G.3 and P.G.5 claims. No evaluation of the platinum potential of the showings has been recorded.

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GSC MAP 631A; 907A; 1424A
GSC MEM 252, p. 191
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1990/11/20

CODED BY: GSB
REVISED BY: KDH

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 042**

NATIONAL MINERAL INVENTORY: 093K13 Sn1

NAME(S): **TSITSUTL MOUNTAIN TIN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K13E
BC MAP:
LATITUDE: 54 58 17 N
LONGITUDE: 125 36 07 W
ELEVATION: 1750 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Symbol on Geological Survey of Canada Map 907A.

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6094705
EASTING: 333459

COMMODITIES: Tin Manganese Vanadium Cobalt Zinc
Rhodonite Gemstones

MINERALS

SIGNIFICANT: Rhodonite Arsenopyrite
ASSOCIATED: Calcite Garnet Ilmenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Industrial Min.
TYPE: Q02 Rhodonite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Meta Sediment/Sedimentary

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Nechako Plateau
RELATIONSHIP:
GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1949
SAMPLE TYPE: Grab
COMMODITY GRADE
Tin 0.0900 Per cent
Vanadium 0.6500 Per cent
Zinc 0.3700 Per cent

COMMENTS: Sample of rhodonite, also cobalt and manganese present. Vanadium oxide is commodity.
REFERENCE: Geological Survey of Canada Memoir 252, page 194.

CAPSULE GEOLOGY

The Tsitsutl Mountain showing occurs in an area underlain by metasedimentary rocks of the Mississippian to Triassic Cache Creek Group.
The showing comprises a northwesterly-striking rhodonite vein cutting the rocks of the Cache Creek Group. This vein, consists of about 70 per cent rhodonite, 2 to 3 per cent arsenopyrite, and variable amounts of calcite, spessartine garnet and ilmenite. The vein has been exposed over widths of 46 and 61 centimetres in two places. Analyses have shown the presence of minor amounts of tin (0.09 per cent), zinc (0.37 per cent), vanadium oxide (0.65 per cent) and cobalt as well as manganese (GSC Memoir 252 p.194).

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EMPR FIELDWORK 1992, pp. 475-482; 1997, pp. 3-1-3-13; 1998, pp. 33-68
GSC MAP 631A; 907A; 1424A
GSC MEM *252, p. 194
GSC OF 2593, 3183

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1124
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 72-53, pp. 45,58; 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 043**

NATIONAL MINERAL INVENTORY: 093K14 Asb1

NAME(S): **MT. SIDNEY WILLIAMS**, VAN, KLONE,
MOUNT SIDNEY WILLIAMS, MT. SYDNEY WILLIAMS, MOUNT SYDNEY WILLIAMS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:
LATITUDE: 54 54 30 N
LONGITUDE: 125 25 07 W
ELEVATION: 1500 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Centered south of Tear Drop Lake, 87 kilometres northwest of Fort St. James.

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6087269
EASTING: 344948

COMMODITIES: Asbestos Gold Silver Chromium

MINERALS

SIGNIFICANT: Chrysotile Pyrite Arsenopyrite Chromite Stibnite
ASSOCIATED: Quartz Carbonate Mariposite
ALTERATION: Serpentine Quartz Carbonate Mariposite
ALTERATION TYPE: Serpentin'zn Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated Massive
CLASSIFICATION: Replacement Porphyry Hydrothermal Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos M03 Podiform chromite
 Q01 Jade
DIMENSION: 7 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Chrysotile stringers occur in 7.6 metre wide zone, and are up to 3.8 centimetres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Permian-Triassic	Cache Creek	Undefined Formation	Trembleur Intrusions

LITHOLOGY: Serpentinized Peridotite
Listwanite
Harzburgite
Dunite
Basalt
Andesite
Argillaceous Schist

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. Informally referred to as the Mount Sydney Williams ultramafic massif.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Cache Creek

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1988
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	0.2000 Grams per tonne
Gold	0.3900 Grams per tonne
Chromium	0.1380 Per cent
COMMENTS: Sample 9720, silicified listwanite.	
REFERENCE: Assessment Report 17173.	

CAPSULE GEOLOGY

The Mount Sidney Williams showing occurs within ultramafic rocks of the Permian to Triassic Trembleur Intrusions. This suite of rocks is probably of ophiolitic affinity, related to the oceanic Mississippian to Triassic Cache Creek Group on which it lies.

The area is underlain by rocks informally referred to as the Mount Sidney Williams ultramafic massif which consist of serpentinized peridotite and harzburgite with pods of dunite and Cache Creek Group andesitic volcanics and argillaceous schist.

Mineralization at Mount Sidney Williams consists of asbestos,

CAPSULE GEOLOGY

chromite, pyrite, arsenopyrite, stibnite and poor quality jade. Low gold and silver values are associated with the poor quality jade and listwanite alteration zones consisting of quartz, carbonate, mariposite and locally up to 5 per cent disseminated pyrite and arsenopyrite. One outcrop of listwanite was observed to contain coarse grained stibnite. Chromite occurs in harzburgite in small massive pods, fine grained clots and as veinlets which occasionally form a stockwork (see also 093K 039 and 072). Cross fibre chrysotile asbestos occurs in a 7.6-metre wide zone in serpentized peridotite. Stringers vary in width from 0.3 to 3.8 centimetres and are from 0.3 to 30 centimetres apart. The asbestos fibres are brittle and of poor commercial quality (see also 093K 068).

A grab sample taken in 1988 from silicified listwanite on the Klone claim south of Tear Drop Lake assayed 0.390 gram per tonne gold, 0.2 gram per tonne silver and 0.138 per cent chromium (Assessment Report 17173).

First Point Minerals mapped and sampled in the area in 1997.

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- EMPR OF 1995-25; 1999-11
- GSC MAP 631A; 907A; 1424A
- GSC MEM 252, p. 197
- GSC OF 2593, 3183
- GSC P 38-10, p. 18; 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/15

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 044**

NATIONAL MINERAL INVENTORY: 093K1 Mn1

NAME(S): **GODWIN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K01W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 08 44 N
LONGITUDE: 124 23 48 W
ELEVATION: 762 Metres

NORTHING: 6000618
EASTING: 408772

LOCATION ACCURACY: Within 500M

COMMENTS: Location from map, Geological Survey of Canada Paper 38-14.

COMMODITIES: Manganese

MINERALS

SIGNIFICANT: Pyrolusite Psilomelane
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Cherty Quartzite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Godwin showing occurs within a region underlain dominantly by Mississippian to Triassic Cache Creek Group rocks. In the area of the showing, these consist of deformed cherty quartzite. Small, irregular fractures in these rocks contain pyrolusite and psilomelane. Small pockets of high grade manganese occur in areas of most intense fracturing.

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GSC P 38-14, p. 7; 72-53, p. 59; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 195
GSC MAP 630A; 907A; 971A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/17

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 045**

NATIONAL MINERAL INVENTORY: 093K1 Mn2

NAME(S): **TEAD, BIG MARCELLE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K01W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 08 16 N
LONGITUDE: 124 25 44 W
ELEVATION: 792 Metres

NORTHING: 5999795
EASTING: 406650

LOCATION ACCURACY: Within 500M

COMMENTS: Location from map, Geological Survey of Canada Paper 38-14.

COMMODITIES: Manganese

MINERALS

SIGNIFICANT: Pyrolusite Psilomelane

ASSOCIATED: Clay

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Layered Massive
CLASSIFICATION: Epigenetic Replacement Industrial Min.
DIMENSION: 3 x 1 Metres STRIKE/DIP:
COMMENTS: Lense is about 1.2 metres wide and 3.0 metres long.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Cherty Quartzite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

Two exposures of manganese occur in an area underlain by Mississippian to Triassic Cache Creek Group rocks consisting mainly of folded, cherty quartzites. These rocks trend northwesterly and normally dip steeply to the northeast. One showing consists of pyrolusite and psilomelane, with thin seams of sandy, yellow clay, forming a small lens having a maximum width of about 1.2 metres and a length of 3.0 metres. At the second showing manganese mineralization occurs across a width of about one metre. In some cases individual quartzite beds up to about 5 centimetres in width have been almost completely replaced by manganese oxides.

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EMPR AR 1936-C38; 1940-85
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EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3182
GSC P 38-14, p. 6; 72-53, p. 59; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 195
GSC MAP 630A; 907A; 971A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 046**

NATIONAL MINERAL INVENTORY: 093K9 Hg3

NAME(S): **SUNSHINE, BELLE, AJAX,
MURRAY, MIDNIGHT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K09E
BC MAP:
LATITUDE: 54 30 07 N
LONGITUDE: 124 08 31 W
ELEVATION: 823 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6039971
EASTING: 426051

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
ASSOCIATED: Quartz
ALTERATION: Carbonate
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein	Stockwork	Disseminated
CLASSIFICATION: Hydrothermal	Epigenetic	
TYPE: E01 Almaden Hg		108 Silica-Hg carbonate
SHAPE: Irregular		
MODIFIER: Faulted		

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Andesite
Schist
Ultramafic

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A number of mercury showings occur along the Pinchi Fault zone. The Pinchi Fault separates the Mississippian to Triassic Cache Creek Group from the Upper Triassic Takla Group. The fault has provided zones of permeability for the passage of mercury-bearing hydrothermal solutions in a number of places along its length. The origin of the mercury mineralization is not yet clear and in many places there are no obvious sources of heat or origin of the metals.

The Sunshine showings occur adjacent to the Pinchi Fault. The area is underlain mainly by metamorphosed sedimentary and volcanic rocks of the Mississippian to Triassic Cache Creek Group.

Cinnabar mineralization occurs in a stockwork of fine quartz veins. These veins occur in a carbonate alteration zone surrounding ultrabasic dikes. Mercury mineralization also occurs in carbonate altered andesite and schist as disseminations.

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EMPR MIN POT MAP 1993-2
EMPR ASS RPT *11213
EMPR PF (Claim Maps 1964; Claim Records and Notes, 1964-1969;
Sutherland-Brown A. Sketch and Property Description; Dept.
of Mines Summary of Exploration and Development work, 1967,1968,
1971)
EMR MP CORPFILE (Pan-Ajax Resources Limited)
GSC MAP 630A; 907A; 1424A
GSC MEM 252 p.171

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1130
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 2593, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 047**

NATIONAL MINERAL INVENTORY: 093K9 Hg2

NAME(S): **CIN, MERC**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 38 16 N
LONGITUDE: 124 27 51 W
ELEVATION: 762 Metres

NORTHING: 6055470
EASTING: 405501

LOCATION ACCURACY: Within 1 KM
COMMENTS: CIN 14.

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
ASSOCIATED: Silica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: E01 Almaden Hg

108 Silica-Hg carbonate

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Siliceous Limestone Breccia
Siliceous Dolomitic Breccia
Siliceous Cherty Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A number of mercury showings occur along the Pinchi Fault zone. The Pinchi Fault separates the Mississippian to Triassic Cache Creek Group from the Upper Triassic Takla Group. The fault has provided zones of permeability for the passage of mercury-bearing hydrothermal solutions in a number of places along its length. The origin of the mercury mineralization is not yet clear and in many places there are no obvious sources of heat or origin of the metals.

The Cin showing occurs adjacent to the Pinchi Fault. The area is underlain mainly by metamorphosed sedimentary and volcanic rocks of the Mississippian to Triassic Cache Creek Group. Cinnabar mineralization occurs in siliceous re-cemented breccias of limestone, dolostone and chert.

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EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
EMPR PF (Claim Maps, 1969; Dept. of Mines Summary of Exploration and Development work, 1966, 1968, 1969, 1970, 1971, 1973)
GSC MAP 630A; 907A; 1424A
GSC MEM 252
GSC OF 2593, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
EMR MP CORPFILE (Highland Mercury Mines Limited; Highland-Bell Limited; Leitch Mines Limited)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 048**

NATIONAL MINERAL INVENTORY: 093K8 Hg1

NAME(S): **CALEX**, CENTENNIAL, MURRAY,
MIDNIGHT, DA

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K08E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 29 28 N
LONGITUDE: 124 08 20 W
ELEVATION: 792 Metres

NORTHING: 6038762
EASTING: 426229

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
ASSOCIATED: Quartz Ferrodolomite
ALTERATION: Serpentine Carbonate
ALTERATION TYPE: Carbonate Serpentin'zn
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Replacement Hydrothermal
TYPE: E01 Almaden Hg 108 Silica-Hg carbonate
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Permian-Triassic	Cache Creek	Undefined Formation	Trembleur Intrusions

LITHOLOGY: Mafic Volcanic
Shale
Limestone
Serpentinized Peridotite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A number of mercury showings occur along the Pinchi Fault zone. The Pinchi Fault separates the Mississippian to Triassic Cache Creek Group from the Upper Triassic Takla Group. The fault has provided zones of permeability for the passage of mercury-bearing hydrothermal solutions in a number of places along its length. The origin of the mercury mineralization is not yet clear and in many places there are no obvious sources of heat or origin of the metals.

The Calex showings occur within an area underlain by the Mississippian to Triassic Cache Creek Group and Permian to Triassic Trembleur Intrusions. Both groups are represented in the area of the showings.

Mafic volcanics with minor shale and limestone and serpentinized peridotite have been intensely sheared and carbonatized to varying degrees. This carbonatization has, in places, resulted in the formation of massive ferrodolomite, widely replaced by cinnabar. Minor cinnabar is also associated with an erratic quartz vein stockwork.

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EMPR PF (Sutherland-Brown A. 1965 Property Description and Sketch;
Dept. of Mines Summary of Exploration and Development work, 1969)
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1133
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 171
GSC MAP 630A; 907A; 971A; 1424A
EMR MP CORPFILE (Darbar Explorations Ltd.)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Cache Creek rocks. A number of faults, mostly with a northwesterly trend, occur in the Pinchi fault zone.

Cinnabar mineralization is concentrated in breccia zones along the faults as well as in strata cut by the faults. Known orebodies roughly parallel the bedding and occur mainly in dolomitized limestone beneath bands of impervious schist although some ore is also found in the quartz-carbonate-mica schists. Most of the cinnabar occurs as veinlets and blebs filling pre-existing openings such as fissures, solution cavities and interstices between grains and breccia fragments. The cinnabar is mainly a massive red variety but there is also some bright red earthy cinnabar as well as some crystallized cinnabar. A little stibnite and scattered grains of pyrite have been found.

The south fault, which hosts most of the mineralization, strikes about 320 degrees and dips about 60 degrees west. The faulting style changes from one distinct fault to a group of closely spaced faults 300 metres to the northwest.

Possible resources are 1.1 million tonnes grading 3.2 kilograms per tonne mercury (Cominco Ltd. Annual Report 1992).

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- EMPR OF 1992-1; 1993-9
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
EMPR MIN POT MAP 1993-2
EMPR MAP 65 (1989)
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EMPR GEM 1969-156; 1970-117; 1971-167; 1972-364; 1973-333; 1974-254
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GSC P 38-14, p. 9; 42-11, p. 12-15; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC OF 2593, 2846
GSC MAP 630A; 907A; 971A; 1424A; 1582G
GSC MEM *252, pp. 166-171
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DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 050**

NATIONAL MINERAL INVENTORY: 093K10 Hg1

NAME(S): **TOAD**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 42 07 N
LONGITUDE: 124 35 43 W
ELEVATION: 823 Metres

NORTHING: 6062793
EASTING: 397202

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Toad claim group.

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
ALTERATION: Silica Carbonate
ALTERATION TYPE: Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: E01 Almaden Hg I08 Silica-Hg carbonate

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Permian-Triassic			Trembleur Intrusions

LITHOLOGY: Serpentinite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A number of mercury showings occur along the Pinchi Fault zone. The Pinchi Fault separates the Mississippian to Triassic Cache Creek Group from the Upper Triassic Takla Group. The fault has provided zones of permeability for the passage of mercury-bearing hydrothermal solutions in a number of places along its length. The origin of the mercury mineralization is not yet clear and in many places there are no obvious sources of heat or origin of the metals.

The Toad showing occurs adjacent to the Pinchi Fault zone. Mineralization consists of traces of cinnabar in silica-carbonate altered serpentinite, which is probably part of the Trembleur Intrusions.

BIBLIOGRAPHY

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EMPR PF (Dept. of Mines Summary of Exploration and Development work, 1966-1969)
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 630A; 907A; 1424A; 1592G
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 051**

NATIONAL MINERAL INVENTORY:

NAME(S): **JOHN**, NECOSLIE RIVER

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K08E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 22 05 N
LONGITUDE: 124 05 59 W
ELEVATION: 792 Metres

NORTHING: 6025030
EASTING: 428552

LOCATION ACCURACY: Within 500M

COMMENTS: Stripping area, adjacent to the highway.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Paleozoic-Mesozoic
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Forams

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone

Massive
Industrial Min.

DIMENSION: 650 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Deposit outcrops for 650 metres along highway.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
DATING METHOD: Fossil
MATERIAL DATED: Forams

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Chert

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: ROADCUT

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Limestone

YEAR: 1969

GRADE: 51.6600
Per cent

COMMENTS: 38.1 metre long chip sample. Grade given for CaO.
REFERENCE: Geology, Exploration and Mining 1969, page 393.

CAPSULE GEOLOGY

Limestone is exposed along the base of a slope for 650 metres on the northeast side of the Necoslie River road, 13 kilometres south-east of Fort St. James. The deposit lies on the southwest margin of a belt of limestone of the Carboniferous to Jurassic Cache Creek Group with minor chert, argillite and greenstone (andesite) up to 10 kilometers wide that extends northwest of Gordon Lake for 200 kilometres.

The deposit is comprised mostly of light grey, medium to fine grained limestone that becomes black in a few places. The limestone is cut by white calcite veinlets and contains a few cherty inclusions. A sample of randomly collected chips taken along a roadcut for 38.1 metres assayed 51.66% CaO, 0.14% MgO, 6.42% insolubles, 0.29% R2O3, 0.12% Fe2O3, 0.06% MnO, 0.03% P2O5, 0.011% sulphur and 40.78% ignition loss (Geology, Exploration and Mining in B.C. 1969, p. 393).

This deposit was partially stripped and drilled by Domtar Chemicals between 1968 and 1970.

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EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR GEM 1968-310; 1969-393; 1970-503
EMPR MIN POT MAP 1993-2
EMPR OF 1993-9

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

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GSC MAP 630A; 907A; 1424A
GSC MEM 252, pp. 32-37
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1989/08/11
DATE REVISED: 1989/08/11

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
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ENERGY AND MINERALS DIVISION

PAGE: 1139
REPORT: RGEN0100

MINFILE NUMBER: **093K 052**

NATIONAL MINERAL INVENTORY: 093K6 Cu2

NAME(S): **J, T**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K06E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 26 36 N
LONGITUDE: 125 13 00 W
ELEVATION: Metres

NORTHING: 6035112
EASTING: 356258

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Argillite
Quartzite
Chlorite Schist

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The J.T. showing occurs in a region underlain by metasedimentary and metavolcanic rocks of the Mississippian to Triassic Cache Creek Group. These are intruded by intermediate to felsic plutons of the Francois Lake Intrusive Suite.

The showing is underlain entirely by argillite, quartzite and interbedded chlorite schist. Mineralization comprises chalcopyrite within quartz stringers cutting chlorite schist.

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EMPR ASS RPT 1111
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A; 5305G
GSC MEM 252

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 052**

MINFILE NUMBER: **093K 053**

NATIONAL MINERAL INVENTORY: 093K11 Ag1

NAME(S): **CUNNINGHAM LAKE**, LORNE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K11W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 34 51 N
LONGITUDE: 125 26 59 W
ELEVATION: Metres

NORTHING: 6050907
EASTING: 341681

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of Lorne 1-16 claims.

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Galena
COMMENTS: Specific minerals not mentioned but assume galena is the lead mineral.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Argillite
Andesite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Cunningham Lake showing occurs in a region underlain by metasedimentary and metavolcanic rocks of the Mississippian to Triassic Cache Creek Group. These are intruded by intermediate to felsic plutons of the Francois Lake Intrusive Suite.

Silver-lead mineralization, assumed to be in the form of argentiferous galena, is reported to occur in argillite and andesite of the Cache Creek group.

Equity Silver explored the showing in 1960's.

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EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR GEM 1969-120
EMPR MIN POT MAP 1993-2
EMPR OF 1993-9
EMPR PF (Claim Map and notes, date unknown)
GSC MAP 631A; 907A; 1424A; 5314G
GSC MEM 252
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 054**

NATIONAL MINERAL INVENTORY: 093K12 Cu1

NAME(S): **BL, SMJ, BUTTER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 33 32 N
LONGITUDE: 125 33 12 W
ELEVATION: 1360 Metres

NORTHING: 6048705
EASTING: 334898

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate centre of BL 18 Claim.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Calcite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Magmatic Syngenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Upper Triassic
Permian-Triassic

GROUP

Cache Creek
Takla

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Porphyritic Pyroxenite
Coarse Grained Gabbro
Andesite
Tuff

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1988

COMMODITY

Copper

GRADE

0.0530 Per cent

COMMENTS: Sample S-9853 from pyroxenite containing chalcopyrite and malachite.
REFERENCE: Assessment Report 17294.

CAPSULE GEOLOGY

The BL showing occurs in a region underlain dominantly by metasedimentary and metavolcanic rocks of the Upper Triassic Takla Group and by ultramafic bodies of ophiolitic character related perhaps to the oceanic Cache Creek Group. These ultramafic bodies, known as the Permian to Triassic Trembleur Intrusions, are composed dominantly of dunite and peridotite but pyroxenite and gabbro are also present in some areas.

The BL showing comprises disseminated chalcopyrite in a porphyritic pyroxenite and coarse-grained gabbro. In this vicinity chalcopyrite and malachite also occur in andesite adjacent to a pyritic tuff unit of unknown age. In 1987, a grab sample from an outcrop of pyroxenite containing chalcopyrite and malachite on the Butter claim assayed 0.053 per cent copper (Assessment Report 17294).

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EMPR EXPL 1983-434; 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482; 1998, pp. 33-68
EMPR GEM 1970-118; 1971-168
EMPR OF 1995-6; 1995-24; 1999-11
EMPR PF (EM Survey, Royal Canadian Ventures, 1970; Dept. of Mines

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RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1142
REPORT: RGEN0100

BIBLIOGRAPHY

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EMR MP CORPFILE (Royal Canadian Ventures Ltd.)
GSC MAP 631A; 907A; 1424A; 5313G
GSC MEM 252
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/15

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093K 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRASER LAKE COAL**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K02E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 04 09 N
LONGITUDE: 124 39 26 W
ELEVATION: Metres

NORTHING: 5992487
EASTING: 391555

LOCATION ACCURACY: Within 500M

COMMENTS: Coal showing (Geological Survey of Canada Paper 38-14, map).

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: A02 Lignite

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Coal
Shale
Sandstone
Lignite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Lowland

RELATIONSHIP: Syn-mineralization GRADE: Lignite

CAPSULE GEOLOGY

A railroad cut exposes several narrow coal seams in Tertiary sedimentary beds which are overlain by basalt. The coal formation consists of shales, some sandstone and thin bands of lignite separated by shale-partings of varying thickness. Lignite bands vary from a few centimetres up to about 60 centimetres but in places there is 1.2 to 1.5 metre thicknesses of coal and shale bands bedded together. The coal is a lignite and of generally poor quality. The host formation is of limited extent.

BIBLIOGRAPHY

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EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3182
GSC P 38-14, p. 14; 89-4; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 196
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRANCOIS LAKE ASPHALTUM**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 04 44 N
LONGITUDE: 125 45 29 W
ELEVATION: 762 Metres

NORTHING: 5995817
EASTING: 319574

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of phosphorus showing on Geological Survey of Canada Map 907A.

COMMODITIES: Phosphate Bitumen

MINERALS

SIGNIFICANT: Pyrobitumen Collinsite
COMMENTS: Quercyite (phosphate mineral) also present.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Residual Industrial Min.
DIMENSION: 0030 Metres STRIKE/DIP:
COMMENTS: "Vein" outcrops at intervals over 30 metres and is 0.10 to 0.30 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Amygdaloidal Vesicular Andesite Flow
Sandstone
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Botryoidal phosphates and asphaltum occur in a small irregular vein that is 10 centimetres to 30 centimetres wide and outcrops at intervals over a length of about 30 metres. The vein occurs in a Tertiary amygdaloidal and vesicular andesitic flow that overlies sandstone and shale. Although described as a vein, it has been noted that the occurrence appears to be a layer between two lava flows. The asphaltum has been classified as asphaltic pyrobitumen while the phosphates have been identified as collinsite and quercyite.

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EMPR AR 1923-116; 1924-101
EMPR BULL 78 (in press)
EMPR P *1990-2
EMPR PF (Oil Prospecting Near Francois Lake, date and author unknown;
Whittaker, D.E. 1923 Correspondence and assay certificate;
J.D. Galloway, correspondence 1923-24)
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 72-53, p. 29; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 197
GSC SUM RPT 1924, part A, p. 43
GSC MB 46, pp. 2-12
GSC MAP 631A; 907A; 971A; 1424A
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 057**

NATIONAL MINERAL INVENTORY:

NAME(S): **THUR**, THOR, PINCHI

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 37 41 N
LONGITUDE: 124 33 41 W
ELEVATION: 732 Metres

NORTHING: 6054523
EASTING: 399203

LOCATION ACCURACY: Within 5 KM

COMMENTS: Centered on Thur 1 claim just west of Pinchi Lake, as shown on claim map 093K/10E (1974).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Paleozoic-Mesozoic
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Fusulinids

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone

Massive
Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Pennsylvan.-Permian	Cache Creek	Undefined Formation	
DATING METHOD:	Fossil		
MATERIAL DATED:	Fusulinids		

LITHOLOGY: Limestone

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age, in this area Permian to Pennsylvanian.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A deposit of Permian to Triassic Cache Creek Group limestone, is reported to be located 0.5 to 1.5 kilometres west of Pinchi Lake, 30 kilometers northwest of Fort St. James.

The deposit was evaluated by Northrock Industries in 1972. Diamond drilling encountered limestone of excellent quality with good large tonnage possibilities. No further information is available.

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EMPR MIN POT MAP 1993-2
EMPR OF 1993-9
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GSC MAP 630A; 907A; 1424A
GSC MEM 252 pp.32-37
GSC OF 2593, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1989/07/27
DATE REVISED: 1989/08/29

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRUCE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 04 59 N
LONGITUDE: 125 47 13 W
ELEVATION: 914 Metres

NORTHING: 5996354
EASTING: 317703

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz veining in outcrop, 3.75 kilometres north-northwest from the village of Francois Lake, 3.5 kilometres west of Tchesinkut Lake (Assessment Report 16786).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Chalcedony Bitumen
ALTERATION: Epidote Calcite
ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: H05 Epithermal Au-Ag: low sulphidation
DIMENSION: 0030 Metres STRIKE/DIP: 055/ TREND/PLUNGE:
COMMENTS: Main quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Cretaceous-Tertiary
Unknown

GROUP

Ootsa Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Andesite Flow
Andesite Flow Breccia
Diorite Dike
Rhyolite
Rhyolite Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1987

COMMODITY

Silver

GRADE

3.2000

Grams per tonne

Gold

3.8800

Grams per tonne

COMMENTS: Sample of quartz vein
REFERENCE: Assessment Report 16786.

CAPSULE GEOLOGY

The Bruce occurrence area is underlain by Cretaceous to Tertiary Ootsa Lake Group andesitic volcanic rocks and rhyolitic rocks and tuffs overlain by Lower Cretaceous Skeena Group conglomerates and siltstones. A diorite dike trending 030 degrees cuts the andesite which are comprised of propylitically altered flows and flow breccia. Vesicles are commonly filled with quartz, chalcedony, epidote and calcite. The rhyolitic rocks contain vugs and fracture-fillings of chalcedony and locally, bitumen.

Quartz veins, stockworks and breccia-fillings are hosted by the andesite. The main vein strikes 055 degrees with steep dips to the northwest and is up to 0.5 metres wide with limited lateral extent (up to 30 metres). The quartz is white, locally banded and vuggy. Disseminated pyrite occurs locally. A grab sample of the quartz veining assayed 3.88 grams per tonne gold and 3.2 grams per tonne silver (Assessment Report 16786).

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EMPR ASS RPT *16786
EMPR EXPL 1988-C165; 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 907A; 1424A
GSC MEM 252
Chevron File

DATE CODED: 1989/08/31
DATE REVISED: 1995/03/14

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 060**

NATIONAL MINERAL INVENTORY: 093K4 Au1

NAME(S): **OAKLA**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 06 00 N
LONGITUDE: 125 45 12 W
ELEVATION: Metres

NORTHING: 5998153
EASTING: 319975

LOCATION ACCURACY: Within 5 KM
COMMENTS: On the north side of Francois Lake.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1923
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Gold	18.5000 Grams per tonne

COMMENTS: Sample from pyritic vein.
REFERENCE: Minister of Mines Annual Report 1923, page 119.

CAPSULE GEOLOGY

The Oakla showing occurs in a region underlain by Lower Jurassic strata into which felsic plutons of the Upper Jurassic Francois Lake Suite have been intruded. Volcanics of the Upper Cretaceous to Lower Tertiary Ootsa Lake Group overlie these rocks.

The Oakla showing comprises pyritic veins cutting grey-green andesite of the Ootsa Lake Group. A sample of one of these veins returned a value of 18.5 grams per tonne gold (Annual Report 1923, p. 119).

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EMPR BULL 78 (in press)
EMPR P *1990-2
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 36-20, p. 162; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 631A; 907A; 1424A; 5303G
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 061**

NATIONAL MINERAL INVENTORY: 093K3 Zn1

NAME(S): **KATHLEEN JANE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 06 30 N
LONGITUDE: 125 28 36 W
ELEVATION: Metres

NORTHING: 5998411
EASTING: 338093

LOCATION ACCURACY: Within 5 KM

COMMENTS: East end of Tchesinkut Lake, 3.2 kilometres from North shore.

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite
COMMENTS: Assume zinc mineral is sphalerite, is not specified.
ASSOCIATED: Specularite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Cretaceous-Tertiary

GROUP

Ootsa Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Amygdaloidal Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1926

SAMPLE TYPE: Grab

COMMODITY

GRADE

Zinc

1.0000

Per cent

COMMENTS: From hematitic fracture.

REFERENCE: Minister of Mines Annual Report 1926, page 144.

CAPSULE GEOLOGY

The Kathleen Jane showing occurs in a region underlain by Lower Jurassic strata into which felsic plutons of the Upper Jurassic Francois Lake Suite have been intruded. Volcanics of the Upper Cretaceous to Lower Tertiary Ootsa Lake Group overlie these rocks.

The showing comprises minor specularite in small fractures cutting amygdaloidal andesite of the Ootsa Lake Group. A sample of one of these hematitic fractures assayed 1.0 per cent zinc (Annual Report 1926, p.144).

BIBLIOGRAPHY

EMPR AR 1926-144
EMPR ASS RPT 19960
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC AMP 631A; 907A; 1424A; 5304A

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 062**

NATIONAL MINERAL INVENTORY: 093K4 Pb2

NAME(S): **GAMBLE** CYMRIC, NEWMAN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 07 12 N
LONGITUDE: 125 44 41 W
ELEVATION: 884 Metres

NORTHING: 6000355
EASTING: 320624

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Silver Gold Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena
COMMENTS: Copper staining.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Mafic Volcanic

HOSTROCK COMMENTS: Host rock not specified.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1930
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	54.8600	Grams per tonne	
Gold	1.3700	Grams per tonne	
Lead	1.6000	Per cent	
Zinc	2.0000	Per cent	

COMMENTS: Selected sample of vein material.
REFERENCE: Minister of Mines Annual Report 1930, page 146.

CAPSULE GEOLOGY

The Gamble showing occurs in a region underlain by Lower Jurassic strata into which felsic plutons of the Upper Jurassic Francois Lake Suite have been intruded. Volcanics of the Upper Cretaceous to Lower Tertiary Ootsa Lake Group overlie these rocks. The geology of the showing has not been described other than a reference to several outcrops of mafic volcanics in the area. Mineralization consists of sphalerite and galena in a 0.6 to 0.9 metre wide copper stained quartz vein. A selected sample of vein material assayed 1.37 grams per tonne gold, 54.86 grams per tonne silver, 1.6 per cent lead and 2.0 per cent zinc (Annual Report 1930, p.146).

BIBLIOGRAPHY

EMPR AR 1925-144; 1930-145
EMPR BULL 78 (in press)
EMPR P *1990-2
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 36-20, p. 162; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 631A; 907A; 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1152
REPORT: RGEN0100

BIBLIOGRAPHY

Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 063**

NATIONAL MINERAL INVENTORY: 093K13 Cu1

NAME(S): **TSITSUTL MOUNTAIN**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K13E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 58 34 N
LONGITUDE: 125 37 51 W
ELEVATION: 1900 Metres

NORTHING: 6095300
EASTING: 331630

LOCATION ACCURACY: Within 500M
COMMENTS: South slope of Tsitsutl Mountain.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Igneous-contact Skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Lower Jurassic			Topley Intrusions

LITHOLOGY: Limestone
Granite

HOSTROCK COMMENTS: The Cache Creek Group contains strata Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Tsitsutl Mountain copper showing occurs in a region underlain dominantly by Mississippian to Triassic Cache Creek Group rocks. These are intruded by intermediate to felsic intrusions of the Lower to Middle(?) Jurassic Topley Intrusive Suite. Mineralization consists of small amounts of disseminated pyrite and chalcopyrite in Cache Creek Group limestone near the contact with granitic rocks.

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 33-68
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482; 1997, pp. 3-1-3-13
EMPR OF 1999-11
GSC MAP 631A; 907A; 1424A
GSC MEM 252
GSC OF 2593, 3183
GSC P 38-10, p. 19; 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 064**

NATIONAL MINERAL INVENTORY: 093K14 Au1

NAME(S): **VAN DECAR CREEK PLACER**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 56 54 N
LONGITUDE: 125 21 59 W
ELEVATION: 825 Metres

NORTHING: 6091605
EASTING: 348446

LOCATION ACCURACY: Within 500M

COMMENTS: Approximately 3.2 kilometres upstream from the mouth of the Creek.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Area mainly underlain by Trembleur Intrusion rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A small amount of placer gold has been found in Van Decar Creek. The creek drains an area that is underlain mainly by a serpentinized peridotite-dunite batholith of the Permian to Middle Triassic Trembleur Intrusions.

BIBLIOGRAPHY

EM OF 1999-11
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482; 1998, pp. 33-68
GSC MAP 631A; 907A; 1424A
GSC MEM 252, p. 152
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 065**

NATIONAL MINERAL INVENTORY: 093K9,10 Mg1

NAME(S): **PINCHI LAKE**, PINCHI MOUNTAIN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 39 40 N
LONGITUDE: 124 29 06 W
ELEVATION: 1067 Metres

NORTHING: 6058094
EASTING: 404211

LOCATION ACCURACY: Within 500M

COMMENTS: On the southwest side of Pinchi Mountain.

COMMODITIES: Magnesite

MINERALS

SIGNIFICANT: Magnesite
ASSOCIATED: Calcite Quartz
ALTERATION: Talc Serpentine Ankerite
ALTERATION TYPE: Serpentin'zn Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Replacement Hydrothermal Industrial Min.
TYPE: M07 Ultramafic-hosted talc-magnesite
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Triassic	Cache Creek	Undefined Formation	Trembleur Intrusions

LITHOLOGY: Peridotite
Serpentinite
Serpentinized Peridotite
Magnesite
Limestone
Quartzite

HOSTROCK COMMENTS: The Cache Creek Group is considered to be of Mississippian to Triassic age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Grab
COMMODITY
Magnesite 56.4000 Per cent
COMMENTS: Ankeritic carbonate alteration, also 16.1 per cent CaCO₃ and 16.2 per cent FeCO₃.
REFERENCE: Open File 1987-13, page 40.

CAPSULE GEOLOGY

On the southwest face of Pinchi Mountain, Late Permian serpentinitized and steatized peridotites of the Trembleur Intrusions are in contact along the Pinchi fault with blue-grey limestones and quartzitic sediments of the Mississippian to Triassic Cache Creek Group.

Magnesite occurs as 0.3 to 1.2 metre wide veins and/or as small lenses or irregular masses of magnesian carbonate veined by cherty quartz. This magnesite is best exposed on the cliff face on Pinchi Mountain and the ankeritic carbonate alteration contains about 56.4 per cent MgCO₃, 16.1 per cent CaCO₃, 16.2 per cent FeCO₃ and about 12 per cent insolubles which are mainly silica (Open File 1987-13 p. 40). The magnesite probably originated as alteration of the serpentinites along the Pinchi fault.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
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PAGE: 1156
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1987-13, p. 40; 1993-9
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
EMPR MIN POT MAP 1993-2
GSC OF 2593, 2846
GSC P 38-14, p. 9; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 136
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/21

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 066**

NATIONAL MINERAL INVENTORY: 093K8 Hg2

NAME(S): **DICKINSON MOUNTAIN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K08E
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 26 30 N
LONGITUDE: 124 14 19 W
ELEVATION: Metres

NORTHING: 6033370
EASTING: 419673

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximately 0.8 kilometres east of Fort St. James.

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: E01 Almaden Hg

I08 Silica-Hg carbonate

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Limestone

HOSTROCK COMMENTS: The Cache Creek Group contains strata of Mississippian to Triassic age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A number of mercury showings occur along the Pinchi Fault zone. The Pinchi Fault separates the Mississippian to Triassic Cache Creek Group from the Upper Triassic Takla Group. The fault has provided zones of permeability for the passage of mercury-bearing hydrothermal solutions in a number of places along its length. The origin of the mercury mineralization is not yet clear and in many places there are no obvious sources of heat or origin of the metals.

The Dickinson Mountain showing consists of cinnabar in Cache Creek Group limestone 800 metres east of Fort St. James. The Pinchi Fault is interpreted to pass through the area a short distance to the east of the showing.

BIBLIOGRAPHY

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EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, p. 172
GSC MAP 630A; 907A; 1424A
EMR MP CORPFILE (Ajax Mercury Mines Limited)

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 067**

NATIONAL MINERAL INVENTORY: 093K13 Cu2

NAME(S): **DIANE**, BORNITE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K13E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 55 17 N
LONGITUDE: 125 34 29 W
ELEVATION: 1300 Metres

NORTHING: 6089079
EASTING: 334996

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate centre of claim block.

COMMODITIES: Copper Gold Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Bornite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Epigenetic Porphyry

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Permian-Triassic			Trembleur Intrusions

LITHOLOGY: Chlorite Schist
Amphibole Schist
Andesitic Greenstone
Chert
Ultramafic

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The Diane showing occurs in a region underlain mainly by rocks of the Mississippian to Triassic Cache Creek Group. Into these, ultramafic rocks of the Trembleur Intrusives have been emplaced. The Cache Creek Group in this area comprises greenstone of andesitic composition, chlorite and amphibole schists, and minor chert.

The Diane claim group was staked on the west side of upper Tildesley Creek in 1969, to cover an area of anomalous copper values identified in a reconnaissance silt sampling program. Soil sampling, electromagnetic and magnetic surveys were conducted over the claims later that year, but no follow-up work was recorded and the Diane claims were allowed to lapse. The area was subsequently re-staked by Ursala Mowat as the western part of the Bornite claim group, which was subjected to a soil sampling, chip sampling and diamond drilling (5 holes, 893 metres) program in 1995 by Hera Resources Inc. Ursala Mowat mapped and sampled in 1998.

The area of the original Diane claims, on the west side of Tildesley Creek, is underlain by the North Arm succession of the Cache Creek Complex, comprising variably foliated mafic metavolcanic and meta-intrusive rocks along with local metasedimentary intervals. Three holes from 2 setups were drilled into this succession in 1995 to test copper-in-soils anomalies. The holes all encountered sub-economic chalcopyrite mineralization within a succession of predominantly chlorite-epidote-actinolite-calcite-altered mafic volcanic rocks. Slightly anomalous gold concentrations were associated with the highest copper concentrations (up to 500 ppm copper) in all three holes (Assessment Report 24277).

The eastern part of the Diane claim group, on the east side of Tildesley Creek, is underlain by fault-imbricated slivers of ultramafic rock, slate and siltstone, and greenstone. These rocks are inferred to represent either the North Arm succession or the Sitlika assemblage imbricated with the ultramafic unit in the footwall of the Mount Sidney Williams ultramafic allochthon. Mowat reports that the metasedimentary rocks, which are highly anomalous in zinc, silver and barium, host bedding-parallel sulphide

CAPSULE GEOLOGY

mineralization consisting of pyrrhotite with minor chalcopyrite intergrowths.

BIBLIOGRAPHY

EM OF 1999-11
EMPR ASS RPT 2414, 24277, 25668
EMPR EXPL 1992-69-106, 1995-44; 1998-19-31
EMPR FIELDWORK 1992, pp. 475-482; 1997, pp. 3-1-3-13; *1998,
pp. 33-68
EMPR GEM 1969-109; 1970-118
EMPR PF (Dept. of Mines Summary of Exploration and Development work,
including claim and location map 1969,1970)
GSC MAP 631A; 907A; 1424A
GSC MEM 252
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1999/06/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1160
REPORT: RGEN0100

MINFILE NUMBER: **093K 068**

NATIONAL MINERAL INVENTORY: 093K14 Asb1

NAME(S): **VAN DECAR ASBESTOS**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:
LATITUDE: 54 55 31 N
LONGITUDE: 125 27 07 W
ELEVATION: 1520 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6089229
EASTING: 342878

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Tremolite Picrolite
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Hydrothermal Epigenetic Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos
DIMENSION: 0006 Metres STRIKE/DIP:
COMMENTS: Veins outcrop over 6 metres and are 0.6 to 0.24 metres wide. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Permian-Triassic			Trembleur Intrusions

LITHOLOGY: Serpentinized Peridotite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Van Decar asbestos showing occurs in a region underlain mainly by the Mississippian to Triassic Cache Creek Group rocks. Into these, ultramafic rocks of the Trembleur Intrusives have been emplaced.

Asbestos mineralization occurs as veins within serpentized peridotite of the Trembleur Intrusives. Three veins have been recognized, each 10 to 24 centimetres wide and 61 metres apart, outcropping over a distance of 6 metres. The asbestos fibres are tremolitic in composition and have their long axes normal to vein walls. The fibres are very brittle and are associated with some picrolite serpentine.

BIBLIOGRAPHY

EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482; 1998, pp. 33-68
EMPR OF 1995-25; 1999-11
GSC MAP 631A; 907A; 1424A
GSC MEM 252, p. 197
GSC OF 2593, 3183
GSC P 38-10, p. 18; 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/21

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 068**

MINFILE NUMBER: **093K 069**

NATIONAL MINERAL INVENTORY: 093K15 Pb2

NAME(S): **TREMBLEUR LAKE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K15W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 49 00 N
LONGITUDE: 124 58 06 W
ELEVATION: Metres

NORTHING: 6076166
EASTING: 373523

LOCATION ACCURACY: Within 1 KM

COMMENTS: South shore of Trembleur Lake near Tachie River outlet.

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Pyrite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Folded Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Permian-Triassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Quartzite
Argillite
Graphitic Schist
Quartz Mica Schist
Diorite Dike

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Trembleur Lake showing occurs in a region underlain dominantly by the Mississippian to Triassic Cache Creek Group rocks. These have been intruded by intermediate to felsic intrusions of the Lower Jurassic Topley Intrusive Suite.

The showing consists of sparse pyrite and galena mineralization in quartz veins which cut interbedded quartzite and argillite. These rocks, in areas of folding and faulting, have been metamorphosed to graphitic and quartz-mica schist. The veins vary in width from 5 to 36 centimetres and are both cross-cutting and conformable to bedding. Many large pyritic diorite dikes, probably related to the Topley Intrusive Suite, also outcrop in the area.

BIBLIOGRAPHY

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GSC OF 2593, 2846
GSC P 38-14, p. 10; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 630A; 907A; 1424A
W MINER June 1984

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 070**

NATIONAL MINERAL INVENTORY: 093K10 Hg2

NAME(S): **MOUNT PINCHI**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K10E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 39 13 N
LONGITUDE: 124 31 16 W
ELEVATION: Metres

NORTHING: 6057309
EASTING: 401864

LOCATION ACCURACY: Within 1 KM

COMMENTS: Mercury occurrence on Geological Survey of Canada Preliminary Map 42-11A.

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
ALTERATION: Silica Carbonate
ALTERATION TYPE: Carbonate Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: E01 Almaden Hg 108 Silica-Hg carbonate

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	

LITHOLOGY: Schist

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Nechako Lowland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

A number of mercury showings occur along the Pinchi Fault zone. The Pinchi Fault separates the Mississippian to Triassic Cache Creek Group from the Upper Triassic Takla Group. The fault has provided zones of permeability for the passage of mercury-bearing hydrothermal solutions in a number of places along its length. The origin of the mercury mineralization is not yet clear and in many places there are no obvious sources of heat or origin of the metals.

The Mount Pinchi showing consists of specks of cinnabar in carbonatized and silicified schist of the Mississippian to Triassic Cache Creek Group. This alteration zone is probably related to a branch of the Pinchi Fault.

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EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 2846
GSC P 42-11, p. 18; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 42-11A; 630A; 907A; 971A; 1424A
GSC MEM 252-172

DATE CODED: 1985/07/24
DATE REVISED: 1989/01/12

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 071**

NATIONAL MINERAL INVENTORY: 093K8 Au2

NAME(S): **SOWCHEA CREEK**, SAUCHI CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093K08W
BC MAP:

Open Pit

MINING DIVISION: Omineca

LATITUDE: 54 22 41 N
LONGITUDE: 124 27 10 W
ELEVATION: Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 6026558
EASTING: 405639

LOCATION ACCURACY: Within 1 KM

COMMENTS: On Sowchea Creek approximately 7.2 kilometres upstream from mouth.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary			Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

HOSTROCK COMMENTS: Drains an area underlain by Jurassic granitic rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The upper parts of Sowchea Creek drain an area underlain by Jurassic granitic rocks. Fine placer gold occurs mainly in the lower 0.9 to 1.2 metres of gravel overlying a clay seam that acted as a false bedrock. A producer at one time, gold production from these operations has not been recorded.

BIBLIOGRAPHY

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EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 630A; 907A; 1424A
GSC MEM 252, p. 153

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIDNEY**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 53 38 N
LONGITUDE: 125 22 42 W
ELEVATION: 1725 Metres

NORTHING: 6085574
EASTING: 347475

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol on Geological Survey of Canada Map 907A.

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Magmatic Industrial Min.
TYPE: M03 Podiform chromite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Permian-Triassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Dunite
Peridotite
Sediment/Sedimentary
Volcanic

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Sidney showing occurs in a region underlain mainly by Mississippian to Triassic Cache Creek Group sedimentary and volcanic rocks. Into these, ultramafic rocks of the Trembleur Intrusives have been emplaced.

The showing comprises chromite mineralization within Trembleur peridotite-dunite. Although recorded on GSC Map 907A, no detailed information is available on the nature of this occurrence.

BIBLIOGRAPHY

EM OF 1999-11
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482; 1998, pp. 33-68
GSC MAP 631A; 907A; 1424A
GSC MEM 252, p. 190
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **O'NE-ELL CREEK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 54 49 N
LONGITUDE: 125 30 05 W
ELEVATION: 1600 Metres

NORTHING: 6088043
EASTING: 339663

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol on Geological Survey of Canada Map 907A.

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Magmatic Industrial Min.
TYPE: M03 Podiform chromite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Permian-Triassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Serpentinized Dunitic Sill
Serpentinized Peridotite Sill
Sediment/Sedimentary
Volcanic

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The O'ne-ell Creek showing occurs within ultramafic rocks of the Trembleur Intrusions. The Trembleur Intrusions are probably ophiolitic in affinity, related to the oceanic Cache Creek Group sedimentary and volcanic rocks on which it lies.

Chromite occurs in serpentinized peridotite-dunite sills.

BIBLIOGRAPHY

EM OF 1999-11
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482; 1998, pp. 33-68
GSC MAP 631A; 907A; 1424A
GSC MEM 252, p. 190
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/21

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 074**

NATIONAL MINERAL INVENTORY: 093K15 Pb1

NAME(S): **TEZZERON LAKE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K10E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 44 49 N
LONGITUDE: 124 30 18 W
ELEVATION: 765 Metres

NORTHING: 6067671
EASTING: 403126

LOCATION ACCURACY: Within 1 KM

COMMENTS: Along north shore, 7.2 kilometres from west end of Tezzeron Lake.

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 0006 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Vein is exposed for 6 metres before extending into lake and is 0.6 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic

GROUP

Takla

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Fine Grained Basalt
Quartzite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Tezzeron Lake showing occurs is underlain mainly by mafic volcanic rocks and associated sediments of the Upper Triassic Takla Group. The Takla Group rocks are in fault contact, to the west, with the Mississippian to Triassic Cache Creek Group.

The area of the showing is underlain by steeply-dipping, thinly-bedded quartzite and slate, overlain by dark green fine-grained basalt. Mineralization comprises pyrite and arsenopyrite along fractures in a 0.6 metre wide quartz vein in basalt. This vein is exposed for about six metres and extends into Tezzeron Lake. Small amounts of galena and sphalerite occur with the iron sulphides. An assay indicated only trace amounts of gold and silver.

BIBLIOGRAPHY

EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 2846
GSC P 38-14, p. 10; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252-181
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 076**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOODWIN**, FT. FRASER, NECHAKO

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K02E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 30 N
LONGITUDE: 124 33 06 W
ELEVATION: Metres

NORTHING: 5989271
EASTING: 398394

LOCATION ACCURACY: Within 5 KM

COMMENTS:

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1929

COMMODITY	GRADE	
Silver	41.1400	Grams per tonne
Copper	2.5000	Per cent

COMMENTS: Selected sample, trace gold.

REFERENCE: Minister of Mines Annual Report 1929, page 182.

CAPSULE GEOLOGY

The Goodwin showing occurs in a region underlain mainly by intermediate to felsic intrusive rocks of the Upper Jurassic Francois Lake Intrusives, overlain by younger volcanics.

The showing comprises chalcopyrite, malachite and azurite in fractures cutting granodiorite of the Francois Lake Intrusive Suite. A selected sample assayed 41.14 grams per tonne silver, 2.5 per cent copper and trace gold (Annual Report 1929, p.182).

BIBLIOGRAPHY

EMPR AR 1929-182
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 630A; 907A; 1424A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 077**

NATIONAL MINERAL INVENTORY:

NAME(S): **DEM**, DEM LAKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 45 06 N
LONGITUDE: 124 26 48 W
ELEVATION: 960 Metres

NORTHING: 6068118
EASTING: 406891

LOCATION ACCURACY: Within 500M

COMMENTS: Access to Dem Lake is from the Germansen-Hat forest Road. The showing is located 1 kilometre south of Dem Lake (Open File 1991-3).

COMMODITIES: Arsenic

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite
COMMENTS: 5 to 10 per cent arsenopyrite.

ASSOCIATED: Epidote Tremolite Quartz Actinolite Actinolite
ALTERATION: Biotite Diopside Epidote Tremolite Actinolite

COMMENTS: Secondary biotite.

ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform Stratabound
CLASSIFICATION: Skarn Industrial Min.
TYPE: K04 Au skarn
SHAPE: Tabular
DIMENSION: 0001 Metres STRIKE/DIP: 144/70N TREND/PLUNGE:
COMMENTS: Parallel/concordant bedding (original). The main pod shaped showing is 0.20 by 1 metre.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Takla	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Unknown			

LITHOLOGY: Hornfels Sandstone
Hornfels Siltstone
Hornfels Argillite
Syeno Monzonite

HOSTROCK COMMENTS: Inzana Lake Formation is the informal name of the host rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Lowland
TERRANE: Quesnel
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE: Hornfels
COMMENTS: Zeolite to pumpellyite-prehnite grade metamorphism.

CAPSULE GEOLOGY

The Dem showing is located 1 kilometre south of Dem Lake and about 50 kilometres northwest of Fort Fraser. The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the informally named Inzana Lake, Rainbow, Witch Lake and Chuchi Lake formations. The Inzana Lake Formation is a sequence of epiclastic sediments derived from a volcanic source. It is underlain by fine grained slates and sediments of the Rainbow Formation derived (in part) from a continental source. In turn, it is overlain by augite porphyry flows and agglomerates of the Witch Lake Formation and the subaerial maroon and green flows of the Chuchi Lake Formation. The Dem showing is hosted in metasomatically altered sediments of the Inzana Lake Formation. Well laminated sandstones and siltstones are intruded and altered by syenomonzonite dikes. Original concordant bedding strikes 144 degrees and dips 70 degrees north. Areally, extensive alteration in the sediments ranges from local massive epidote-tremolite skarning to biotite-diopside hornfelsing. The main showing is a pod shaped subcrop exposure (20 centimetres by 1 metre) of brecciated quartz vein. The vein contains between 5 and 10 per cent arsenopyrite that occurs in clumps with epidote and tremolite.

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1170
REPORT: RGEN0100

CAPSULE GEOLOGY

Another massive skarn pod (0.5 metres wide) occurs within the sediments in close proximity to syenomonzonite dikes, approximately 500 metres south of the arsenopyrite quartz breccia vein. Skarn mineralization consists of pyrite and pyrrhotite with secondary biotite and actinolite veinlets.

BIBLIOGRAPHY

EM BULL 99
EMPR ASS RPT 22277
EMPR EXPL 1992-69-106
EMPR FIELDWORK *1990, pp. 89-110; 1992, pp. 475-482
EMPR MP MAP 1992-4
EMPR OF *1991-3
GSC OF 2593, 2801, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1990/08/29
DATE REVISED: 1990/11/08

CODED BY: MM
REVISED BY: DEJ

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093K 078**

NATIONAL MINERAL INVENTORY: 093K2 Cu4

NAME(S): **HANSON LAKE**, HAN, HAN 53,
FIR, SHOVEL CREEK, CLEA,
YARA, KIMURA, CYR,
BYSOUTH

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K06E
BC MAP:
LATITUDE: 54 15 24 N
LONGITUDE: 125 00 52 W
ELEVATION: Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Han 53 claim, general area of some mapping, trenching and drilling
done in 1972. Located 15 kilometres north of Endako, B.C.

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6013952
EASTING: 368776

COMMODITIES: Copper Gold Silver Molybdenum Zinc
 Lead

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena Pyrite Molybdenite
ALTERATION: Clay Chlorite Silica
ALTERATION TYPE: Argillic Chloritic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Breccia
CLASSIFICATION: Porphyry Hydrothermal Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Quartz Monzonite
Quartz Porphyry
Quartz Feldspar Porphyry
Breccia
Quartz Diorite
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Cache Creek

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1990
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Gold 0.1230 Grams per tonne
Copper 0.1700 Per cent
COMMENTS: Drillhole 90-3, over 22 metres from the Bysouth zone.
REFERENCE: George Cross News Letter #246, 1992.

CAPSULE GEOLOGY

The Hanson Lake showing is located 15 kilometres north of Endako.

The area is underlain by a metamorphic complex comprised of metamorphosed equivalents of the Carboniferous-Jurassic Cache Creek Group and a gneissic complex of granodiorites and quartz diorites. These were intruded by Tertiary intrusives. Basic to acid dikes and stocks are common. Lithologies include quartz monzonite, quartz porphyry, quartz feldspar porphyry, acid breccia, quartz diorite and amphibolite.

Argillic and chloritic alteration is evident in the quartz monzonite. The other lithologies show strong argillic, silicic and sulfidic alteration.

Mineralization consists of 1) fracture filling copper and molybdenum in quartz monzonite 2) silicified zones containing gold, silver, zinc and lead in quartz porphyry/quartz feldspar porphyry 3)

CAPSULE GEOLOGY

silicified zones containing zinc, lead, gold and silver in acid breccias trending north 4) shear zone containing copper and gold in quartz diorite/amphibolite. Sulphides occur mainly as pyrite, chalcopyrite, sphalerite, molybdenite and galena.

A sample from drillhole 90-3 on the Bysouth zone across 22 metres assayed 0.123 gram per tonne gold and 0.17 per cent copper (Property File - Snapshot Review 1992, Cazador Explorations). Another sample from drillhole 90-4 on the Cyr zone across 33 metres assayed 23.6 grams per tonne silver (Property File - Snapshot Review 1992, Cazador Explorations).

BIBLIOGRAPHY

EMPR ASS RPT 3645, 4282, 4283, 4284, 4758, 17506
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
EMPR GEM 1971-164; 1972-351; 1973-332
EMPR PF (Dept. of Mines Summary of Exploration and Development work, 1971-1973; Cazador Explorations Ltd. Prospectus July 11, 1988; *Snapshot Review, 1992, Cazador Explorations)
GSC MAP 631A; 907A; 1424A
GSC MEM 252
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GCNL #24, #48, 1989; *#246, 1990
N MINER Nov. 27, 1989; Apr. 2, 1990
WWW <http://www.infomine.com/>
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/03

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 079**

NATIONAL MINERAL INVENTORY:

NAME(S): **DAD**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K09W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 32 06 N
LONGITUDE: 124 19 12 W
ELEVATION: Metres

NORTHING: 6043850
EASTING: 414590

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Cinnabar
COMMENTS: Specific mercury mineral not mentioned.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Cache Creek	Undefined Formation	
Permian-Triassic			Trembleur Intrusions

LITHOLOGY: Harzburgite
Gabbro
Greenstone

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Dad occurrence, located to the south of the eastern end of Pinchi Lake, occurs adjacent to the Pinchi Fault. Here, the Upper Triassic Takla Group rocks are in contact with supracrustal rocks of the Mississippian to Triassic Cache Creek Group and ultramafics of the pre-Middle Triassic Trembleur Intrusives.

The showing is not well described; mercury mineralization is reported to occur in a harzburgite-gabbro-greenstone sequence which is probably a sequence of Trembleur and Cache Creek Group rocks. The sequence is faulted by a northwest-trending fault system which forms the southwest margin of the Pinchi Fault zone.

BIBLIOGRAPHY

EMPR GEM 1972-364
EMPR PF (Dept. of Mines Summary of Exploration and Development work, 1972)
EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/21

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 080**

NATIONAL MINERAL INVENTORY:

NAME(S): **TAS**, EAST ZONE, TASLINCHENKO CREEK,
TAS 1

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16W
BC MAP:

MINING DIVISION: Omineca

LATITUDE: 54 54 17 N
LONGITUDE: 124 18 38 W
ELEVATION: 1077 Metres

UTM ZONE: 10 (NAD 83)

LOCATION ACCURACY: Within 500M

NORTHING: 6084975
EASTING: 415970

COMMENTS: Located just north of the Germansen-Inzana forest road approximately 10 kilometres from its junction with the Ft. St. James-Germansen logging road. Location of East zone (Open File 1991-3).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Pyrite Marcasite
ALTERATION: Epidote Silica Biotite
ALTERATION TYPE: Epidote Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Shear
CLASSIFICATION: Porphyry
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Sheared
COMMENTS: North trending, steeply dipping shear 0.10 to 0.20 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic Jurassic	Takla	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Siliceous Argillaceous Meta Tuff
Homblende Porphyry Dike
Fine Grained Diorite
Fine Grained Monzonite
Brecciated Pipe

HOSTROCK COMMENTS: Mineralization is hosted in the informal Inzana Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
COMMENTS: Zeolite to pumpellyite-prehnite grade metamorphism.

PHYSIOGRAPHIC AREA: Nechako Lowland
RELATIONSHIP: Zeolite
GRADE: Zeolite

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Drill Core
COMMODITY
Gold 42.8500 Grams per tonne
Copper 2.2700 Per cent
COMMENTS: Drill hole 31 from 64.6 to 68 metres.
REFERENCE: Vancouver Stockwatch July 31, 1989.

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Chip
COMMODITY
Gold 6.3000 Grams per tonne
Copper 0.1000 Per cent
REFERENCE: Assessment Report 15687.

CAPSULE GEOLOGY

The Tas (East Zone) showing is located on a small hill just north of the Germansen-Inzana forest road approximately 10 kilometres from its junction with the Fort St. James-Germansen logging road.

CAPSULE GEOLOGY

The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the Inzana Lake Formation, the Rainbow Formation, the Witch Lake Formation and the Chuchi Lake Formation.

The Inzana Lake Formation is a sequence of epiclastic sediments derived from a volcanic source. It is underlain by fine grained slates and sediments of the Rainbow Formation derived (in part) from a continental source. In turn, it is overlain by augite porphyry flows and agglomerates of the Witch Lake Formation and the subaerial maroon and green flows of the Chuchi Lake Formation.

Hornfelsed and bleached, siliceous argillaceous meta-tuffs of the Inzana Lake Formation are intruded by variable hornblende ± biotite ± plagioclase porphyry dikes. These weakly propylitized dikes often form intrusive breccias with xenoliths of sediments and hornblende (± clinopyroxene cores). Felsic diorite intrudes this package of rocks, which, by analogy with similar rocks to the south, is probably of Lower to Middle Jurassic in age.

Mineralization in the sedimentary and intrusive rocks is confined to minor amounts (less than 2 per cent) of disseminated pyrite and pyrrhotite. High grade sulphides are found in steeply dipping, north trending shear zones that are 0.10 to 0.20 metres wide. On surface, these zones contain up to 70 per cent sulphides; mainly pyrite and pyrrhotite with minor chalcopyrite and marcasite (?). An unmineralized diatreme containing milled fragments of tuffs, hornblende porphyry and monzodiorite appears to grade into a hydrothermal breccia containing quartz and fine grained massive actinolite. In areas of sulphide mineralization these rocks have been epidotized.

The East, Mid, 19 and West Zones have been trenched and drilled. The best intersection in 1988, from the Mid zone, assayed 42.85 grams per tonne gold and 2.27 per cent copper over 3.4 metres (Vancouver Stockwatch July 30, 1989). Typical intersections have lower values over 1 to 4 metres. A chip sample from trench #2 in 1986 assayed 6.3 grams per tonne gold and 0.1 per cent copper (Assessment Report 15687).

Navasota Resources Ltd. drilled the West zone in September 2002. Assay results include a drill intercept of 2.15 grams per tonne gold over 12.5 metres.

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- EMPR EXPL 1985-C308; 1987-B48-49,C299; 1992-69-106; 2002-13-28
- EMPR FIELDWORK 1990, pp. 89-110; 1992, pp. 475-482
- EMPR MP MAP 1992-4
- EMPR OF *1991-3
- EMPR PF (Location Map, Noranda Expl., 1987; Excerpt from Report, unknown source and date)
- GSC MAP 630A; 907A; 1424A
- GSC OF 2593, 2801, 2846
- GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
- GCNL #15, 1990
- N MINER Aug. 28, 1989
- PR REL Navasota Resources Ltd., Oct.21, 2002; Jan.21, 2003
- V STOCKWATCH July 31; Aug.4, 1989
- WWW <http://www.infomine.com/index/properties/TAS.html>
- Placer Dome File

DATE CODED: 1987/03/26
DATE REVISED: 1990/08/29

CODED BY: LLC
REVISED BY: MM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 081**

NATIONAL MINERAL INVENTORY:

NAME(S): **ENDEX**, HANSON LAKE

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 13 08 N
LONGITUDE: 125 04 39 W
ELEVATION: Metres

NORTHING: 6009868
EASTING: 364546

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Kaolinite Sericite
ALTERATION TYPE: Argillic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
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>
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Quartz Monzonite
Foliated Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Endex showing occurs in an area underlain dominantly by a quartz monzonite phase of the Upper Jurassic Francois Lake Intrusive Suite. This phase has been mapped over a length of about two kilometres.

The quartz monzonite is locally mineralized with molybdenite and minor pyrite and chalcopyrite in quartz veins and as thin fracture fillings. The veins, which form a poorly developed stockwork, are normally less than about 6 millimetres wide. Alteration is characterized by weak kaolinitization and local sericitization. Mineralization also extends into a foliated quartz diorite at the eastern end of the claim group. This is probably a more deformed Francois Lake Intrusive Suite phase.

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EMPR ASS RPT 2931, 4703, *6664, 7190
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 631A; 907A; 1424A
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 082**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOON**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 10 20 N
LONGITUDE: 125 07 26 W
ELEVATION: 920 Metres

NORTHING: 6004767
EASTING: 361365

LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole.

COMMODITIES: Uranium Gold

MINERALS

SIGNIFICANT: Unknown
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Cretaceous-Tertiary
Upper Jurassic

GROUP

Ootsa Lake

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Francois Lake Intrusive Suite

LITHOLOGY: Siliceous Rhyolitic Breccia
Siliceous Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
COMMENTS: Suspect Terrane overlap.

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY

YEAR: 1978

	GRADE	
Gold	1.9800	Grams per tonne
Uranium	0.0025	Per cent

COMMENTS: Two samples: uranium assay intersection over 1.1 metres, gold assay intersection over 1.3 metres.

REFERENCE: Assessment Report 7289.

CAPSULE GEOLOGY

The Loon showing occurs in a region underlain by Upper Jurassic plutons of the Francois Lake Intrusive Suite. These are overlain by Upper Cretaceous to Lower Tertiary Ootsa Lake Group volcanic rocks.

Anomalous radioactivity is associated with shears cutting the Ootsa Lake Group volcanics. A drillhole intersected mineralization which assayed 1.1 metres of 0.0025 per cent uranium in a silicified and brecciated rhyolite. A 1.3 metre drill core sample of highly silicified andesite assayed 1.98 grams per tonne gold (Assessment Report 7289).

BIBLIOGRAPHY

EMPR ASS RPT *7289
EMPR EXPL 1978-212; 1992-69-106
EMPR PF (See 093K General file, Endako Area Maps)
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 631A; 971A; 1424A

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
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BIBLIOGRAPHY

GSC MEM 252

DATE CODED: 1987/09/01
DATE REVISED: 1995/03/14

CODED BY: LDJ
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 083**

NATIONAL MINERAL INVENTORY:

NAME(S): **LYNX**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 51 13 N
LONGITUDE: 124 04 13 W
ELEVATION: 991 Metres

NORTHING: 6079026
EASTING: 431288

LOCATION ACCURACY: Within 500M

COMMENTS: Trenched gossan adjacent to the logging road (Germansen-Cripple) accessible from Fort St. James (Open File 1991-3).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite
ALTERATION: Quartz Garnet Epidote Ankerite Biotite
Hematite Covellite Malachite

COMMENTS: Secondary biotite.

ALTERATION TYPE: Silicific'n Skarn Oxidation Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive Disseminated
CLASSIFICATION: Epigenetic Skarn
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0003 x 0003 Metres STRIKE/DIP: 102/75S
COMMENTS: Attitude of sediments hosting skarn, dimension of mineralized gossan zone.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Triassic-Jurassic GROUP: Takla FORMATION: Unnamed/Unknown Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Brecciated Ash Meta Tuff
Tuffaceous Siltstone
Lapilli Tuff
Skarn
Gossan
Clinopyroxene Porphyry Flow
Clinopyroxene Hornblende Plagioclase Flow

HOSTROCK COMMENTS: Inzana Lake Formation is the informal name of the host rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Nechako Lowland

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Zeolite

COMMENTS: Zeolite to prehnite-pumpellyite metamorphic grade.

CAPSULE GEOLOGY

The Lynx showing is located on the southern portion of the Max (093K 020) claims south of Cripple Creek.

The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the informally named Inzana Lake, Rainbow, Witch Lake and Chuchi Lake formations.

The Inzana Lake Formation is a sequence of epiclastic sediments derived from a volcanic source. It is underlain by fine grained slates and sediments of the Rainbow Formation derived (in part) from a continental source. In turn, it is overlain by augite porphyry flows and agglomerates of the Witch Lake Formation and the subaerial maroon and green flows of the Chuchi Lake Formation.

The showing encompasses a large area (approximately 2 by 1 kilometres) of bleached, silicified and mineralized rocks. This alteration zone may be part of a larger propylitic alteration halo associated with the large intrusive body on the Max claims to the north.

The main part of the Lynx showing occurs in a trench adjacent to the Germansen-Cripple logging road accessible from Fort St. James. A 3 metre square mineralized gossan zone occurs within light green, silicified and brecciated ash/dust tuffs of the Inzana Lake Formation. The gossan contains up to 30 per cent massive and

CAPSULE GEOLOGY

crystalline pyrite, up to 5 per cent chalcopyrite and minor malachite. The rocks have a well-developed network of hairline fractures with alteration envelopes along them. Both propylitic and secondary potassic alteration are present. The rocks are strongly hornfelsed and contain abundant secondary biotite, however, no intrusive rocks have been identified on the property.

Adjacent to the gossan, a northwest trending, steeply dipping fault contains a 30 centimetre gouge zone that contains brittle quartz but no mineralization. Stratigraphically above the main gossan (approximately 1.25 kilometres west-northwest), tuffaceous siltstones and minor lapilli tuffs are sporadically skarnified. The sediments strike 102 degrees and dip 75 degrees south. Biotite and diopside hornfelsing are widespread for several hundred metres. Locally, a zoned garnet-epidote-diopside-biotite skarn contains concentrations of massive pyrrotite (50 to 70 per cent) with minor flecks of chalcopyrite and possibly covellite(?). The meta-tuffs are interbedded with intermediate plagioclase-augite (\pm hornblende) porphyry flows/dikes. These contain disseminated pyrite and abundant epidote in streaky veins.

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EMPR MP MAP 1992-4
EMPR OF *1991-3
GSC OF 2593, 2801, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1990/08/29
DATE REVISED: 1990/11/08

CODED BY: MM
REVISED BY: DEJ

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093K 084**

NATIONAL MINERAL INVENTORY:

NAME(S): **HAT LAKE**, HAT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16W
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 46 37 N
LONGITUDE: 124 22 39 W
ELEVATION: 840 Metres

NORTHING: 6070841
EASTING: 411398

LOCATION ACCURACY: Within 500M

COMMENTS: Hat Lake claims are located 1.5 kilometres south of Hat Lake, not to be confused with the HA1 claims to the north (Open File 1991-3).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite
ASSOCIATED: Quartz Carbonate
ALTERATION: Silica Quartz Carbonate
ALTERATION TYPE: Silicific'n Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Unknown
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Fractured Sheared
COMMENTS: Quartz carbonate alteration zones in hornfelsed sediments.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Takla	Unnamed/Unknown Formation	

LITHOLOGY: Siliceous Hornfels Argillite
Cherty Tuff
Sandstone
Plagioclase Augite Hornblende Diorite
Gabbro

HOSTROCK COMMENTS: Inzana Lake Formation is the informal name of the host rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
COMMENTS: Zeolite to prehnite-pumpellyite grade metamorphism.

PHYSIOGRAPHIC AREA: Nechako Lowland
RELATIONSHIP:
GRADE: Zeolite

CAPSULE GEOLOGY

The Hat Lake showing is located on the Hat Lake claim group 1.5 kilometres south of Hat Lake on the Germansen-Hat logging road. The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the informally named Inzana Lake, Rainbow, Witch Lake and Chuchi Lake formations. The Inzana Lake Formation is a sequence of epiclastic sediments derived from a volcanic source. It is underlain by fine grained slates and sediments of the Rainbow Formation derived (in part) from a continental source. In turn, it is overlain by augite porphyry flows and agglomerates of the Witch Lake Formation and the subaerial maroon and green flows of the Chuchi Lake Formation. Outcrop is best exposed on road cuts and in trenches on the property. Silicified, hornfelsed and fractured black argillite, cherty tuffs and green sandstone of the Inzana Lake Formation contain disseminated pyrite. The sediments are cut by highly variable gabbro and diorite intrusions. Unmineralized gabbroic intrusions, containing between 30 and 90 per cent hornblende phenocrysts, cut the hornfelsed sediments. In a trench exposure, plagioclase-augite-hornblende diorite contains 10 per cent pyrrhotite and forms an intrusive breccia with earlier gabbroic phases and sediments. These intrusive phases appear very similar to those exposed on the Tas (093K 080) property. Pale quartz-carbonate alteration and a shear zone were also noted near the showing.

Several gold and silver geochemical anomalies are present on the

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CAPSULE GEOLOGY

property and one coincides with a 1 metre wide quartz-carbonate stockwork containing minor sulphides. Sulphides at the showing include up to 5 per cent pyrite and pyrrhotite with traces of chalcopyrite (Assessment Report 15943).

BIBLIOGRAPHY

EM BULL 99
EMPR ASS RPT *15943, 16339, 21285, 24872
EMPR EXPL 1992-69-106
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EMPR OF *1991-3
GSC OF 2593, 2801, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
Chevron File

DATE CODED: 1990/10/10
DATE REVISED: 1990/11/08

CODED BY: KBE
REVISED BY: DEJ

FIELD CHECK: Y
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1184
REPORT: RGEN0100

BIBLIOGRAPHY

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EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 69-86, 475-482
EMPR OF 1993-9
EMPR MIN POT MAP 1993-2
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252, pp. 32-37
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/11

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 086**

NATIONAL MINERAL INVENTORY:

NAME(S): **K-2, KIM SQUARED**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 55 18 N
LONGITUDE: 124 06 00 W
ELEVATION: 1173 Metres

NORTHING: 6086628
EASTING: 429499

LOCATION ACCURACY: Within 500M

COMMENTS: Located near Max property (093K 020), 3 kilometres northeast of Cripple Lake (Open File 1991-3).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite

COMMENTS: Also contains up to 15 per cent unidentified grey-silver sulphide.

ASSOCIATED: Quartz Carbonate

ALTERATION: Silica Malachite Hematite Biotite Epidote

COMMENTS: Secondard biotite and epidote in surrounding volcanic host rock.

ALTERATION TYPE: Silicific'n Oxidation Propylitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Massive

CLASSIFICATION: Hydrothermal Epigenetic

SHAPE: Tabular

DIMENSION: 0002 Metres

STRIKE/DIP: TREND/PLUNGE: 165/

COMMENTS: General trend and width of subcrop.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Triassic-Jurassic

Takla

Unnamed/Unknown Formation

LITHOLOGY: Clinopyroxene Agglomerate
Clinopyroxene Flow

HOSTROCK COMMENTS: Witch Lake Formation is the informal name of the host rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Nechako Lowland

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Zeolite

COMMENTS: Prehnite-pumpellyite to zeolite grade metamorphism.

CAPSULE GEOLOGY

The K-2 showing is located near the western edge of the Max (093K 020) claims approximately 3 kilometres northwest of Cripple Lake.

The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the informally named Inzana Lake, Rainbow, Witch Lake and Chuchi Lake formations.

The Inzana Lake Formation is a sequence of epiclastic sediments derived from a volcanic source. It is underlain by fine grained slates and sediments of the Rainbow Formation derived (in part) from a continental source. In turn, it is overlain by augite porphyry flows and agglomerates of the Witch Lake Formation and the subaerial maroon and green flows of the Chuchi Lake Formation.

The showing is a hydrothermally brecciated quartz-carbonate vein exposed in a subcrop zone approximately 2 metres wide which trends southeast. The vein contains bleached and milled wall rock and is strongly hematite stained. Up to 30 per cent chalcopyrite with minor malachite and an unidentified grey-silver coloured sulphide occur in the rock. The vein is hosted by clinopyroxene-rich flows and agglomerates of the Witch Lake Formation. Secondary biotite and epidote are locally abundant in the rocks around the showing. These alteration minerals are probably part of the large propylitic alteration halo associated with the large multiphase intrusion on the Max claims to the east.

BIBLIOGRAPHY

EM BULL 99

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RUN TIME: 11:27:59

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BIBLIOGRAPHY

EMPR EXPL 1992-69-106
EMPR FIELDWORK *1990, pp. 89-110; 1992, pp. 475-482
EMPR MP MAP 1992-4
EMPR OF *1991-3
GSC OF 2593, 2801, 2846
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1990/08/29
DATE REVISED: 1990/11/08

CODED BY: MM
REVISED BY: DEJ

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093K 087**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRASER LAKE**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K02W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 03 00 N
LONGITUDE: 124 49 51 W
ELEVATION: 700 Metres

NORTHING: 5990635
EASTING: 380140

LOCATION ACCURACY: Within 5 KM

COMMENTS: Approximately 15.5 kilometres east of Endako along Highway 16.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: B06 Fireclay

Industrial Min.

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Unnamed/Unknown Informal

LITHOLOGY: Fine Grained Calcareous Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Fraser Lake clay prospect is underlain by fine-grained, light brown, calcareous, varved clay with fair plasticity. Although generally of poor quality, it was once used for brick manufacture. The clay was probably deposited interstitially during the late Tertiary.

BIBLIOGRAPHY

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EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 088**

NATIONAL MINERAL INVENTORY:

NAME(S): **VANDERHOOF**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K01E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 02 00 N
LONGITUDE: 124 04 16 W
ELEVATION: 671 Metres

NORTHING: 5987761
EASTING: 429847

LOCATION ACCURACY: Within 1 KM

COMMENTS: Along the Fort St. James road, 4.8 kilometres from Vanderhoof.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: B06 Fireclay

Industrial Min.

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Calcareous Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

A considerable area around Vanderhoof is underlain by clay. Exposures occur along the Nechako River bank and 4.8 kilometres from Vanderhoof along the road to Fort St. James. The clay is light brown to greyish, calcareous and suitable for common brick.

BIBLIOGRAPHY

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EMPR EXPL 1992-69-106
EMPR FIELDWORK 1992, pp. 475-482
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/22

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 089**

NATIONAL MINERAL INVENTORY:

NAME(S): **BAPTISTE** MOUNT SYDNEY WILLIAMS

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K14W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 52 15 N
LONGITUDE: 125 17 16 W
ELEVATION: 1050 Metres

NORTHING: 6082816
EASTING: 353198

LOCATION ACCURACY: Within 500M

COMMENTS: Area between Trembleur Lake and Baptiste Creek, southwest of Mount Sydney Williams, 85 kilometres northwest of Fort St. James.

COMMODITIES: Talc Soapstone

MINERALS

SIGNIFICANT: Talc
ASSOCIATED: Quartz Mariposite Carbonate Ankerite Magnetite
Chromite Pyrite
ALTERATION: Hornblende Actinolite Chlorite Tremolite
ALTERNATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: M07 Ultramafic-hosted talc-magnesite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian-Triassic			Trembleur Intrusions

LITHOLOGY: Serpentinized Dunite
Serpentinized Harzburgite
Soapstone
Chert
Argillite
Serpentinite
Peridotite

HOSTROCK COMMENTS: Trembleur Intrusions cut Paleozoic cherts and argillites.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

Talc is associated with the Mount Sydney Williams ultramafic massif in the area between Trembleur Lake and Baptiste Creek, southwest of Mount Sydney Williams. The area is 85 kilometres northwest of Fort St. James.

The Mount Sydney Williams peridotite-dunite-harzburgite batholith is part of the Permian to Triassic Trembleur Intrusions which intrude Paleozoic cherts and argillites. The dunite and harzburgite are 60 per cent serpentinized.

Carbonate, quartz and mariposite occur in zones of hydrothermal alteration along faults, shears and fractures. However, soapstone bodies with talc and carbonate are massive and do not appear to be structurally controlled.

Two large masses of soapstone occur in the southern part of the stock. The surrounding rock is red, green and orange weathered and contains elongate euhedral olivine crystals in a talc matrix; all the serpentine and pyroxene is completely replaced.

The borders of the ultramafic bodies, especially along serpentine and siliceous sediment contacts, are altered to talc, chlorite-actinolite and tremolite. The talc and carbonate zones are greenish to buff with a greasy luster. Average compositions run 60 per cent talc, 40 per cent ankerite with accessory magnetite, chromite and pyrite.

On the southeast face of Mount Sydney Williams, a 15 to 30 metre wide talc-carbonate zone with minor actinolite crystals, marks the contact between serpentine and peridotite, and siliceous sediments. The characteristic succession for steatitization is observed here; hornblende to actinolite/tremolite to chlorite to talc to carbonate (Armstrong, 1949).

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RUN TIME: 11:27:59

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GSC MAP 631A; 907A; 1424A
GSC MEM 252, p. 84,89
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1985/07/24
DATE REVISED: 1988/01/12

CODED BY: GSB
REVISED BY: MM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 090**

NATIONAL MINERAL INVENTORY:

NAME(S): **NOBLE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K08E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 15 48 N
LONGITUDE: 124 15 04 W
ELEVATION: Metres

NORTHING: 6013543
EASTING: 418511

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate centre of the Noble D Claim.

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcocite
ASSOCIATED: Quartz
ALTERATION: Limonite Carbonate
ALTERATION TYPE: Carbonate Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 5 Metres
COMMENTS: Vein is 5 metres wide.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Permian-Triassic	Cache Creek	Undefined Formation	Trembleur Intrusions

LITHOLOGY: Carbonatized Peridotite
Volcanic

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The region in which the Noble showing occurs is underlain by poorly exposed bedrock which probably consists mainly of Mississippian to Triassic Cache Creek Group rocks and ultramafics of the Trembleur Intrusions. Upper Cretaceous to Tertiary volcanic rocks of the Ootsa Lake Group also occur in the region.

The Noble showing consists of a five metre wide quartz vein containing some chalcocite, limonite and anomalous gold and silver values. The vein occurs within a fault zone cutting carbonatized peridotite. The peridotite is probably part of the Trembleur Intrusions.

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GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/02/20

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 091**

NATIONAL MINERAL INVENTORY:

NAME(S): **FREE GOLD ZONE, TAS**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K16W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 53 32 N
LONGITUDE: 124 19 30 W
ELEVATION: 945 Metres

NORTHING: 6083602
EASTING: 415017

LOCATION ACCURACY: Within 500M

COMMENTS: Located about 11 kilometres along the Inzana forest road from the Fort St. James-Germansen logging road and 3.5 kilometres southwest of the Tas East Zone (093K 080) (Open File 1991-3).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Pyrite Gold
ASSOCIATED: K-Feldspar
ALTERATION: Quartz Carbonate Malachite
ALTERATION TYPE: Propylitic Quartz-Carb. Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Unknown
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Triassic-Jurassic Unknown	Takla	Unnamed/Unknown Formation	Unnamed/Unknown Informal

LITHOLOGY: Hornblende Diorite
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
COMMENTS: Zeolite to prehnite-pumpellyite grade metamorphism.

PHYSIOGRAPHIC AREA: Nechako Lowland
GRADE: Zeolite

CAPSULE GEOLOGY

The Free Gold Zone occurs on the Tas claims, 3.5 kilometres southwest of the East Zone (093K 080), along the Germansen-Inzana forest road.

The region is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Takla Group within the Quesnellia Terrane. The group comprises the informally named Inzana Lake, Rainbow, Witch Lake and Chuchi Lake formations.

The Inzana Lake Formation is a sequence of epiclastic sediments derived from a volcanic source. It is underlain by fine grained slates and sediments of the Rainbow Formation derived (in part) from a continental source. In turn, it is overlain by augite porphyry flows and agglomerates of the Witch Lake Formation and the subaerial maroon and green flows of the Chuchi Lake Formation.

A small zone of intense quartz-carbonate alteration is exposed in a quarry. The rocks host up to 10 per cent pyrite with traces of magnetite, malachite and rare native gold. Propylitized hornblende diorite, with potassium feldspar veins and traces of malachite on the fractures, outcrop near the showing.

The diorite and the Free Gold Zone are hosted by the Inzana Lake Formation.

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EMPR FIELDWORK *1990 pp. 89-110; 1992, pp. 475-482
EMPR MP MAP 1992-4
EMPR OF *1991-3
EMPR PF (Location map, Noranda Exploration 1987; Excerpt from Report

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unknown source and date)
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GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
N MINER Aug. 28, 1989
VSW July 31, Aug. 4, 1989
WWW <http://www.infomine.com/index/properties/TAS.html>
Placer Dome File

DATE CODED: 1990/08/29
DATE REVISED: 1990/11/08

CODED BY: MM
REVISED BY: DEJ

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **093K 092**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORT ST. JAMES SOUTH**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093K08W
BC MAP:

Open Pit

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 27 37 N
LONGITUDE: 124 17 53 W
ELEVATION: 700 Metres

NORTHING: 6035510
EASTING: 415857

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on quarry as shown on Geological Survey of Canada Map 630A in Industrial Minerals File.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Paleozoic-Mesozoic
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Forams

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
DIMENSION: 0300 x 0076
COMMENTS: Limestone trends northwest.

Massive
Evaporite
Industrial Min.
Metres
STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Argillite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY

YEAR: 1968

Limestone

GRADE

54.8100

Per cent

COMMENTS: Grade given for CaO.

REFERENCE: Minister of Mines Annual Report 1968, page 310.

CAPSULE GEOLOGY

Limestone outcrops on the south side of a 15 metre high knoll on the north shore of Stuart Lake over a length of 300 metres with widths of up to 76 metres, 3.5 kilometres northwest of Fort St. James. The deposit is situated on the southwest margin of 200 kilometre long belt of limestone with minor chert, argillite and greenstone (andesite) of the Mississippian to Triassic Cache Creek Group that extends northwestwards along Stuart Lake.

The deposit is composed of light to dark grey, very fine grained, well fractured limestone that is frequently cut by calcite veinlets up to 1.3 centimetres thick. The limestone contains some black and rusty stained cherty argillite lenses. A grab sample of randomly collected chips from the floor of the quarry assayed 54.81% CaO, 0.93% MgO, 0.17% insolubles, 0.10% R2O3, 0.06% Fe2O3, 0.003% MnO, 0.01% P2O5, 0.002% sulphur and 43.98% ignition loss (EMPR Annual Review 1968, p. 310)

A small amount of limestone was produced from a quarry located 46 metres north of the road that leads to Fort St. James along the north shore of Stuart Lake.

BIBLIOGRAPHY

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RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GSC MEM 252, pp. 32-36
GSC MAP 630A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1989/08/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 093**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORT**, SPECULARITE LAKE, ELDEN

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K12E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 37 14 N
LONGITUDE: 125 34 48 W
ELEVATION: 990 Metres

NORTHING: 6055627
EASTING: 333426

LOCATION ACCURACY: Within 500M

COMMENTS: East of Specularite Lake, Open File 1999-11.

COMMODITIES: Copper Silver Molybdenum Lead Zinc
Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Molybdenite Sphalerite Galena
Pyrrhotite

ASSOCIATED: Quartz Calcite
ALTERATION: Silica K-Feldspar Biotite

ALTERATION TYPE: Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein Breccia
CLASSIFICATION: Porphyry Epigenetic
TYPE: L04 Porphyry Cu ± Mo ± Au
DIMENSION: 700 x 400 Metres
COMMENTS: Mineralized area.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Permian-Triassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Monzonite
Breccia
Diorite
Granodiorite
Andesite
Tuff
Pyroxenite Hornblende Gabbro
Pyroxenite
Chlorite Schist

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1998

COMMODITY

GRADE

COMMODITY	GRADE	Units
Silver	72.3000	Grams per tonne
Copper	0.3400	Per cent
Molybdenum	0.0170	Per cent

COMMENTS: Average of 8 grab samples in a 700 by 400 metre area.
REFERENCE: Northern Miner, May 4, 1998.

CAPSULE GEOLOGY

The Specularite Lake showing was discovered by Elden Nyberg and the area was staked by Richard Haslinger. Eastfield Resources Ltd. and Ascot Resources Ltd. optioned the Fort property shortly after and conducted surveys in 1998. Ascot is dropping their interest. The Fort property occurs in an underlain dominantly by metasedimentary and metavolcanic rocks of the Mississippian to Triassic Cache Creek Group and by ultramafic bodies of ophiolitic character related perhaps to the oceanic Cache Creek Group. These ultramafic bodies, known as the Permian to Triassic Trembleur Intrusions, are composed dominantly of dunite and peridotite but

CAPSULE GEOLOGY

pyroxenite and gabbro are also present in some areas. The area is also underlain by Jurassic diorite and quartz diorite and Eocene volcanics of the Endako Group.

A new logging road exposed copper-molybdenum-silver mineralization in a 700 by 400 metre area. Eight grab samples averaged 0.34 per cent copper, 0.017 per cent molybdenum and 72.3 grams per tonne silver. Three of the samples returned values ranging from 0.36 to 1.01 per cent zinc and 0.33 to 0.48 per cent lead. The highest gold was 98 parts per billion. The mineralized area is supported by high soil sample values. (Northern Miner, May 4, 1998).

Rocks from the Specularite Lake showing are strongly altered monzonite. Alteration is an intense form of potassium alteration that includes abundant secondary potassium feldspar, green biotite and secondary hydrothermal silica. A rock sample 3 kilometres northwest of the showing is an altered and brecciated monzonite.

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GCNL #6, (Jan.9), #23(Feb.3), #66(Apr.3), #112(June 11), 1998
N MINER *May 4, Nov.9, 1998
PR REL Eastfield Resources Ltd., Jan.7, Feb.2, Mar.30, May 20, June 3, July 6, Oct.19, 1998; Mar.8, 1999
WWW <http://www.eastfieldgroup.com/eastfield/elhome.html>

DATE CODED: 1998/05/28
DATE REVISED: 1998/05/28

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 094**

NATIONAL MINERAL INVENTORY:

NAME(S): **CASEY PEGMATITE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

MINING DIVISION: Omineca

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 03 30 N
LONGITUDE: 125 02 16 W
ELEVATION: Metres

NORTHING: 5991933
EASTING: 366620

LOCATION ACCURACY: Within 1 KM

COMMENTS: Largest body of pegmatite in the area, approximately 1.2 kilometres northeast of Casey Lake.

COMMODITIES: Feldspar Mica Silica

MINERALS

SIGNIFICANT: Orthoclase Plagioclase Biotite Quartz

ASSOCIATED: Perthite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Discordant
CLASSIFICATION: Pegmatite Industrial Min.

SHAPE: Tabular

DIMENSION: 0009 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Largest dike is 9 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Upper Jurassic

Francois Lake Intrusive Suite

LITHOLOGY: Pegmatite Dike
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Several pegmatite dikes occur in a batholith of the Upper Jurassic Francois Lake Intrusive Suite. The largest dike is 9 metres wide and occurs alongside an aplite dike approximately 1.2 kilometres northeast of Casey Lake. The pegmatite consists of quartz, perthitic orthoclase, and minor plagioclase and biotite. Crystal size ranges up to about 2.5 centimetres.

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GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 631A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 095**

NATIONAL MINERAL INVENTORY:

NAME(S): **EAGLE CREEK**, OPAL

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K04W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 11 30 N
LONGITUDE: 125 52 24 W
ELEVATION: Metres

NORTHING: 6008660
EASTING: 312545

LOCATION ACCURACY: Within 1 KM

COMMENTS: From Geological Survey of Canada Paper 72-53, Figure 11.

COMMODITIES: Opal Agate Gemstones

MINERALS

SIGNIFICANT: Opal Agate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: Q11 Volcanic-hosted opal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Tertiary

GROUP

Endako

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Vesicular Basalt
Amygdaloidal Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Eagle Creek showing is located on the Opal 2 claim about 6.5 kilometres west of Burns Lake.

The area is designated as a No Staking Reserve and is accessed by a well-kept walking trail about 4.2 kilometres in length. Walking time to the collecting area is about 1.5 hours each way.

The area is underlain by volcanic rocks of the Oligocene to Miocene Endako Group and the Lower Jurassic Hazelton Group.

The showing is underlain by flat-lying vesicular to amygdaloidal basalts of the Endako Group.

Elongated (up to 7.5 centimetres) and rounded leaf green agates occur in vesicles within the basalt. White and amber agates (up to 5 centimetres in diameter) and rare opals, including fire opals, have been reported. Two pieces of precious opal were found along Eagle Creek. Common opal and agate are plentiful.

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GSC MEM 252
GSC MAP 631A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 096**

NATIONAL MINERAL INVENTORY:

NAME(S): **TCHESINKUT LAKE**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K04E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 06 00 N
LONGITUDE: 125 35 06 W
ELEVATION: 762 Metres

NORTHING: 5997737
EASTING: 330979

LOCATION ACCURACY: Within 1 KM

COMMENTS: From Geological Survey of Canada Paper 72-53, Figure 11.

COMMODITIES: Agate Zeolite Gemstones

MINERALS

SIGNIFICANT: Agate Zeolite

COMMENTS: Zeolite is stilbite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Tertiary	Endako	Undefined Formation	

LITHOLOGY: Volcanic

HOSTROCK COMMENTS: The Endako Grop is Oligocene to Miocene in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The area is mainly underlain by Upper Cretaceous or later volcanic rocks. Stilbite occurs as radiating groups and clusters in vesicles and fractures within the volcanics. Banded agates occur in the same place.

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GSC P 72-53, pp. 29,30; 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MEM 252
GSC MAP 631A; 907A; 1424A

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/14

CODED BY: GSB
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 097**

NATIONAL MINERAL INVENTORY: 093K13 Mo1

NAME(S): **MAC, CAMP, PAULA CREEK,
PEAK, POND**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 093K13E
BC MAP:
LATITUDE: 54 51 36 N
LONGITUDE: 125 34 38 W
ELEVATION: 1250 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Camp Zone.

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)
NORTHING: 6082256
EASTING: 334584

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
ASSOCIATED: Quartz
ALTERATION: Limonite Ferrimolybdite Kaolinite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Lower Cretaceous
ISOTOPIC AGE: 142.5 +/- 1.4 Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Biotite, mineralized edge

DEPOSIT

CHARACTER: Stockwork Disseminated Vein
CLASSIFICATION: Hydrothermal Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
DIMENSION: 3500 x 2000 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Area of mineralization.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Cache Creek Undefined Formation
Lower Cretaceous Francoise Lake Intrusive Suite
ISOTOPIC AGE: 136 +/- 5 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite, unmineralized core

LITHOLOGY: Alaskite
Siliceous Biotite Hornfels
Siliceous Quartz Monzonite
Phyllite
Serpentinized Ultramafic Rock

HOSTROCK COMMENTS: Cache Creek Group is Mississippian to Triassic in age. The intrusions are thought to be Francoise Lake Intrusives.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Nechako Plateau
TERRANE: Cache Creek
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Pre-mineralization GRADE: Hornfels

INVENTORY

ORE ZONE: CAMP REPORT ON: Y
CATEGORY: Combined YEAR: 1997
QUANTITY: 100000000 Tonnes
COMMODITY GRADE
Copper 0.0850 Per cent
Molybdenum 0.0620 Per cent
COMMENTS: Indicated and inferred resources; cutoff of 0.04 per cent molybdenum.
REFERENCE: Exploration in BC 1997, page 14 and Info. Circular 1998-1, page 20.

ORE ZONE: CAMP REPORT ON: Y
CATEGORY: Inferred YEAR: 1997
QUANTITY: 47520000 Tonnes
COMMODITY GRADE
Molybdenum 0.0700 Per cent
COMMENTS: Inferred resource is 0.12 per cent MoS2 equivalent grade; cutoff is 0.06 per cent MoS2.
REFERENCE: George Cross News Letter No.43 (March 3), 1997.

INVENTORY

ORE ZONE: CAMP REPORT ON: Y
CATEGORY: Indicated YEAR: 1997
QUANTITY: 52400000 Tonnes
COMMODITY Molybdenum GRADE 0.1200 Per cent
COMMENTS: Cutoff is 0.040 per cent.
REFERENCE: Spokane Resources Ltd., April 23, 1977. Fieldwork 1977, p. 3-12.

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Indicated YEAR: 1997
QUANTITY: 52420000 Tonnes
COMMODITY Molybdenum GRADE 0.0800 Per cent
COMMENTS: Indicated resource is 0.14 per cent MoS2 equivalent; cutoff grade is 0.06 per cent MoS2.
REFERENCE: George Cross News Letter No.43 (March 3), 1997.

CAPSULE GEOLOGY

The area is underlain primarily by the Carboniferous to Permian Cache Creek Group volcanic and sedimentary rocks which, at the showings, consist of hornfelsed mafic volcanic rocks. These rocks are intruded by a siliceous, leucocratic quartz monzonite stock of the Francois Lake Intrusive Suite.

The main zone of mineralization referred to as the Camp Zone, consists of an oxidized multidirectional, molybdenite-bearing stockwork of quartz veins in pervasively kaolinized alaskite. Molybdenite forms coatings on the walls of the 2.0 millimetres to 2.5 centimetres wide quartz veins. Subordinate amounts of pyrite and traces of chalcopyrite are also present in the veins and traces of molybdenite occur between the veins as disseminations. The mineralization occurs over an area 750 metres by 350 metres and to a depth of 150 metres. Another type of mineralization consists of molybdenite in quartz veins and disseminations in the siliceous biotite hornfels.

Spokane Resources Ltd. and Rio Algom Exploration Incorporated drilled the property in 1995 and 1996. Drill hole 95-15 intersected 137 metres grading 0.21 per cent molybdenum and 0.18 per cent copper Northern Miner, March 11, 1996).

A geostatistical resource estimate confirms an indicated resource of 52,420,000 tonnes grading an MoS2 equivalent of 0.14 per cent MoS2, and an inferred resource of 47,520,000 tonnes at an MoS2 equivalent of 0.12 per cent MoS2; cutoff grade is 0.06 per cent MoS2 (George Cross News Letter No.43 (March 3), 1997).

This drilling outlined three distinct zones of porphyry molybdenum plus/minus copper mineralization contained within an alteration zone estimated to be 3.5 kilometres long by 2 kilometres wide: the Camp, Peak and Pond zones. A further 4434 metres were drilled in 34 holes in the fall of 1996. Drilling targeted the Camp zone which is estimated to be 700 metres in length, 300 metres in width and at least 150 metres in depth. The company estimates the zone has a potential geological resource of approximately 100 million tonnes with an expected average grade of 0.15 per cent MoS2 and 0.12 per cent copper. Included within this estimate is the potential for approximately 20 million tonnes with an expected average grade of 0.25 per cent MoS2 and 0.2 per cent copper (Information Circular 1997-1, page 27). Drilling on the Peak zone, located 1 kilometre south of the Camp zone, suggests an area of molybdenum-copper mineralization 1 kilometre in length by 500 metres in width, with potential to host 150 million tonnes of ore. The Pond zone, located approximately 1 kilometre north of the Camp zone, is estimated to be approximately 2 kilometres in length by 2 kilometres in width. Drilling indicates the Peak and Camp zones to be part of the same porphyry system; the Peak zone appears to contain more copper than the Camp zone.

In 1997, Spokane Resources Ltd. drilled 3 holes for 808 metres. A geostatistical resource estimate by Giroux Consultants Ltd. identified an indicated and inferred resource in the Camp zone of approximately 100 million tonnes, grading 0.062 per cent molybdenum and 0.085 per cent copper, at a cut-off grade of 0.04 per cent molybdenum. This includes an indicated resource of 52,420,000 tonnes grading 0.14 per cent MoS2 equivalent and an inferred resource of 47,520,000 tonnes grading 0.12 per cent MoS2 equivalent. (Exploration in BC 1997, page 14 and Information Circular 1998-1, page 20.) The overall porphyry system, with two other zones of mineralization identified, is at least 3.5 kilometres long and up to

CAPSULE GEOLOGY

2 kilometres wide. The company has engaged Fluor Daniel Wright to complete a preliminary economic study by 1998.

The age dates of the unmineralized core (136 Ma) and of the mineralized edge of the camp zone (142 Ma) suggests that mineralization may be a late porphyritic phase of the Francois Intrusions.

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EMPR INF CIRC 1995-9, p. 21; 1996-1, p. 22; *1997-1, p. 25; 1998-1, p. 20
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GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
CIM Special Volume 46, pp. 757-763 (Cope, G.R. and Spence, C.D., 1995)
GCNL #229(Nov.29), #233(Dec.5), 1995; #28(Feb.8),#43(Feb.29), #50 (Mar.11),#55(Mar.18),#58 (Mar.21),#64 (Mar.29), 1996; #43(Mar.3), #79(Apr.24), 1997
N MINER Jan.1, March 11, 1996; May 4, 1998
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1997/03/25

CODED BY: GSB
REVISED BY: GP

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **093K 098**

NATIONAL MINERAL INVENTORY:

NAME(S): **DAT**, NUSAM, ENDAKO,
SAM

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K03E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 03 32 N
LONGITUDE: 125 09 58 W
ELEVATION: 945 Metres

NORTHING: 5992244
EASTING: 358223

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ALTERATION: Kaolinite
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Hydrothermal Porphyry
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>
Upper Jurassic			Francois Lake Intrusive Suite

LITHOLOGY: Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

The Dat showing is located about 10 kilometres south-southwest of Endako and is on the Endako mine (093K 006) property.

The area is underlain by a batholith of the Upper Jurassic Francois Lake Intrusive Suite. At least five phases based on distinct textural and compositional changes have been recognized in the composite batholith.

Diamond drilling has outlined a zone of westerly dipping molybdenite mineralization in the Endako quartz monzonite.

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*7312, *7860, *13391, 18732, 21243
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EMPR FIELDWORK 1992, pp. 475-482
GSC MAP 631A; 907A; 1424A
GSC OF 2593, 3184
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1986/09/24
DATE REVISED: 1995/03/14

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 099**

NATIONAL MINERAL INVENTORY: 093K8 Au1

NAME(S): **DOG CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 093K08W
BC MAP:

Open Pit

MINING DIVISION: Omineca

LATITUDE: 54 15 02 N
LONGITUDE: 124 20 22 W
ELEVATION: 884 Metres

UTM ZONE: 10 (NAD 83)

NORTHING: 6012227
EASTING: 412731

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximately 8 kilometres upstream from Ft. St. James Hwy.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Residual
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Tertiary

Glacial/Fluvial Gravels

LITHOLOGY: Tertiary Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Lowland

CAPSULE GEOLOGY

Medium to fine and flaky placer gold occurs in a layer of gravel overlying a clay seam 30 centimetres to 46 centimetres thick. The occurrence is slightly above the present creek level. A small amount of gold also occurs in crudely stratified glacial gravels that form low terraces along the creek valley. Most of the gold occurred around large boulders lying on the clay.

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EMPR FIELDWORK 1992, pp. 69-86, 475-482
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GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 630A; 907A; 1424A
GSC MEM 252, p. 153

DATE CODED: 1986/10/21
DATE REVISED: 1989/02/22

CODED BY: GRF
REVISED BY: DGB

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 100**

NATIONAL MINERAL INVENTORY:

NAME(S): **JOSEPH LAKE**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K02E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 00 19 N
LONGITUDE: 124 39 47 W
ELEVATION: 882 Metres

NORTHING: 5985389
EASTING: 391006

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on weathered outcrop (Geological Fieldwork 1989, p. 486, Figure 5-1-7).

COMMODITIES: Vermiculite

MINERALS

SIGNIFICANT: Vermiculite Mica

MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Syngenetic Industrial Min.

TYPE: M08 Vermiculite deposits

SHAPE: Regular

DIMENSION: 75 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Granodiorite zone hosting vermiculite.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Medium Grained Plagioclase Porphyritic Granodiorite
Coarse Grained Porphyritic Quartz Diorite
Granite
Granodiorite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

Plutonic Rocks

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

A vermiculite prospect outcrops 14 kilometres southeast of the community of Fraser Lake, in an area underlain by granite, granodiorite and quartz diorite of Jurassic age.

A road-cut exposes a zone of reddish orange weathered, medium grained granodiorite, 75 metres long, containing mica flakes which swell when heated with a propane torch. Fresh medium-grained granodiorite outcrops along a ridge immediately northeast of this zone. The granodiorite contains mica flakes, that also expand on heating, throughout much of the exposed area.

Exfoliation tests were carried out on a sample of vermiculite by CANMET, Energy, Mines and Resources Canada. Vermiculite content of the tested sample averaged 5.6 per cent (Fieldwork 1990, p. 267, Table 3-1-2). The material may be too fine-grained for use as loose insulation; 91 per cent of the vermiculite was found to occur in size fractions below 1.40 millimetres. Bulk densities of the minus 1.40 millimetre size fractions, ranged from 326 to 427 kilograms per cubic metre, above the ASTM range of 88 to 128 kilograms per cubic metres specified for loose insulation.

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GSC MEM 252
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1991/05/07
DATE REVISED: 1995/03/14

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 101**

NATIONAL MINERAL INVENTORY:

NAME(S): **SOWCHEA CREEK VERMICULITE**

MINING DIVISION: Omineca

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 093K07E
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 22 55 N
LONGITUDE: 124 30 46 W
ELEVATION: 850 Metres

NORTHING: 6027073
EASTING: 401752

LOCATION ACCURACY: Within 500M

COMMENTS: Location centered on largest outcrop of weathered diorite (Geological Fieldwork 1989, p. 487, Figure 5-1-8).

COMMODITIES: Vermiculite

MINERALS

SIGNIFICANT: Vermiculite Mica

MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Syngenetic Industrial Min.
TYPE: M08 Vermiculite deposits
DIMENSION: 150 Metres
COMMENTS: Exposed diorite outcrops.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Medium Grained Hornblende Diorite
Medium Grained Diorite
Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine Plutonic Rocks

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Sowchea Creek vermiculite prospect occurs north of Sowchea Creek, about 17 kilometres southwest of Fort St. James.

Vermiculite is concentrated in a zone of weathered medium grained hornblende diorite of Jurassic age, exposed in 5 outcrops along a roadcut over a distance of 150 metres. Expandable mica also occurs in fresh medium grained diorite exposed southwest and northeast of the weathered diorite.

Exfoliation tests were carried out on a sample of vermiculite by CANMET, Energy, Mines and Resources Canada. Vermiculite content of the tested sample averaged 11.8 per cent (Geological Fieldwork 1990, p. 267, Table 3-1-1). The material may be too fine-grained for use as loose insulation; 89 per cent of the vermiculite was found to occur in size fractions below 1.65 millimetres. Bulk densities of the minus 1.65 millimetre size fractions, ranged from 357 to 434 kilograms per cubic metre, above the ASTM range of 88 to 128 kilograms per cubic metres specified for loose insulation.

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EMPR OF 1993-9
GSC MAP 630A, 971A, 1424A
GSC MEM 252
GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1991/05/07
DATE REVISED: 1991/05/08

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 102**

NATIONAL MINERAL INVENTORY:

NAME(S): **JED**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K02W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 04 36 N
LONGITUDE: 124 56 12 W
ELEVATION: 777 Metres

NORTHING: 5993786
EASTING: 373293

LOCATION ACCURACY: Within 1 KM

COMMENTS: Apporximate location of sample J24 (Assessment Report 20967).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz Clay
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Shear Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Tertiary
Upper Jurassic

GROUP
Endako

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Francois Lake Batholith

LITHOLOGY: Quartz Monzonite
Andesite Dike
Quartz Diorite
Andesite
Volcanic Rock

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Stikine

PHYSIOGRAPHIC AREA: Nechako Lowland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1991

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

10.9000

Grams per tonne

COMMENTS: Highest value from samples (sample J24).

REFERENCE: Assessment Report 20967.

CAPSULE GEOLOGY

The Jed showing is located about 7 kilometres northwest of the town of Fraser Lake.

The showing was discovered during a regional prospecting program. In 1989 and 1990, a program of prospecting and rock sampling was conducted on the claims.

The area is dominantly underlain by intermediate to felsic intrusions of the Upper Jurassic Francois Lake Intrusive Suite. Volcanic rocks of the Tertiary Endako Group overlie these. The intrusions are host to a number of molybdenite occurrences in the region.

The showing is underlain by quartz monzonite and quartz diorite phases of the northwest trending Francois Lake batholith. Andesite and rhyolite dikes crosscut the batholith.

The main showing is located in the creek gully on the Jed 1 claim. A major shear zone strikes 084 degrees and dips 55 degrees south. A large andesite dike occurs in the hangingwall of the shear zone. Pervasive silicification occurs for about 2 metres in the footwall of the dike. Quartz and clay filled stringers occur in the alteration zone and contain up to 10.9 grams per tonne gold (Assessment Report 20967, sample J24). Pyrite and chalcopyrite were noted in samples of silicified andesite dike.

Erratic values up to 13.6 grams per tonne gold came from altered

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

MINFILE MASTER REPORT
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CAPSULE GEOLOGY

quartz monzonite with pyrite on the Jed 16 claim (Assessment Report 20967).

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GSC OF 2593, 3182
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
GSC MAP 630A; 907A; 1424A; 1590G; 5304G
GSC MEM 252

DATE CODED: 1995/03/15
DATE REVISED: 1995/03/15

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 103**

NATIONAL MINERAL INVENTORY:

NAME(S): **OWL**, FORT, BUT 4

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K12E 093K11W
BC MAP:

MINING DIVISION: Omineca
UTM ZONE: 10 (NAD 83)

LATITUDE: 54 36 20 N
LONGITUDE: 125 30 28 W
ELEVATION: 850 Metres

NORTHING: 6053790
EASTING: 338028

LOCATION ACCURACY: Within 500M

COMMENTS: Location of mineralization along forestry road, west of Cunningham Lake (Assessment Report 20377).

COMMODITIES: Copper Silver Gold Zinc Lead

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Galena Bornite Magnetite
ASSOCIATED: Quartz
ALTERATION: Hematite Sericite K-Feldspar
ALTERATION TYPE: Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive Vein
CLASSIFICATION: Epigenetic Porphyry Epithermal
TYPE: I06 Cu±Ag quartz veins L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Permian-Triassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Tuffaceous Rhyolite
Rhyodacite
Andesite
Tuff
Quartz Monzonite
Plagioclase Augite Porphyry
Dacite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

The Owl showing is located along a forestry road, west of Cunningham Lake. The property was prospect and trenched by A.A. Halleran and W. Halleran in 1990 and 1991. Cominco Ltd. conducted surveys in 1992. Eastfield Resources Ltd. held the area as the But 4 claim in 1998.

The area occurs in a region underlain dominantly by metasedimentary and metavolcanic rocks of the Mississippian to Triassic Cache Creek Group and by ultramafic bodies of ophiolitic character related perhaps to the oceanic Cache Creek Group. These ultramafic bodies, known as the Permian to Triassic Trembleur Intrusions, are composed dominantly of dunite and peridotite but pyroxenite and gabbro are also present in some areas.

Rocks in the immediate area consist of banded to tuffaceous rhyolites and tuffaceous to massive andesites to rhyodacites. Quartz monzonite porphyry intrudes the sequence in the northeast part of the property.

Several types of mineralization occur in the area. Disseminated chalcopyrite and pyrite in tuffaceous and massive andesite was traced discontinuously for 400 metres. A sample assayed 0.7 per cent copper and 11.6 grams per tonne silver. Stringer quartz occurs with chalcopyrite in silicified rhyolite tuffs and tuffaceous andesite. A sample assayed graded to 0.9 per cent copper, 3.5 grams per tonne silver and 0.36 grams per tonne gold. Quartz carbonate veins up to 1.5 metres occur in altered volcanic breccia. A sample assayed 0.46 per cent copper, 0.025 per cent zinc, 24.1 grams per tonne silver and 0.123 gram per tonne gold. Massive sulphide boulders occur in the area. (Assessment Report 20377).

RUN DATE: 26-Jun-2003
RUN TIME: 11:27:59

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GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1211
REPORT: RGEN0100

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EM OF 1999-2; 1999-11
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GSC MEM 252
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13
WWW <http://www.eastfieldgroup.com/eastfield/etfhome.html>;
http://www.infomine.com/index/properties/FORT_PROJECT.html

DATE CODED: 1998/05/29
DATE REVISED: 1998/05/29

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **093K 104**

NATIONAL MINERAL INVENTORY:

NAME(S): **RUBYROCK CREEK**

MINING DIVISION: Omineca

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 093K11W
BC MAP:

UTM ZONE: 10 (NAD 83)

LATITUDE: 54 40 57 N
LONGITUDE: 125 27 05 W
ELEVATION: 1250 Metres

NORTHING: 6062220
EASTING: 341968

LOCATION ACCURACY: Within 500M

COMMENTS: Location from Fieldwork 1998, page 64.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Hematite Sericite K-Feldspar
ALTERATION TYPE: Quartz-Carb.
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Epigenetic Porphyry Epithermal
TYPE: L04 Porphyry Cu ± Mo ± Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Permian-Triassic

GROUP

Cache Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Trembleur Intrusions

LITHOLOGY: Biotite Feldspar Porphyritic Granodiorite
Serpentinite

HOSTROCK COMMENTS: The Cache Creek Group is Mississippian to Triassic in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Cache Creek

PHYSIOGRAPHIC AREA: Nechako Plateau

CAPSULE GEOLOGY

Mapping within the Trembleur ultramafic unit (Permian to Triassic? Cache Creek Complex) along the crest of the ridge northeast of Rubyrock Creek resulted in the discovery of several small outcrops of crowded biotite-feldspar porphyritic granodiorite with up to 15 percent disseminated and fracture controlled pyrite. These outcrops occur in a small saddle and define an area of sulphide mineralization that is at least 300 metres long and 200 metres wide. The extent of mineralization is constrained to the west by the occurrence of unmineralized serpentinite but is open in all other directions. A single sample collected from this locality contained 183 ppm copper. The discovery is considered significant because the style of sulphide mineralization and the nature of the porphyritic host rocks suggest the presence of a porphyry copper style hydrothermal system of probable Eocene age. Although no significant copper mineralization was located within the zone of disseminated and fracture controlled pyrite, followup work may locate a copper-rich zone associated with the porphyritic intrusions. (Geological Fieldwork 1998, page 34.)

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GSC MAP 631A; 907A; 1424A; 5313G
GSC MEM 252
GSC OF 2593, 3183
GSC P 90-1F, pp. 115-120; 91-1A, pp. 7-13

DATE CODED: 1999/06/01
DATE REVISED: 1999/06/21

CODED BY: PS
REVISED BY: PS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 093A 001		NAME: BOSS MOUNTAIN			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	29,770	29,770	Molybdenum		51,539	
1982	445,000	445,000	Molybdenum		539,355	
1981	468,000	468,000	Molybdenum		906,000	
1980	533,254	533,254	Molybdenum		769,806	
1979	496,108	496,108	Molybdenum		614,961	
1978	541,928	541,928	Molybdenum		764,516	
1977	523,603	523,453	Molybdenum		992,588	
1976	564,376	564,036	Molybdenum		1,022,697	
1975	545,496	545,496	Molybdenum		1,094,002	
1974	448,060	448,060	Molybdenum		837,781	
1972		542	Molybdenum		301,796	
1971	484,908	484,908	Molybdenum		720,531	
1970	536,296	536,296	Molybdenum		1,019,278	
1969	496,681	496,681	Molybdenum		1,064,523	
1968	451,627	451,627	Molybdenum		1,101,561	
1967	425,870	425,870	Molybdenum		1,409,059	
1966	393,564	393,564	Molybdenum		1,603,392	
1965	203,479	203,479	Molybdenum		732,649	

SUMMARY TOTALS: 093A 001

NAME: **BOSS MOUNTAIN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	7,588,020 tonnes	8,364,360 tons
Milled:	7,588,072 tonnes	8,364,418 tons
Recovery: Molybdenum:	15,546,034 kilograms	34,273,129 pounds

Comments: 1972: Molybdenum concentrates.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 093A 003		NAME: PROVIDENCE		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	3		Silver Lead Zinc	4,417	629 3
1970	1		Silver Lead Zinc	1,151	136 1
1953	6		Silver Lead Zinc	19,533	2,852 13
1951	6		Silver Gold Lead Zinc	21,243 31	2,903 7
1950	7		Silver Gold Lead Zinc	23,203 31	3,133 14
1949	5		Silver Lead Zinc	9,922	1,494 5

SUMMARY TOTALS: 093A 003

NAME: **PROVIDENCE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	28 tonnes	31 tons
Milled:	tonnes	tons
Recovery:	Silver: 79,469 grams	2,555 ounces
	Gold: 62 grams	2 ounces
	Lead: 11,147 kilograms	24,575 pounds
	Zinc: 43 kilograms	95 pounds

Comments: 1970: Actual tonnage mined was .45.
 1949: PROVIDENCE-JANET

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093A 005	NAME: LITTLE SNOWSHOE CREEK	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1915	1	Gold
		Commodity
		Grams Recovered
		35,800
		Kilograms Recovered

SUMMARY TOTALS: 093A 005

NAME: **LITTLE SNOWSHOE CREEK**

Metric Imperial

Mined: 1 tonnes 1 tons
 Milled: tonnes tons

Recovery:

Gold: 35,800 grams 1,151 ounces

Comments:

1915: Amount mined unknown. Production for 1901 to 1915.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **093A 008** NAME: **MOUNT POLLEY** 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>
2001	3,502,177	3,502,177	Gold	8,173,072	
			Copper		1,385,600
2000	6,949,600	6,949,600	Gold	2,587,333	
			Copper		15,504,430
1999	15,040,000	7,090,465	Gold	3,097,093	
			Copper		16,828,970
1998	5,829,701	5,829,701	Gold	3,163,772	
			Copper		10,850,310
1997	2,344,144	2,344,144	Silver	341,000	
			Gold	597,583	
			Copper		3,957,893

SUMMARY TOTALS: 093A 008

NAME: **MOUNT POLLEY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	33,665,622 tonnes	37,109,996 tons
Milled:	25,716,087 tonnes	28,347,133 tons
Recovery:		
Silver:	341,000 grams	10,963 ounces
Gold:	17,618,853 grams	566,458 ounces
Copper:	48,527,203 kilograms	106,984,139 pounds

Comments:

2001: First 6 months ended June 30, 2001; Second Quarter Report.
 1999: Imperial Metals Annual Report 1999, pages 6,7.
 1998: Imperial Metals Corporation 1998 Annual Report, page 7.
 1997: Production began in October 1997.

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MINFILE NUMBER: 093A 015	NAME: WARD'S HORSEFLY	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1903	1		Gold	10,979	

SUMMARY TOTALS: 093A 015

NAME: **WARD'S HORSEFLY**

Metric Imperial

Mined: 1 tonnes 1 tons
Milled: tonnes tons

Recovery:

Gold: 10,979 grams 353 ounces

Comments:

1903: Ore mined unknown. Total prod. ranges from 994 to 2023 kg gold.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093A 024	NAME: FRENCH SNOWSHOE CREEK	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1945	1	
		Commodity
		Gold
		Grams Recovered
		12,752
		Kilograms Recovered

SUMMARY TOTALS: 093A 024

	NAME: FRENCH SNOWSHOE CREEK
	<u>Metric</u>
Mined:	1 tonnes
Milled:	tonnes
Recovery:	
	<u>Imperial</u>
	1 tons
	tons
Gold:	12,752 grams
	410 ounces
Comments:	
1945:	Amount mined unknown. Production for 1874 to 1945.

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MINFILE NUMBER: 093A 025	NAME: BULLION PIT	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1942	200,000,000		Gold	5,463,148	

SUMMARY TOTALS: 093A 025

	NAME: BULLION PIT	
	<u>Metric</u>	<u>Imperial</u>
Mined:	200,000,000 tonnes	220,462,260 tons
Milled:		
Recovery:	Gold: 5,463,148 grams	175,644 ounces
Comments:	1942: K.D. Hancock, 1989-Estimate from published sources for 1870-1942.	

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MINFILE NUMBER: 093A 035	NAME: MIDAS (L. 4670)	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1949	45	45	Silver Gold	62 311	

SUMMARY TOTALS: 093A 035

NAME: **MIDAS (L. 4670)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	45 tonnes	50 tons
Milled:	45 tonnes	50 tons
Recovery:		
Silver:	62 grams	2 ounces
Gold:	311 grams	10 ounces

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 093A 042	NAME: HOBSON'S HORSEFLY	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1912	1	
		Commodity
		Gold
		Grams Recovered
		238,653
		Kilograms Recovered

SUMMARY TOTALS: 093A 042

	NAME: HOBSON'S HORSEFLY
	<u>Metric</u>
Mined:	1 tonnes
Milled:	tonnes
	<u>Imperial</u>
	1 tons
Recovery:	tons
	Gold: 238,653 grams
	7,673 ounces
Comments:	
1912:	Amount mined unknwn. Production for 1894-1899 and 1912.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **093A 043** NAME: **SPANISH MOUNTAIN** 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>
1992	635		Gold	4,697	
1947	4		Silver	1,306	
			Gold	249	
			Copper		46
			Lead		66

SUMMARY TOTALS: 093A 043

NAME: **SPANISH MOUNTAIN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	639 tonnes	704 tons
Milled:	tonnes	tons
Silver:	1,306 grams	42 ounces
Gold:	4,946 grams	159 ounces
Copper:	46 kilograms	101 pounds
Lead:	66 kilograms	146 pounds

Recovery:

Comments:

1992: 1992: Estimated by Schroeter.
 1947: Exploration by El Toro Yellowknife Mines Ltd.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093A 069	NAME: MOREHEAD CREEK	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1945	1,120,000	
		Commodity
		Gold
		Grams Recovered
		47,837
		Kilograms Recovered

SUMMARY TOTALS: 093A 069

	NAME: MOREHEAD CREEK	
	<u>Metric</u>	<u>Imperial</u>
Mined:	1,120,000 tonnes	1,234,589 tons
Milled:		tons
Recovery:	Gold: 47,837 grams	1,538 ounces
Comments:	1945: Recorded to 1945 (Bulletin 28, p.51).	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093A 071		NAME: CARIBOO HUDSON			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	10,028	10,028	Silver	70,884		
			Gold	138,533		
1938	2,212	2,212	Silver	10,793		
			Gold	22,767		

SUMMARY TOTALS: 093A 071

NAME: **CARIBOO HUDSON**

	<u>Metric</u>	<u>Imperial</u>
Mined:	12,240 tonnes	13,492 tons
Milled:	12,240 tonnes	13,492 tons
Recovery: Silver:	81,677 grams	2,626 ounces
Gold:	161,300 grams	5,186 ounces

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093A 080	NAME: MURDER GULCH PLACER (PL.7139)	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1976	4,118	
		Commodity
		Gold
		Grams Recovered
		3,497
		Kilograms Recovered

SUMMARY TOTALS: 093A 080

NAME: **MURDER GULCH PLACER (PL.7139)**

	<u>Mined:</u>	<u>Metric</u>		<u>Imperial</u>
	Milled:	4,118 tonnes		4,539 tons
Recovery:	Gold:	3,497 grams		112 ounces

Comments: 1976: Quantity is in cubic metres. Average 116 m3 for 36 days.

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MINFILE NUMBER: 093A 081	NAME: MAEFORD LAKE	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1990	148		Marble		148,000
SUMMARY TOTALS: 093A 081		NAME: MAEFORD LAKE			
	Mined:	<u>Metric</u>	<u>Imperial</u>		
	Milled:	148 tonnes	163 tons		
Recovery:	Marble:	148,000 kilograms	326,284 pounds		

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 093A 090		NAME: SKARN		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>	
1980		172	Silver	243,385		
			Gold	721		
			Copper		1,072	
			Lead		10,386	
			Zinc		3,956	

SUMMARY TOTALS: 093A 090

NAME: **SKARN**

	<u>Metric</u>		<u>Imperial</u>
Mined:	tonnes		tons
Milled:	172 tonnes		190 tons
Recovery:			
Silver:	243,385 grams		7,825 ounces
Gold:	721 grams		23 ounces
Copper:	1,072 kilograms		2,363 pounds
Lead:	10,386 kilograms		22,897 pounds
Zinc:	3,956 kilograms		8,721 pounds

Comments: 1980: Government records indicate tonnes milled only.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093A 091		NAME: CARIBOO THOMPSON		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	4		Silver	311	
			Gold	933	
			Lead		69
			Zinc		22

SUMMARY TOTALS: 093A 091

NAME: **CARIBOO THOMPSON**

	<u>Metric</u>	<u>Imperial</u>
Mined:	4 tonnes	4 tons
Milled:	tonnes	tons
Recovery:		
Silver:	311 grams	10 ounces
Gold:	933 grams	30 ounces
Lead:	69 kilograms	152 pounds
Zinc:	22 kilograms	49 pounds

Comments: 1937: GSC P 38-16:Hand-cobbed shipment from Wendle or North showing

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MINFILE NUMBER: 093A 121		NAME: QR		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>	
1998	69,162	69,162	Gold	337,400		
1997	372,263	372,263	Silver	327,000		
			Gold	1,274,030		
1996	400,986	381,982	Silver	477,675		
			Gold	1,357,000		
1995	286,016	195,577	Silver	264,473		
			Gold	659,829		

SUMMARY TOTALS: 093A 121

NAME: **QR**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,128,427 tonnes	1,243,878 tons
Milled:	1,018,984 tonnes	1,123,238 tons
Silver:	1,069,148 grams	34,374 ounces
Gold:	3,628,259 grams	116,651 ounces

Recovery:

Comments:

1998: Silver recovery not reported.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 093A 161	NAME: ANTLER CREEK	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1994	666	Gold
		Commodity
		Grams Recovered
		632
		Kilograms Recovered

SUMMARY TOTALS: 093A 161

	NAME: ANTLER CREEK	
	<u>Metric</u>	<u>Imperial</u>
Mined:	666 tonnes	734 tons
Milled:	tonnes	tons
Recovery:	Gold: 632 grams	20 ounces
Comments:	1994: Ore mined is cubic metres of gravel.	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	<u>093B 012</u>	NAME:	<u>GIBRALTAR EAST</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>	
1998	12,390,000	12,390,000	Silver Copper Molybdenum	5,304,000	33,896,000 398,000	
1997	13,008,410	13,008,410	Silver Copper Molybdenum	4,654,000	35,038,712 154,596	
1996	13,161,568	13,161,568	Silver Copper Molybdenum	4,227,196	31,736,831 182,293	
1995	18,660,857	13,855,199	Silver Copper Molybdenum	4,200,000	26,479,000 18,050	
1994	4,024,000	3,461,000	Silver Copper	268,392	6,471,564	
1993	10,133,533	10,133,533	Silver Copper Molybdenum	3,427,137	25,628,000 19,519	
1992	13,256,434	12,672,025	Silver Copper Molybdenum	4,576,970	32,806,051 238,555	
1991	12,068,021	11,923,234	Silver Copper Molybdenum	4,314,488	32,344,468 429,339	
1990	12,233,854	11,701,957	Silver Copper Molybdenum	4,314,488	32,344,468 746,138	
1989	11,677,932	11,980,574	Silver Gold Copper Molybdenum	3,603,555 3,060	35,075,711 347,876	
1988	5,488,379	5,473,121	Silver Gold Copper Molybdenum	1,632,994 15,272	17,925,750 357,229	
1987	12,589,849	12,575,334	Silver Gold Copper Molybdenum	3,972,132 26,936	35,428,740 449,478	
1986	12,281,220	12,182,335	Silver Gold Copper Molybdenum	7,042,574 49,050	37,617,000 792,057	
1985	13,093,890	13,401,587	Silver Gold Copper Molybdenum	7,042,574 49,050	37,617,000 359,919	
1984	13,274,600	13,142,200	Silver Copper Molybdenum	5,165,354	32,026,361 910,227	
1983	7,754,400	13,517,000	Silver Copper Molybdenum	4,098,101	28,018,884 662,602	
1982	9,210,500	13,378,760	Silver Copper Molybdenum	4,281,954	32,279,933 686,395	
1981	12,913,700	13,257,620	Silver Copper Molybdenum	5,624,599	44,231,267 487,361	
1980	12,579,024	12,654,522	Silver Copper Molybdenum	4,639,395	32,672,960 528,461	
1979	11,296,537	10,446,035	Silver Copper Molybdenum	3,373,452	32,217,953 408,676	
1978	7,363,580	5,135,655	Silver Copper Molybdenum	3,265,628	19,713,622 119,174	
1977	19,408,617	12,764,959	Silver Copper Molybdenum	3,310,292	40,255,709 137,202	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093B 012		NAME: GIBRALTAR EAST			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>	
1976	10,955,903	7,672,296	Silver	3,343,168		
			Copper		26,142,438	
1975	15,533,643	10,388,188	Silver	5,391,611		
			Copper		41,165,032	
			Molybdenum		251,672	
1974	16,644,939	12,033,343	Silver	4,403,998		
			Copper		37,266,090	
			Molybdenum		127,919	
1973	13,811,816	13,682,300	Copper		56,559,988	
			Molybdenum		223,863	
1972	10,881,624	9,853,336	Copper		33,752,846	

SUMMARY TOTALS: 093B 012

NAME: **GIBRALTAR EAST**

	<u>Metric</u>	<u>Imperial</u>
Mined:	325,696,830 tonnes	359,019,296 tons
Milled:	305,846,091 tonnes	337,137,602 tons
Recovery:		
Silver:	105,478,052 grams	3,391,193 ounces
Gold:	143,368 grams	4,609 ounces
Copper:	876,712,378 kilograms	1,932,819,396 pounds
Molybdenum:	9,036,601 kilograms	19,922,289 pounds

Comments:

1998: Closed December 1998; includes 1658 tonnes copper from SX-EW.
 1995: See also Gibraltar Mines Limited, Annual Report 1995.
 1994: See also Gibraltar Mines Limited, Annual Report 1995.
 1988: Includes 1,684,537 tonnes from the Granite Lake (093B 013).

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 093B 022	NAME: AINSWORTH	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1945	1	
		Commodity
		Gold
		Grams Recovered
		477,000
		Kilograms Recovered

SUMMARY TOTALS: 093B 022

	NAME: AINSWORTH	
	<u>Metric</u>	<u>Imperial</u>
Mined:	1 tonnes	1 tons
Milled:	tonnes	tons
Recovery:		
	Gold: 477,000 grams	15,336 ounces
Comments:		
	1945: Amount mined unknown. Production to 1945.	

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MINFILE NUMBER: 093B 023	NAME: LOT 906	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1988	5,000		Diatomite		5,000,000
1980	17,074		Diatomite		17,074,000

SUMMARY TOTALS: 093B 023

NAME: **LOT 906**

<u>Metric</u>	<u>Imperial</u>
22,074 tonnes	24,332 tons
tonnes	tons

Recovery:

Diatomite:	22,074,000 kilograms	48,664,826 pounds
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Comments:

1980: 1975-1980 production.

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MINFILE NUMBER: **093B 059** NAME: **QUESNEL** 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>
1993	1,000		Diatomite		1,000,000
1992	1,800		Diatomite		1,800,000
1991	2,400		Diatomite		2,400,000
1990	2,500		Diatomite		2,500,000
1989	2,500		Diatomite		2,500,000
1988	2,500		Diatomite		2,500,000
1987	2,500		Diatomite		2,500,000

SUMMARY TOTALS: 093B 059

NAME: **QUESNEL**

	<u>Mined:</u>	<u>Metric</u>	<u>Imperial</u>
	Milled:	15,200 tonnes	16,755 tons
		tonnes	tons

Recovery:

Diatomite: 15,200,000 kilograms 33,510,254 pounds

Comments:

1993: 1991- 1993: B. Warner, personal communication, 1993.
1990: 1987-1990: Estimate.

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MINFILE NUMBER:	093D 004	NAME:	DEAN CHANNEL	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1919	1,088		Magnetite		1,088

SUMMARY TOTALS: 093D 004

NAME: **DEAN CHANNEL**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,088 tonnes	1,199 tons
Milled:		
Recovery:		
	Magnetite: 1,088 kilograms	2,399 pounds
Comments:		
	1919: Minister of Mines Annual Report 1919; 47 per cent iron.	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: **093D 008** NAME: **BEALE'S QUARRY** 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	10,010		Limestone		10,009,875
1948	8,438		Limestone		8,437,725
1933	5,716		Limestone		5,716,171
1932	304		Limestone		303,907
1931	6,272		Limestone		6,272,275
1930	14,004		Limestone		14,004,210
1929	13,337		Limestone		13,337,429
1928	16,053		Limestone		16,052,633
1927	18,144		Limestone		18,143,694
1926	23,949		Limestone		23,948,768
1925	14,793		Limestone		14,792,553
1924	11,340		Limestone		11,339,808

SUMMARY TOTALS: 093D 008

NAME: **BEALE'S QUARRY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	142,360 tonnes	156,925 tons
Milled:	tonnes	tons
Recovery: Limestone:	142,359,048 kilograms	313,847,889 pounds

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 093E 001		NAME: EMERALD GLACIER		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	1,963	1,963	Silver	506,606			
			Gold	93			
			Cadmium		856		
			Copper		6,778		
			Lead		147,294		
			Zinc		209,875		
1967	1,815	1,815	Silver	298,713			
			Gold	218			
			Cadmium		632		
			Copper		2,236		
			Lead		91,429		
			Zinc		158,299		
1966	363	363	Silver	69,609			
			Gold	31			
			Cadmium		172		
			Lead		18,692		
			Zinc		42,331		
			1953		11	Silver	5,754
			Gold	31			
			Cadmium		24		
			Lead		1,380		
			Zinc		4,945		
1952	2,637	2,637	Silver	1,456,336			
			Gold	964			
			Lead		433,359		
			Zinc		394,651		
1951	1,564	1,504	Silver	259,897			
			Gold	187			
			Lead		74,167		
			Zinc		81,841		

SUMMARY TOTALS: 093E 001

NAME: **EMERALD GLACIER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	8,342 tonnes	9,195 tons
Milled:	8,293 tonnes	9,141 tons
Recovery:		
Silver:	2,596,915 grams	83,493 ounces
Gold:	1,524 grams	49 ounces
Cadmium:	1,684 kilograms	3,713 pounds
Copper:	9,014 kilograms	19,872 pounds
Lead:	766,321 kilograms	1,689,448 pounds
Zinc:	891,942 kilograms	1,966,395 pounds

Comments: 1953: Production from 11 tonnes of zinc concentrate (from clean-up).

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<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1935	1		Silver Lead Zinc	2,488	506 87

SUMMARY TOTALS: 093E 028

NAME: **NICKEL PLATE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1 tonnes	1 tons
Milled:	tonnes	tons
Recovery:		
Silver:	2,488 grams	80 ounces
Lead:	506 kilograms	1,116 pounds
Zinc:	87 kilograms	192 pounds
Comments:		
1935:	Shipped by A. & O. Harrison, Wistaria, B.C.	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 093E 029		NAME: ROOSEVELT		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	1		Silver Lead Zinc	2,239	535 73

SUMMARY TOTALS: 093E 029

		NAME: ROOSEVELT	
		<u>Metric</u>	<u>Imperial</u>
Mined:	1 tonnes	1 tonnes	1 tons
Milled:	tonnes		
Recovery:	Silver: 2,239 grams	72 ounces	
	Lead: 535 kilograms	1,179 pounds	
	Zinc: 73 kilograms	161 pounds	

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MINFILE NUMBER: 093E 035	NAME: CAPTAIN	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1926	1		Silver Lead Zinc	1,058	119 11

SUMMARY TOTALS: 093E 035

	NAME: CAPTAIN	
	<u>Metric</u>	<u>Imperial</u>
Mined:	1 tonnes	1 tons
Milled:	tonnes	tons
Recovery:		
Silver:	1,058 grams	34 ounces
Lead:	119 kilograms	262 pounds
Zinc:	11 kilograms	24 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093E 037		NAME: HUCKLEBERRY		STATUS: Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
2001	7,400,000	7,400,000	Silver	9,052,000		
			Gold	330,000		
			Copper		36,397,770	
			Molybdenum		888,380	
2000	7,145,600	7,145,600	Copper		33,489,741	
			Molybdenum		596,348	
1999	9,260,600	6,958,700	Copper		37,039,615	
			Molybdenum		443,031	
1998	13,628,197	6,549,997	Silver	8,576,000		
			Gold	253,460		
			Copper		36,867,700	
1997	1,249,602	1,249,602	Molybdenum		249,480	
			Copper		6,304,586	

SUMMARY TOTALS: 093E 037

NAME: **HUCKLEBERRY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	38,683,999 tonnes	42,641,809 tons
Milled:	29,303,899 tonnes	32,302,019 tons
Recovery:		
Silver:	17,628,000 grams	566,753 ounces
Gold:	583,460 grams	18,759 ounces
Copper:	150,099,412 kilograms	330,912,466 pounds
Molybdenum:	2,177,239 kilograms	4,799,989 pounds

Comments:

2001: Personal Communication - P. Wojdak, Smithers Regional Geologist.
 1999: Imperial Metals Corporation Annual Report 1999, page 10.
 1998: Imperial Metals Corporation 1998, 1999 Annual Reports, pages 9,10.
 1997: For the period September 22 to December 1997; mine opened October.

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MINFILE NUMBER: 093G 003		NAME: MOUSE MOUNTAIN		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>
1956	20		Silver	311	
			Gold	31	
			Copper		1,129

SUMMARY TOTALS: 093G 003

		NAME: MOUSE MOUNTAIN	
		<u>Metric</u>	<u>Imperial</u>
Mined:	20 tonnes	22 tons	
Milled:	tonnes	tons	
Recovery:	Silver: 311 grams	10 ounces	
	Gold: 31 grams	1 ounces	
	Copper: 1,129 kilograms	2,489 pounds	

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MINFILE NUMBER: 093G 009	NAME: HANNADOR	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1993	70,134	70,134	Gold	66,456	

SUMMARY TOTALS: 093G 009

	NAME: HANNADOR	
	<u>Metric</u>	<u>Imperial</u>
Mined:	70,134 tonnes	77,310 tons
Milled:	70,134 tonnes	77,310 tons
Recovery:	Gold: 66,456 grams	2,137 ounces
Comments:	1993: Cubic metres; Explore B.C. Program 94/95 - A4.	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 093G 013	NAME: PIONEER	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1927	4	
		Commodity
		Silver
		Lead
		Zinc
		Grams Recovered
		809
		Kilograms Recovered
		126
		2

SUMMARY TOTALS: 093G 013

	NAME: PIONEER	
	<u>Metric</u>	<u>Imperial</u>
Mined:	4 tonnes	4 tons
Milled:	tonnes	tons
Recovery:		
Silver:	809 grams	26 ounces
Lead:	126 kilograms	278 pounds
Zinc:	2 kilograms	4 pounds

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MINFILE NUMBER:	093G 015	NAME:	QUESNEL QUARTZ	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1939	2,041		Silver	8,429	
			Gold	6,158	
1932	7		Silver	124	
			Gold	280	

SUMMARY TOTALS: 093G 015

NAME: **QUESNEL QUARTZ**

		<u>Metric</u>		<u>Imperial</u>	
	Mined:	2,048 tonnes		2,258 tons	
	Milled:				
Recovery:	Silver:	8,553 grams		275 ounces	
	Gold:	6,438 grams		207 ounces	

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MINFILE NUMBER: 093G 028	NAME: PURDEN	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1988	10,000		Limestone		10,000,000
1986	10,000		Limestone		10,000,000

SUMMARY TOTALS: 093G 028

	NAME: PURDEN	
	<u>Metric</u>	<u>Imperial</u>
Mined:	20,000 tonnes	22,046 tons
Milled:	tonnes	tons
Recovery:	Limestone: 20,000,000 kilograms	44,092,440 pounds

MINFILE PRODUCTION REPORT
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MINFILE NUMBER:	093G 032	NAME:	DAHL LAKE	STATUS:	Producer
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1997	20,000	20,000	Aggregate		20,000,000
1996	20,000	20,000	Aggregate		20,000,000
1995	20,000	20,000	Aggregate		20,000,000
1990	20,500		Limestone		20,500,000
1989	20,500		Limestone		20,500,000
1988	17,200		Limestone		17,200,000
1987	30,000		Limestone		30,000,000
1986	25,356		Limestone		25,356,000
1985	14,800		Limestone		14,800,000
1984	8,557		Limestone		8,557,000
1983	21,750		Limestone		21,750,000
1982	17,514		Limestone		17,514,000
1981	27,307		Limestone		27,307,000
1980	30,844		Limestone		30,844,000
1979	14,824		Limestone		14,824,000
1978	18,144		Limestone		18,143,694
1977	38,613		Limestone		38,613,409
1976	31,583		Limestone		31,582,728
1975	24,948		Limestone		24,947,579
1974	49,140		Limestone		49,140,380
1973	38,102		Limestone		38,101,757
1972	21,591		Limestone		21,590,995
1971	35,667		Limestone		35,667,145
1970	27,216		Limestone		27,215,541
1969	24,494		Limestone		24,493,986
1968	32,659		Limestone		32,658,649

SUMMARY TOTALS: 093G 032

NAME: **DAHL LAKE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	651,309 tonnes	717,945 tons
Milled:	60,000 tonnes	66,139 tons
Recovery:	Aggregate: 60,000,000 kilograms	132,277,320 pounds
	Limestone: 591,307,863 kilograms	1,303,610,324 pounds

Comments:

- 1997: Decorative aggregate from old waste rock.
- 1996: Decorative aggregate from old waste rock.
- 1995: Decorative aggregate - 1994 stockpile (Inf. Circular 1996-1, p.9).

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: **093H 006** NAME: **ISLAND MOUNTAIN** 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>
1954	27,745	27,745	Silver	50,667	
			Gold	401,789	
1953	43,908	43,908	Silver	79,748	
			Gold	597,022	
1952	41,072	41,072	Silver	78,473	
			Gold	562,902	
1951	35,643	35,643	Silver	73,932	
			Gold	520,540	
1950	36,813	36,813	Silver	73,963	
			Gold	522,810	
1949	40,221	40,221	Silver	79,935	
			Gold	585,794	
1948	36,969	36,969	Silver	77,353	
			Gold	525,858	
1947	37,373	37,373	Silver	70,044	
			Gold	551,176	
1946	18,876	18,876	Silver	38,848	
			Gold	289,196	
1945	20,515	20,515	Silver	42,798	
			Gold	313,238	
1944	19,220	19,220	Silver	45,566	
			Gold	293,643	
1943	20,534	20,534	Silver	49,049	
			Gold	317,313	
1942	43,468	43,468	Silver	91,350	
			Gold	656,180	
1941	49,349	49,349	Silver	108,923	
			Gold	770,017	
1940	44,660	44,660	Silver	97,850	
			Gold	651,950	
1939	41,921	41,921	Silver	91,692	
			Gold	626,850	
1938	40,747	40,747	Silver	83,574	
			Gold	574,379	
1937	30,756	30,756	Silver	73,372	
			Gold	431,554	
1936	39,597	39,597	Silver	92,625	
			Gold	567,568	
			Lead		35
1935	27,524	27,524	Silver	89,981	
			Gold	570,118	
			Lead		26
			Zinc		241
1934	2,625	2,625	Silver	7,278	
			Gold	49,485	

SUMMARY TOTALS: 093H 006

NAME: **ISLAND MOUNTAIN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	699,536 tonnes	771,106 tons
Milled:	699,536 tonnes	771,106 tons
Recovery:		
Silver:	1,497,021 grams	48,130 ounces
Gold:	10,379,382 grams	333,704 ounces
Lead:	61 kilograms	134 pounds
Zinc:	241 kilograms	531 pounds

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MINFILE NUMBER: 093H 010		NAME: MOSQUITO 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>	
1987	4,672	4,672	Silver	18,590		
			Gold	53,755		
1986	4,285	4,285	Silver	1,786		
			Gold	74,875		
1985	7,545	7,545	Silver	29,069		
			Gold	64,330		
1984	2,329	2,329	Silver	13,281		
			Gold	46,741		
1983	18,947	18,947	Silver	63,762		
			Gold	205,591		
1982	22,508	22,508	Silver	75,215		
			Gold	260,978		
1981	21,121	21,121	Silver	64,661		
			Gold	247,177		
1980	11,419	11,419	Silver	36,885		
			Gold	136,869		

SUMMARY TOTALS: 093H 010

NAME: **MOSQUITO CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	92,826 tonnes	102,323 tons
Milled:	92,826 tonnes	102,323 tons
Recovery:		
Silver:	303,249 grams	9,750 ounces
Gold:	1,090,316 grams	35,054 ounces

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MINFILE NUMBER: 093H 012	NAME: WINGDAM	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1938	2,872	
		Commodity
		Gold
		Grams Recovered
		37,212
		Kilograms Recovered

SUMMARY TOTALS: 093H 012

	NAME: WINGDAM	
	<u>Metric</u>	<u>Imperial</u>
Mined:	2,872 tonnes	3,166 tons
Milled:	tonnes	tons
Recovery:		
Gold:	37,212 grams	1,196 ounces
Comments:		
1938:	Mined in 1937-38: Prospectus-Gold Ridge Resources, 1987	

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MINFILE NUMBER: 093H 017		NAME: PTARMIGAN CREEK QUARRY		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	45,082		Limestone		45,082,000
1983	442,155		Limestone Railroad Ballast		37,612,893 404,542,520
1982	228,642		Limestone Railroad Ballast		39,903,426 188,738,750
1981	269,203		Limestone Railroad Ballast		32,263,116 236,940,110
1980	450,921		Limestone Railroad Ballast		52,614,635 398,306,270
1979	321,357		Limestone Railroad Ballast		45,232,682 276,124,610
1978	229,178		Limestone Railroad Ballast		38,371,191 190,807,180
1977	362,182		Limestone Railroad Ballast		17,533,158 344,648,980
1976	242,426		Limestone Railroad Ballast		40,694,491 201,731,440
1975	167,612		Limestone Railroad Ballast		20,473,344 147,139,020
1974	177,122		Limestone Railroad Ballast		21,546,543 155,575,810
1973	29,503		Limestone		29,503,460
1972	141,082		Limestone Railroad Ballast		28,266,060 112,815,670
1971	28,852		Limestone		28,852,102
1970	194,831		Limestone Railroad Ballast		15,360,451 179,470,060
1969	13,061		Limestone		13,060,738
1967	7,359		Limestone		7,359,082

SUMMARY TOTALS: 093H 017

NAME: **PTARMIGAN CREEK QUARRY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	3,350,568 tonnes	3,693,369 tons
Milled:		
Recovery:		
Limestone:	513,729,372 kilograms	1,132,579,076 pounds
Railroad Ballast:	2,836,840,420 kilograms	6,254,160,800 pounds

Comments: 1983: Some rubble and riprap included with railroad ballast figures.

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MINFILE NUMBER: 093H 019		NAME: CARIBOO GOLD QUARTZ		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		1	Silver	29,859		
			Gold	170,476		
1966	26,197	26,197	Silver	105,439		
			Gold	631,764		
1965	37,203	37,203	Silver	100,649		
			Gold	575,126		
1964	26,880	26,880	Silver	118,689		
			Gold	617,923		
1963	31,481	31,481	Silver	98,441		
			Gold	569,434		
1962	35,052	35,052	Silver	101,831		
			Gold	579,262		
1961	34,422	34,422	Silver	99,934		
			Gold	629,618		
1960	35,483	35,483	Silver	84,973		
			Gold	608,219		
1959	42,262	42,262	Silver	96,668		
			Gold	551,954		
1958	60,672	60,672	Silver	114,521		
			Gold	867,525		
1957	82,368	82,368	Silver	141,425		
			Gold	1,205,459		
1956	85,929	85,929	Silver	139,124		
			Gold	1,278,862		
1955	98,567	98,567	Silver	124,070		
			Gold	1,289,655		
1954	78,699	78,699	Silver	93,682		
			Gold	1,095,541		
1953	59,161	59,161	Silver	72,501		
			Gold	813,032		
1952	64,535	64,535	Silver	69,577		
			Gold	764,325		
1951	63,358	63,358	Silver	74,118		
			Gold	758,105		
1950	55,056	55,056	Silver	66,965		
			Gold	686,443		
1949	61,500	61,500	Silver	59,096		
			Gold	651,421		
1948	66,883	66,883	Silver	72,221		
			Gold	707,811		
1947	80,397	80,397	Silver	53,186		
			Gold	625,979		
1946	41,026	41,026	Silver	36,670		
			Gold	438,335		
1945	32,673	31,458	Silver	35,209		
			Gold	419,144		
1944	29,785	29,974	Silver	32,876		
			Gold	422,628		
1943	32,497	34,699	Silver	42,207		
			Gold	506,015		
1942	85,422	85,171	Silver	102,951		
			Gold	1,182,443		
1941	117,259	117,259	Silver	126,527		
			Gold	1,509,335		
1940	101,446	101,446	Silver	106,901		
			Gold	1,364,737		
1939	99,978	99,978	Silver	112,655		
			Gold	1,424,828		
1938	93,021	93,021	Silver	101,956		
			Gold	1,334,505		
1937	62,889	62,889	Silver	70,977		
			Gold	908,830		
1936	46,841	46,956	Silver	52,751		
			Gold	575,934		
1935	39,253	39,388	Silver	51,942		

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
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MINFILE NUMBER: 093H 019		NAME: CARIBOO GOLD QUARTZ			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	39,253	39,388	Gold	529,560		
1934	25,807	25,123	Silver Gold	34,182 319,210		
1933	17,934	17,934	Silver Gold	25,598 238,249		
1902	8		Gold	124		

SUMMARY TOTALS: 093H 019

NAME: **CARIBOO GOLD QUARTZ**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,951,944 tonnes	2,151,650 tons
Milled:	1,952,428 tonnes	2,152,183 tons
Recovery:	Silver: 2,850,371 grams	91,641 ounces
	Gold: 26,851,811 grams	863,305 ounces

Comments: 1967: 8 bullion bars shipped (unknown weight).

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MINFILE NUMBER: 093H 023	NAME: HARDSCRABBLE	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1941	281	281	Tungsten		6,789
1939	790	790	Tungsten		3,174

SUMMARY TOTALS: 093H 023

NAME: **HARDSCRABBLE**

		<u>Metric</u>		<u>Imperial</u>
	Mined:	1,071 tonnes		1,181 tons
Recovery:	Milled:	1,071 tonnes		1,181 tons
	Tungsten:	9,963 kilograms		21,965 pounds

Comments: 1939: 272 tonnes of this were actually mined in 1938.

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MINFILE NUMBER: 093H 037	NAME: PERKINS	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1902	9		Gold	311	

SUMMARY TOTALS: 093H 037

	NAME: PERKINS	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 9 tonnes	10 tons
	Milled: tonnes	tons
Recovery:	Gold: 311 grams	10 ounces

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MINFILE NUMBER: 093J 020	NAME: GISCOME RAPIDS	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1947	18		Clay		18,000
SUMMARY TOTALS: 093J 020		NAME: GISCOME RAPIDS			
		<u>Metric</u>	<u>Imperial</u>		
	Mined:	18 tonnes	20 tons		
	Milled:	tonnes	tons		
Recovery:	Clay:	18,000 kilograms	39,683 pounds		
Comments:	1947:	Minister of Mines Annual Report 1947 p. 208.			

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MINFILE NUMBER: 093J 025		NAME: GISCOME		STATUS: Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1997	50,000	50,000	Limestone		50,000,000
1996	30,000	30,000	Limestone		30,000,000
1995	50,000	50,000	Limestone		50,000,000
1994	50,000	50,000	Limestone		50,000,000
1991	36,000		Limestone		36,000,000
1990	18,988		Limestone		18,988,000

SUMMARY TOTALS: 093J 025

NAME: **GISCOME**

	<u>Metric</u>	<u>Imperial</u>
Mined:	234,988 tonnes	259,030 tons
Milled:	180,000 tonnes	198,416 tons
Recovery:	Limestone: 234,988,000 kilograms	518,059,715 pounds

Comments:

- 1997: Approximate yearly rate.
- 1996: Approximate yearly rate.
- 1995: Approximate yearly rate.
- 1994: Approximate yearly rate. Information Circular 1996-1, page 9.

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MINFILE NUMBER: 093K 001	NAME: FRANCOIS	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1953	1,587		Perlite		1,587,000

SUMMARY TOTALS: 093K 001

	NAME: FRANCOIS		
	<u>Metric</u>	<u>Imperial</u>	
	1,587 tonnes	1,749 tons	
Recovery:	Mined:		
	Milled:		
	Perlite:	1,587,000 kilograms	3,498,735 pounds
Comments:	1953:	For period 1949-1953.	

MINFILE PRODUCTION REPORT
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MINFILE NUMBER: 093K 005	NAME: GENESIS	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1968	34		Jade/Nephrite		3,420

SUMMARY TOTALS: 093K 005

NAME: **GENESIS**

Metric

Imperial

Mined:
Milled:

34 tonnes
tonnes

37 tons
tons

Recovery:

Jade/Nephrite:

3,420 kilograms

7,540 pounds

Comments:

1968: Minister of Mines Annual Report 1968.

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MINFILE NUMBER: 093K 006		NAME: ENDAKO		STATUS: Producer	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
2002	9,500,000	9,500,000	Molybdenum		5,565,499
1998	9,804,670	9,804,670	Molybdenum		5,119,000
1997	9,583,025	9,583,025	Molybdenum		5,708,405
1996	9,979,550	9,979,550	Molybdenum		6,511,363
1995	10,559,900	10,429,900	Molybdenum		6,536,376
1994	10,374,700	10,384,700	Molybdenum		7,441,877
1993	9,526,600	9,584,500	Molybdenum		6,900,849
1992	9,680,000	9,702,000	Molybdenum		6,436,401
1991	9,927,000	9,543,000	Molybdenum		6,916,165
1990	10,903,500	9,702,900	Molybdenum		6,474,993
1989	10,095,000	9,264,300	Molybdenum		5,538,544
1988	7,481,300	7,549,200	Molybdenum		5,287,316
1987	4,594,600	4,716,500	Molybdenum		4,209,218
1986	1,468,800	1,466,000	Molybdenum		826,027
1985			Molybdenum		1,247,269
1984			Molybdenum		1,822,689
1983			Molybdenum		1,223,038
1982	2,847,000	2,948,000	Molybdenum		2,574,426
1981	11,500,000	10,492,000	Molybdenum		3,420,413
1980	11,454,200	11,103,147	Molybdenum		4,651,559
1979	4,630,271	4,768,000	Molybdenum		3,738,530
1978	10,603,873	10,656,643	Molybdenum		6,030,967
1977	11,579,427	9,084,501	Molybdenum		7,691,235
1976	10,948,030	8,520,235	Molybdenum		6,766,374
1975	8,543,821	8,543,821	Molybdenum		5,564,104
1974	7,949,660	6,811,143	Molybdenum		7,249,029
1973	9,324,952	7,662,082	Molybdenum		6,411,414
1972	5,817,231	5,789,653	Molybdenum		4,967,040
1971	8,148,787	8,210,929	Molybdenum		4,139,565
1970	12,577,784	9,178,895	Molybdenum		7,060,650
1969	10,624,766	8,734,375	Molybdenum		7,529,760
1968	7,433,862	5,984,698	Molybdenum		5,450,779
1967	10,042,524	6,148,898	Molybdenum		6,221,585
1966	8,241,842	5,044,854	Molybdenum		6,001,060
1965	4,665,832	2,074,731	Molybdenum		2,476,962

SUMMARY TOTALS: 093K 006

NAME: **ENDAKO**

	<u>Metric</u>	<u>Imperial</u>
Mined:	280,412,507 tonnes	309,101,875 tons
Milled:	252,966,850 tonnes	278,848,217 tons
Recovery:	Molybdenum: 181,710,481 kilograms	400,602,924 pounds

Comments:

2002: Personal Communication - P. Wojdak, Smithers Regional Geologist.
 1985: 1983-1985: No milling.
 1974: 1966-1974: recalculated conversion to kilograms molybdenum.
 1965: Molybdenum recovery from Annual Report, 1965, p. 136.

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MINFILE NUMBER: **093K 036** NAME: **SNOWBIRD** 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	1		Antimony		6,982
1941	1		Antimony		4,003
1940	1		Antimony		20,275
1939	45	45	Antimony		16,135

SUMMARY TOTALS: 093K 036

NAME: **SNOWBIRD**

	<u>Metric</u>	<u>Imperial</u>
Mined:	48 tonnes	53 tons
Milled:	45 tonnes	50 tons
Recovery: Antimony:	47,395 kilograms	104,488 pounds

Comments:
1953: Unknown tonnage mined.
1941: Unknown tonnage mined.
1940: Unknown tonnage mined.

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MINFILE NUMBER:	093K 049		NAME:	PINCHI LAKE MERCURY		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>		
1975	65,526	113,117	Mercury		402,335		
1974	153,687	156,594	Mercury		486,966		
1973	82,367	147,899	Mercury		428,913		
1972	236,815	183,792	Mercury		518,716		
1971	339,021	223,591	Mercury		689,388		
1970	411,363	354,047	Mercury		788,605		
1969		715	Mercury		721,348		
1968	130,250	81,953	Mercury		166,160		
1944	86,745	86,745	Mercury		277,577		
1943	306,084	306,084	Mercury		762,991		
1942	161,207	161,207	Mercury		469,557		
1941	61,843	61,843	Mercury		243,173		
1940	11,552	11,552	Mercury		160,384		

SUMMARY TOTALS: 093K 049

NAME: **PINCHI LAKE MERCURY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	2,046,460 tonnes	2,255,836 tons
Milled:	1,889,139 tonnes	2,082,419 tons
Recovery:	Mercury: 6,116,113 kilograms	13,483,717 pounds
Comments:	1969: Concentrates.	