

MINFILE NUMBER: **082LNE001**

NATIONAL MINERAL INVENTORY:

NAME(S): **W.P.L.**, JOSS MOUNTAIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 48 31 N
LONGITUDE: 118 25 44 W
ELEVATION: 2042 Metres

NORTHING: 5629515
EASTING: 399326

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized outcrop, situated on the southeastern slopes of Joss Mountain about 3 kilometres from its peak, approximately 26 kilometres south-southwest of Revelstoke (Assessment Report 14805).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Arsenopyrite
ASSOCIATED: Garnet
ALTERATION: Garnet
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Disseminated Vein
CLASSIFICATION: Skarn
TYPE: E08 Carbonate-hosted talc 001 Rare element pegmatite - LCT family

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Marble
Granitic Gneiss
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: OUTCROP REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1984
SAMPLE TYPE:	Rock		
COMMODITY	GRADE		
Silver	5.7000	Grams per tonne	
Gold	1.8500	Grams per tonne	
Copper	0.4000	Per cent	

COMMENTS: Highest values.
REFERENCE: Assessment Report 14805.

CAPSULE GEOLOGY

The W.P.L. occurrence is situated near a marble-granitic gneiss contact where massive pyrrhotite-chalcopyrite-arsenopyrite is hosted in a skarn zone. The massive mineralization is exposed on fault planes, while disseminated sulphides occur in schists and green garnetiferous zones; small veins cut these zones. Hostrocks belong to the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex.

Rock samples taken from the mineralized zones analysed as high as 0.4 per cent copper, 1.85 grams per tonne gold and 5.7 grams per tonne silver (Assessment Report 14805).

BIBLIOGRAPHY

EMPR ASS RPT *14805
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1994/01/05
DATE REVISED: / /

CODED BY: GO
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE002**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT GRIFFIN**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L15E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 55 55 N
LONGITUDE: 118 33 44 W
ELEVATION: 2133 Metres

NORTHING: 5643419
EASTING: 390222

LOCATION ACCURACY: Within 1 KM

COMMENTS: Summit of Mount Griffin, about 26 kilometres west of Revelstoke
(Geological Survey of Canada Memoir 296, page 157).

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O03 Muscovite pegmatite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Pegmatite
Granitic Gneiss
Para Gneiss
Ortho Gneiss
Garnet Sillimanite Schist
Amphibolite
Marble
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Small amounts of books of amber sheet-mica, up to 20 centimetres across, have been observed in pegmatites on Mount Griffin, located about 26 kilometres west of Revelstoke. The mica is fractured and twinned and contains inclusions.

Surrounding rocks comprise Precambrian-Paleozoic(?) Shuswap Metamorphic Complex granitic gneiss, paragneiss, garnet sillimanite schist, amphibolite, marble, orthogneiss and quartzite.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58; 1988, pp. 49-54
EMPR OF 1990-30
GSC MAP 1059A
GSC MEM *296, p. 157
GSC OF 481

DATE CODED: 1994/01/10
DATE REVISED: 1994/01/10

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE003**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **MILE 8**, DEER, X5,
COLBY

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L10W 082L10E
BC MAP:

MINING DIVISION: Vernon

LATITUDE: 50 42 40 N
LONGITUDE: 118 45 17 W
ELEVATION: 609 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5619169
EASTING: 376113

LOCATION ACCURACY: Within 500M

COMMENTS: Located on a ridge between Kingfisher and Danforth creeks, 2.75 kilometres south-southwest of the Kingfisher deposit (082LNE007), 7 kilometres west of Mabel Lake and about 57 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Podiform
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
DIMENSION: 130 x 2 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Shuswap Metamorphic Complex

LITHOLOGY: Marble
Quartzite
Granitoid Gneiss
Augen Gneiss
Sillimanite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: PIT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1975
SAMPLE TYPE: Grab
COMMODITY GRADE
Lead 0.7000 Per cent
Zinc 7.7000 Per cent

COMMENTS: Sample from a small pit.
REFERENCE: Geology in British Columbia 1975, page G27.

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

Sphalerite-pyrrhotite-pyrite +/- galena mineralization at the Mile 8 showing is hosted in marble and is exposed intermittently for a distance of 130 metres along layering strike. The maximum exposed width of the mineralized zone is approximately 2 metres. A grab sample from a small pit analysed 7.7 per cent zinc and 0.7 per cent lead (Geology in British Columbia 1975, page G27). The next outcrops of marble, approximately 300 metres to the north, contain two small mineralized pods (see Mile 8 North, 082LNE009).

BIBLIOGRAPHY

EMPR ASS RPT 2169

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 4
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1975, pp. 11-18
EMPR GEOL *1975-G18-G30
EMPR PF (see Kingfisher, 082LNE007)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE004**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **DAKOTA, ELK 3, MIDNIGHT 2,
FX 5, FC 2-3, COLBY**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L10W 082L10E
BC MAP:

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 43 18 N
LONGITUDE: 118 45 16 W
ELEVATION: 762 Metres

NORTHING: 5620342
EASTING: 376160

LOCATION ACCURACY: Within 500M

COMMENTS: Located on a ridge between Kingfisher and Danforth creeks, 1.75 kilometres south-southwest of the Kingfisher deposit (082LNE007), 7 kilometres west of Mabel Lake and about 58 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Calcareous Quartzite
Calc-silicate Gneiss
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

Mineralization in the Dakota zone is hosted in calcareous quartzite. The quartzite is intermittently exposed over a length of approximately 400 metres and contains spotty sphalerite and galena along its contacts with calcsilicate gneiss and marble. The mineralized sections are generally of low grade and are narrow with a maximum width of 1 to 2 metres.

BIBLIOGRAPHY

EMPR ASS RPT 2169, *4934
EMPR FIELDWORK 1975, pp. 11-18
EMPR GEOL *1975-G18-G30
EMPR PF (see Kingfisher, 082LNE007)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE005**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **STAR 4**, FX 5-6, FX 20

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10W 082L10E
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 43 28 N
LONGITUDE: 118 45 10 W
ELEVATION: 792 Metres

NORTHING: 5620648
EASTING: 376285

LOCATION ACCURACY: Within 500M

COMMENTS: Located on a ridge between Kingfisher and Danforth creeks, 1.5 kilometres south-southwest of the Kingfisher deposit (082LNE007), 7 kilometres west of Mabel Lake and about 57 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Calcareous Quartzite
Calc-silicate Gneiss
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

Mineralization at the Star 4 showing is hosted in calcareous quartzite and is about 300 metres north of the Dakota occurrence (082LNE004). The quartzite contains spotty sphalerite and galena along its contacts with calcsilicate gneiss and marble.

BIBLIOGRAPHY

EMPR ASS RPT 2169, 4934
EMPR FIELDWORK 1975, pp. 11-18
EMPR GEOL *1975-G18-G30
EMPR PF (see Kingfisher, 082LNE007)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE006**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **STAR 13**, SILVER KING 26, SILVER KING 21,
STAR 3

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 43 26 N
LONGITUDE: 118 44 27 W
ELEVATION: 746 Metres

NORTHING: 5620566
EASTING: 377127

LOCATION ACCURACY: Within 500M

COMMENTS: Located on a ridge between Kingfisher and Danforth creeks, 1 kilometre south of the Kingfisher deposit (082LNE007), 7 kilometres west of Mabel Lake and about 59 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartzite
Biotite Gneiss
Calc-silicate Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

Mineralization at the Star 13 showing is hosted in quartzite near the contact with biotite gneiss and calcsilicate gneiss and comprises sphalerite-pyrrhotite-pyrite +/- galena.

BIBLIOGRAPHY

EMPR ASS RPT 2169
EMPR FIELDWORK 1975, pp. 11-18
EMPR GEOL *1975-G18-G30
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE007**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **KINGFISHER**, BLACK JACK, FX,
FC, CENTRAL, LEN,
COLBY, BRIGHT STAR, RIDGE,
MAIN, EAST, BST

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:

MINING DIVISION: Vernon

LATITUDE: 50 43 51 N
LONGITUDE: 118 44 02 W
ELEVATION: 838 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5621327
EASTING: 377635

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Central zone, on a ridge between Kingfisher and Danforth creeks, 8 kilometres west of the north end of Mabel Lake, about 60 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena
ASSOCIATED: Calcite Diopside Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Layered Podiform
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: S01 Broken Hill-type Pb-Zn-Ag±Cu E13 Irish-type carbonate-hosted Zn-Pb
SHAPE: Cylindrical
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Unknown			Shuswap Metamorphic Complex Unnamed/Unknown Informal

LITHOLOGY: Marble
Quartzite
Garnet Biotite Gneiss
Calc-silicate Gneiss
Amphibolite
Hornblende Gneiss
Garnet Biotite Sillimanite Gneiss
Granite
Pegmatite
Granite Pegmatite Sill

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: KINGFISHER REPORT ON: Y
CATEGORY: Indicated YEAR: 1974
QUANTITY: 1670000 Tonnes
COMMODITY GRADE
Lead 0.5800 Per cent
Zinc 2.6000 Per cent
REFERENCE: Statement of Material Facts 25/10/74, Colby Mining Limited.

CAPSULE GEOLOGY

The Kingfisher occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers.

The rocks on the Kingfisher property have been divided into six metamorphic units and two intrusive units. The sequence of metamorphic units probably represents an originally conformable package of sedimentary rocks (Geology in British Columbia 1975).

CAPSULE GEOLOGY

Unit 6 is the structurally lowest unit and consists dominantly of medium to coarse grained garnet biotite gneiss that is intruded by many granite-pegmatite sills and dikes. Some white quartzite, marble and rare calcsilicate gneiss layers occur in unit 6. Unit 5 consists of fairly pure marble interlayered with quartzite. Included in the quartzite are some garnet biotite gneiss layers, and along the quartzite-marble contacts, coarse grained calcsilicate gneiss. The more impure quartzite of unit 5 (those containing diopside and/or feldspar) may be mineralized with sulphides. Unit 4 is a heterogeneous unit comprised predominantly of calcsilicate gneiss, but includes rusty weathering to clean white marble, garnet biotite gneiss, minor quartzite and minor amphibolite. The rocks of unit 4 host sulphide mineralization in the Central zone which forms the Kingfisher deposit. Unit 3 is a massive white marble up to several hundred metres thick. Included in the marble are a number of discontinuous layers of garnet biotite gneiss and hornblende gneiss. The most significant mineralization in the Central zone is contained within unit 3. Unit 2 consists of rusty weathering garnet-biotite-sillimanite gneiss with minor amounts of associated calcsilicate gneiss. Granite-pegmatite bodies, up to several hundred metres in diameter, commonly intrude unit 2. Unit 1 consists of hornblende gneiss, garnet biotite gneiss and some calcsilicate gneiss.

Units 1 to 6 are intruded by numerous granite-pegmatite and aplite dikes, sills and irregular stock-like bodies. These range in size from small discontinuous sills a few metres in length to almost equidimensional stock-like intrusions several hundred metres in diameter. A number of north trending quartz feldspar porphyry dikes also cut across the layered rocks and are generally 5 to 10 metres in width.

In summary, the succession of metasedimentary rocks in the Kingfisher area includes biotite gneiss, interlayered quartzite and marble, and calcsilicate gneiss overlain by a thick marble layer (unit 3). These units are in turn overlain by biotite gneiss and minor associated calcsilicate gneiss, and then calcareous hornblende gneiss and amphibolite of unit 1. The rocks have been subjected to high grade regional metamorphism; aluminous gneisses contain sillimanite and occasionally kyanite. The rocks are indicative of upper amphibolite and/or granulite facies of metamorphism (Geology in British Columbia 1975).

The structure in the area is dominated by four northwest-trending faults. These separate the layered rocks into five distinct blocks. The apparent movement of the faults is right-lateral strike-slip with displacement ranging from approximately 100 to 700 metres. The faults cut across an earlier mineral foliation which strikes north-northeast and dips at varying angles to the southeast. This foliation is everywhere parallel or almost parallel with layering. Mineral lineations contained within the foliation plunge to the southwest. Two types of mesoscopic folds are common. The first is typically tight to isoclinal and plunges to the southwest, parallel to the mineral lineations. The second type is more open and has a more variable attitude, although generally it also plunges to the southwest.

Mineralization in the region is restricted to five main areas. These are referred to as Mile 8 (082LNE003), Dakota (082LNE004), Central (this description), Cominco Showings (082LNE019) and Mile 12 (082LNE010). The Don (082LNE008) and Star 13 (082LNE006) showings are also nearby.

Mineralization in the Central zone is in marble of unit 3 and calcsilicate and quartzite of units 4 and 5. Mineralization in marbles consists of dark, medium-grained sphalerite, with varying amounts of pyrrhotite and minor pyrite disseminated through a medium to coarse grained white calcite matrix. Galena is also common, though much finer grained and more widely scattered. The sulphide concentration varies considerably across a mineralized zone, commonly producing a crude layering.

Mineralized quartzites almost invariably contain calcareous minerals in accessory amounts. Dark sphalerite with pyrrhotite is concentrated generally in thin layers. Galena is more common in quartzites than in the marbles, although it is always subsidiary to sphalerite. The sulphide concentration varies from widely scattered individual grains to almost massive intergrowths.

Mineralization in calcsilicate gneisses shows gradational features between that in marble and that in quartzite. Sphalerite, pyrrhotite, pyrite +/- galena may be evenly distributed through a coarse grained calcite-diopside rock or may tend to concentrate in layers in a more quartz-rich rock.

In general, mineralized sections in quartzites are of lower grade but are more continuous along strike with the layering than those in marble. Discontinuous high-grade pods are common in the

CAPSULE GEOLOGY

marbles.

Indicated reserves on the Kingfisher property are 1.67 million tonnes grading 0.58 per cent lead and 2.6 per cent zinc (Statement of Material Facts 25/10/74, Colby Mining Limited).

Crude ore was shipped in 1966 and 1976 from surface workings.

BIBLIOGRAPHY

EMPR AR 1964-105-108,172; 1965-165; 1968-222
EMPR ASS RPT 578, 579, 2169, 4933, 4934, 4945, 5369, 6214, 6254, 6551
EMPR BC METAL MM00423, MM00432
EMPR EXPL 1975-E54; 1977-E82
EMPR FIELDWORK 1974, pp. 7,8; 1975, pp. 11-18
EMPR GEM 1969-298; 1974-91-94
EMPR GEOL *1975, pp. G18-G30
EMPR MAP 65 (1989)
EMPR OF 1992-1; 1994-1, 2000-22
EMPR PF (Property description by D.G. White (1974), Kamloops District Geologist; Gilmour, W.R. (1974): Report on the Diamond Drill Program at the Black Jack Property; Reeve, A.F. (1964): A Preliminary Report on the Kingfisher, Elk and Julie Claim Groups; Various memoranda regarding property geology, assays, reserves, drillhole results and claim location maps; Drillhole location map; Rock sample photographs, drillhole sections and location maps)
EMR MIN BULL MR 223 (B.C. 67)
EMR MP CORPFILE (Bright Star Trio Mining Ltd.; Dakota Silver Mines Ltd.; Colby Mines Ltd.)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GCNL #238,#226, 1974; #238,#200, 1976
Placer Dome File
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/12

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE008**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **DON**, DON 2, RICH 1

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 44 08 N
LONGITUDE: 118 43 25 W
ELEVATION: 853 Metres

NORTHING: 5621835
EASTING: 378372

LOCATION ACCURACY: Within 500M

COMMENTS: Located on a ridge between Kingfisher and Danforth creeks, 1 kilometre north-northeast of the Kingfisher deposit (082LNE007), 7 kilometres west of Mabel Lake and about 61 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartzite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

Mineralization at the Don showing is hosted in quartzite near the contact with marble and comprises sphalerite-pyrrhotite-pyrite +/- galena.

BIBLIOGRAPHY

EMPR ASS RPT *2169
EMPR FIELDWORK 1975, pp. 11-18
EMPR GEOL *1975-G18-G30
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE009**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **MILE 8 NORTH**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10W 082L10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 42 49 N
LONGITUDE: 118 45 09 W
ELEVATION: 647 Metres

NORTHING: 5619443
EASTING: 376276

LOCATION ACCURACY: Within 500M

COMMENTS: Located on a ridge between Kingfisher and Danforth creeks, 2.25 kilometres south-southwest of the Kingfisher deposit (082LNE007), 7 kilometres west of Mabel Lake and about 57 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Podiform
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Marble
Granitoid Gneiss
Augen Gneiss
Sillimanite Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

At the Mile 8 North showing, two small pods of sphalerite-pyrrhotite-pyrite +/- galena mineralization is hosted in marble. Approximately 300 metres to the south is the Mile 8 occurrence (082LNE003).

BIBLIOGRAPHY

EMPR FIELDWORK 1975, pp. 11-18
EMPR GEOL *1975-G18-G30
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE010**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **MILE 12, KING 3, KING,**
D, R, BST 23-24,
COLBY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:
LATITUDE: 50 44 32 N
LONGITUDE: 118 40 57 W
ELEVATION: 762 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Located near Danforth Creek where the creek swings north, 4 kilometres east-northeast of the Kingfisher deposit (082LNE007) and 4 kilometres west of Mabel Lake, about 64 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5622509
EASTING: 381290

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Podiform
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Marble
Granitoid Gneiss
Augen Gneiss
Sillimanite Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE: Amphibolite

INVENTORY

ORE ZONE: OUTCROP
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY
Lead 0.4900 Per cent
Zinc 5.3000 Per cent
REFERENCE: Geology in British Columbia 1975, page G29.

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

At the Mile 12 showing, a small outcrop of marble is well mineralized with sphalerite-pyrrhotite-pyrite +/- galena through its entire exposed width of 2 metres. A grab sample from this zone yielded 0.49 per cent lead and 5.3 per cent zinc (Geology in British Columbia 1975, page G29).

BIBLIOGRAPHY

EMPR ASS RPT 579, *2169, 5369
EMPR FIELDWORK 1975, pp. 11-18
EMPR GEOL *1975-G18-G30
EMPR PF (see Kingfisher, 082LNE007)
GSC MAP 1059A
GSC MEM 296

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 14
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE011**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIC, TOR**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 11 N
LONGITUDE: 118 25 49 W
ELEVATION: 1798 Metres

NORTHING: 5647432
EASTING: 399575

LOCATION ACCURACY: Within 500M

COMMENTS: The common boundary of the Vic 27 and 28 claims, 750 metres west of Victor Creek and about 17 kilometres west of Revelstoke (Assessment Report 2079).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite

COMMENTS: Traces of chalcopyrite.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Shuswap Metamorphic Complex

LITHOLOGY: Mafic Gneiss
Marble
Quartzite
Schist
Calc-silicate
Pegmatite
Pegmatite Dike
Mafic Felsic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The Vic occurrence area is underlain by high grade metamorphic rocks of the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex consisting of gneisses and schists with interlayers of quartzite, marble and calcsilicate rocks. Narrow lenses of pegmatite occur along bedding planes and as dikes along joints and faults. Fine grained felsic to mafic dikes occur in northwest trending, late fractures.

Abundant pyrrhotite, minor pyrite and traces of chalcopyrite occur along the margins of marble beds and as lenses in mafic gneisses.

BIBLIOGRAPHY

EMPR ASS RPT *2079, 2080, 2081
EMPR GEM 1969-338,339
EMPR OF 1990-30
GSC MAP 143A; 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE012**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOLY**, LH, GUNN,
MAL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L15W
BC MAP:

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 05 N
LONGITUDE: 118 47 49 W
ELEVATION: 869 Metres

NORTHING: 5647810
EASTING: 373827

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, on the southeast slopes of Queest Mountain west of Legerwood Creek and 3 kilometres north of the Trans-Canada Highway, about 20 kilometres north-northeast of Sicamous (Assessment Report 9585).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite Pyrite
COMMENTS: Trace chalcopyrite.
ASSOCIATED: Quartz
ALTERATION: Sericite Clay
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated Shear
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Meta Granitoid
Quartzofeldspathic Gneiss
Granodiorite Gneiss
Altered Granodiorite Gneiss
Lamprophyre Dike
Augen Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1980
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Molybdenum	0.4000 Per cent

COMMENTS: Values range from 0.1 to 0.4 per cent.
REFERENCE: Assessment Report 9585.

CAPSULE GEOLOGY

At the Moly occurrence, a 6-metre long adit intersects a mineralized and altered shear zone in relatively massive metagranitoid rock. The shear zone is sericite and clay altered, and strikes northerly with 20 to 45 degree dips to the northwest. The metagranitoid grades conformably into quartzofeldspathic gneiss which is in a gradational contact with unaltered granodiorite gneiss. Below the adit, altered granodiorite gneiss has been intruded by lamprophyre dikes. The Devonian hostrocks are part of the Eagle Bay Assemblage (Formation).

The pyritic shear zone is 1.2 metres wide and is wholly within the metagranitoid. Molybdenite, with trace quantities of fine-grained chalcopyrite, occurs as smears and coatings on shear fractures and as fine to medium-grained flakes and blebs in metagranitoid between shears. Chip samples of visibly mineralized areas of the main shear zone analysed from 0.1 to 0.4 per cent molybdenum over narrow intervals (Assessment Report 9585).

Diamond drilling cored quartzofeldspathic gneiss, altered

CAPSULE GEOLOGY

granodiorite gneiss, augen gneiss and altered shear zones. The metagranitoid was not intersected but the shear zone (unmineralized locally) was intersected at the projected downdip depth. Visible molybdenite and chalcopyrite in crosscutting quartz veins and structures were also intersected.

BIBLIOGRAPHY

EMPR ASS RPT 3163, 4369, *9585
EMPR BULL 9, p. 67
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1971-435; 1973-104
EMPR OF 1990-30
EMPR PF (Prospectus, Darva Resources and Development Ltd., Nov. 15, 1972, Report on the Moly Group by R.H.D. Philp)
GSC MAP 143A; 1059A
GSC MEM 296
GSC OF 481; 637

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE013**

NATIONAL MINERAL INVENTORY:

NAME(S): **NOREEN**, OK, ROLET

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 40 20 N
LONGITUDE: 118 41 01 W
ELEVATION: 823 Metres

NORTHING: 5614728
EASTING: 381035

LOCATION ACCURACY: Within 500M

COMMENTS: Trenches, located 500 metres west of Mabel Lake, about 38 kilometres north-northeast of Enderby (Assessment Report 22652).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Galena Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartzite
Marble
Biotite Schist
Biotite Gneiss
Amphibolite
Pegmatite Sill
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The Noreen property is underlain by a sequence of Precambrian-Paleozoic(?) Shuswap Metamorphic Complex rocks that strike north-northeast with shallow to moderate dips generally to the northwest. Mesoscopic isoclinal and broad folds complicate and possibly repeat the sequence which is dominated by biotite schist and quartzite with lesser amounts of marble, biotite gneiss and very minor amphibolite. Pegmatite dikes and sills commonly invade all rocks.

Stratabound disseminated mineralization comprising pyrrhotite, and lesser amounts of sphalerite, galena and pyrite is hosted in quartzite.

BIBLIOGRAPHY

EMPR ASS RPT 6678, *22652
EMPR EXPL 1978-E96
EMPR GEM 1973-102
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE014**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUEEST**, COYOTE

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L15W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 39 N
LONGITUDE: 118 49 25 W
ELEVATION: 1585 Metres

NORTHING: 5648906
EASTING: 371981

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized outcrop situated on the southeast slopes of Queest Mountain, 2 kilometres west of Legerwood Creek and 6 kilometres north of the Trans-Canada Highway, about 20 kilometres north-northeast of Sicamous (Assessment Report 9567).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Proterozoic-Paleoz.
Unknown

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY:

Granodiorite
Granodiorite Porphyry
Quartz Sericite Schist
Quartz Mica Schist
Phyllite
Quartzite
Siliceous Schist
Hornblende Biotite Schist
Porphyroblastic Garnet Sillimanite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: OUTCROP

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1980

COMMODITY

Molybdenum

GRADE

0.1300 Per cent

REFERENCE: Assessment Report 9567.

CAPSULE GEOLOGY

Regionally, the Queest property lies near the western margin of the Shuswap Metamorphic Complex. The occurrence area is underlain by Hadrynian(?) to Paleozoic deformed metasedimentary and metavolcanic rocks of the Eagle Bay Assemblage (Formation). This sequence has been intruded by two plutonic phases and later stage derivatives.

The stratigraphic sequence is comprised of quartz sericite schist, quartz mica schist, phyllite, quartzite, siliceous schist, hornblende biotite schist, porphyroblastic garnet-(sillimanite)-mica schist and granodiorite porphyry. Molybdenite mineralization occurs as disseminated thin hexagonal flakes up to 3 millimetres in diameter within granodiorite porphyry. A grab sample of coarse-grained molybdenite along a fracture within sericitized granodiorite analysed 0.13 per cent molybdenum (Assessment Report 9567).

BIBLIOGRAPHY

EMPR ASS RPT *9567

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 20
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1972-84
EMPR OF 1990-30
GSC MAP 143A; 1059A
GSC MEM 296
GSC OF 481; 637

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE015**

NATIONAL MINERAL INVENTORY: 082L16 Gem1

NAME(S): **MOUNT BEGBIE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

MINING DIVISION: Revelstoke
Vernon
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 53 18 N
LONGITUDE: 118 14 52 W
ELEVATION: 2408 Metres

NORTHING: 5638149
EASTING: 412235

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, in a pegmatite dike at the lower edge of a snowfield on the northeast side of Mount Begbie, about 12 kilometres south of Revelstoke (Geological Survey of Canada Memoir 296, page 162).

COMMODITIES: Gemstones Beryl

MINERALS

SIGNIFICANT: Tourmaline Beryl
ASSOCIATED: Garnet Lepidolite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O01 Rare element pegmatite - LCT family

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mesozoic Proterozoic-Paleoz.			Unnamed/Unknown Informal Monashee Complex

LITHOLOGY: Pegmatite
Pegmatite Dike
Micaceous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Numerous tourmaline-bearing pegmatite dikes occur in laminated, gently dipping micaceous quartzites of the Precambrian-Paleozoic(?) Monashee Complex (Group). The quartzites, which cap Mount Begbie, also contain disseminated tourmaline as an accessory component. The pegmatites are considered to be of Mesozoic age and occur as lenticular sill-like sheets. Some dikes cut sharply across bedding planes along fault-fractures. Conspicuous amounts of black tourmaline (schorl) are evident in the dikes and occur in thick, prismatic crystals up to 7.6 centimetres long.

One small dike (up to 1.5 metres wide) on the northeast side of Mount Begbie peak, on the lower edge of a snowfield, contains black, green and red varieties of tourmaline, green beryl, garnet and lepidolite. The crystals of tourmaline are scattered and are up to 2.5 centimetres.

BIBLIOGRAPHY

GSC EC GEOL *23, pp. 60,61
GSC MAP 235A; 1059A
GSC MEM *296, p. 162
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE016**

NATIONAL MINERAL INVENTORY:

NAME(S): **CLANWILLIAM LAKE**, SUMMIT LAKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 06 N
LONGITUDE: 118 22 28 W
ELEVATION: 868 Metres

NORTHING: 5647203
EASTING: 403492

LOCATION ACCURACY: Within 1 KM

COMMENTS: Quartzite, located just north of Clanwilliam Lake and the Trans-Canada Highway, 13 kilometres west of Revelstoke (Geological Survey of Canada Memoir 296, page 162).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
COMMENTS: Quartzite.

MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Pure, coarsely crystalline quartzite is common among strata of the Precambrian-Paleozoic(?) Monashee Complex. These rocks are free from iron-bearing minerals, appear translucent white in hand specimen, and are so homogeneous as to be almost devoid of internal bedding or lamination. Such quartzite may be a potential source of silica for industrial uses where a high degree of purity is demanded. Near Clanwilliam Lake, relatively pure quartzites occur.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58
EMPR OF 1987-15, p. 44; 1990-30
GSC BULL 195
GSC MAP 143A; 1059A
GSC MEM *296, p. 162
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE017**

NATIONAL MINERAL INVENTORY:

NAME(S): **VICTOR LAKE QUARTZITE**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 48 N
LONGITUDE: 118 24 04 W
ELEVATION: 1097 Metres

NORTHING: 5646682
EASTING: 401609

LOCATION ACCURACY: Within 1 KM

COMMENTS: Quartzite, located just north of Victor Lake and the Trans-Canada Highway, about 15 kilometres west of Revelstoke (Geological Survey of Canada Memoir 296, page 162).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
COMMENTS: Quartzite.
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Pure, coarsely crystalline quartzite is common among strata of the Precambrian-Paleozoic(?) Monashee Complex. These rocks are free from iron-bearing minerals, appear translucent white in hand specimen, and are so homogeneous as to be almost devoid of internal bedding or lamination. Such quartzite may be a potential source of silica for industrial uses where a high degree of purity is demanded. Near Victor Lake, relatively pure quartzites occur.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58
EMPR OF 1987-15, p. 44; 1990-30
GSC BULL 195
GSC MAP 143A; 1059A
GSC MEM *296, p. 162
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE018**

NATIONAL MINERAL INVENTORY:

NAME(S): **THREE G'S**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 04 N
LONGITUDE: 118 24 38 W
ELEVATION: 609 Metres

NORTHING: 5645336
EASTING: 400920

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of Three G's claim, located between Three Valley and Victor lakes, about 16 kilometres west of Revelstoke (Property File - Thomas, 1991).

COMMODITIES: Graphite Rare Earths

MINERALS

SIGNIFICANT: Graphite Monazite
ASSOCIATED: Quartz Pyrrhotite Pyrite Mica
COMMENTS: Also annite and siderophyllite (trioctahedral micas of ideal composition).

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Quartzite
Calc-silicate Gneiss
Marble
Sillimanite Kyanite Schist
Carbonatite
Garnet Sillimanite Schist
Granitic Gneiss
Para Gneiss
Amphibolite
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
Monashee RELATIONSHIP:
PHYSIOGRAPHIC AREA: Shuswap Highland
GRADE: Amphibolite

INVENTORY

ORE ZONE: OUTCROP
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY: Graphite
GRADE: 3.8000
Per cent
YEAR: 1990

COMMENTS: Grade is actually 3.8 per cent carbon.
REFERENCE: Property File - Private report by G.E. Thomas, 1991.

CAPSULE GEOLOGY

At the Three G's occurrence, a graphite-monzonite showing occurs near the Monashee decollement. Allochthonous cover rocks comprise Precambrian-Paleozoic(?) Shuswap Metamorphic Complex granitic gneiss, paragneiss, garnet sillimanite schist, minor quartzite, marble and amphibolite, which are separated by the Monashee decollement from underlying Precambrian-Paleozoic(?) Monashee Complex (Group) calcsilicate gneiss, impure marble, sillimanite kyanite schist and local carbonatite. Pegmatites intrude the Shuswap rock series. X-ray diffraction studies identified graphite, quartz, pyrrhotite, pyrite, and annite and siderophyllite which are trioctahedral micas of ideal composition. Geochemical analysis also yielded 271,000 parts per million lanthanum, 272 parts per million praseodymium, 825 parts per million neodymium, 83 parts per million samarium, 40 parts per million gadolinium, 6 parts per million

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 25
REPORT: RGEN0100

CAPSULE GEOLOGY

dysprosium and 596 parts per million thorium (Thomas, 1991).
A rock grab sample from the showing analysed 3.8 per cent carbon
(Thomas, 1991).

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58
EMPR OF 1988-13; 1988-26; 1990-30
EMPR PF (*Private report, G.E. Thomas, June 23, 1991)
GSC MAP 143A; 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/10

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE019**

NATIONAL MINERAL INVENTORY: 082L10 Zn1

NAME(S): **COMINCO SHOWINGS**, KINGFISHER 7, COLBY

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 44 10 N
LONGITUDE: 118 42 45 W
ELEVATION: 762 Metres

NORTHING: 5621879
EASTING: 379158

LOCATION ACCURACY: Within 500M

COMMENTS: Trenched area on a ridge between Kingfisher and Danforth creeks, 1.5 kilometres east-northeast of the Kingfisher deposit (082LNE007), 6 kilometres west of Mabel Lake and about 62 kilometres north-northeast of Vernon (Geology in British Columbia 1975).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena
ALTERATION: Diopside
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Podiform
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: E05 Sandstone Pb

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Marble
Granitoid Gneiss
Augen Gneiss
Sillimanite Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence area lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex, a belt of high grade metamorphic rocks. Rocks on the property comprise a heterogeneous package of granitoid gneiss, augen gneiss, sillimanite-bearing schist and prominent marble and quartzite layers. See Kingfisher (082LNE007) for a detailed regional geology description.

A trenched area at the Cominco Showings occurrence exposes three mineralized zones. These zones are less than 1 to 1.25 metres in width and a maximum of 8 metres in length. Mineralization consists of dark sphalerite, pyrite, pyrrhotite and minor galena in a diopside-rich, rusty-weathering marble.

BIBLIOGRAPHY

EMPR ASS RPT 578, 579, 2169
EMPR FIELDWORK 1975, pp. 11-18
EMPR PF (see Kingfisher, 082LNE007)
EMPR GEOL *1975-G18-G30
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/13

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE020**

NATIONAL MINERAL INVENTORY:

NAME(S): **CRAN 3**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 45 35 N
LONGITUDE: 118 01 49 W

NORTHING: 5623612
EASTING: 427334

ELEVATION: 780 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Pit #2 located between Highway 23 and the Columbia River, about 28 kilometres south of Revelstoke (Drawing #2, Assessment Report 6816).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Uraninite Autunite
ASSOCIATED: Quartz Feldspar Biotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Pegmatite
TYPE: O02 Rare element pegmatite - NYF family

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Monashee Complex

LITHOLOGY: Quartz Feldspar Granitic Pegmatite
Biotite Quartz Feldspar Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: PIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1977

SAMPLE TYPE: Chip

COMMODITY

GRADE

Uranium

0.0800

Per cent

REFERENCE: Assessment Report 6816.

CAPSULE GEOLOGY

Fine to medium grained quartz feldspar granitic pegmatites are interlayered with biotite-quartz-feldspar gneiss of the Precambrian-Paleozoic(?) Monashee Complex. Foliation of the gneiss strikes 080 to 100 degrees and dips 10 to 30 degrees north. Some of the pegmatites crosscut the gneiss as dikes and sills, however, the largest pegmatites are conformable lenses with thicknesses to 5 metres and strike lengths to 70 metres.

Radioactivity is associated with the granitic pegmatites, with anomalous zones up to several metres long and a few centimetres wide. Mineralization consists of uraninite crystals and fluorescent lemon-yellow to green autunite smears on fractures.

At the Cran 3 showing, a chip sample from pit #2 assayed 0.08 per cent uranium (Assessment Report 6816). The pegmatite is comprised of coarse-grained quartz, feldspar and biotite with several biotite clots. Several radioactive zones, with supporting uranium assays, occur over an area up to 2.5 kilometres southeast of pit #2.

BIBLIOGRAPHY

EMPR ASS RPT *6816
EMPR EXPL 1978-99,100
EMPR OF *1990-32
GSC MAP 235A; 1059A
GSC MEM 296

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 28
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/29

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE021**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT ODIN**, MT ODIN

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 31 34 N
LONGITUDE: 118 12 40 W
ELEVATION: 2103 Metres

NORTHING: 5597829
EASTING: 414155

LOCATION ACCURACY: Within 500M

COMMENTS: Unit M3a (quartzite) of the Thor-Odin gneiss dome, on the southerly slopes of Mount Odin about 1 kilometre west of Bearpaw Lake, 52 kilometres south of Revelstoke (Geological Survey of Canada Bulletin 195, Figure 2).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
COMMENTS: Quartzite.

MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Precambrian-Paleozoic(?) Monashee Complex (Group) rocks are exposed in the Thor-Odin gneiss dome, a part of a large domal complex in the central, eastern part of the Shuswap Metamorphic Complex. The dome is characterized by a structural-stratigraphic succession divided into four lithologically distinct zones. These are: the Core Zone, comprising migmatitic and granitic gneisses in the central part of the gneiss dome; the Mantling Zone, well-differentiated metasedimentary rocks ranging from quartzite and marble through calcsilicate gneiss to pelitic schist; the Fringe Zone, in part overlapping, and in part surrounding the Mantling Zone and characterized by large amounts of granitic and pegmatitic rocks; and the Supracrustal Zone that lies outside the gneiss complex, and forms a cover to the gneisses.

Pure, coarsely crystalline quartzite is common among strata of the Monashee Complex. These rocks are free from iron-bearing minerals, appear translucent white in hand specimen, and are so homogeneous as to be almost devoid of internal bedding or lamination. Such quartzite may be a potential source of silica for industrial uses where a high degree of purity is demanded. Relatively pure quartzites in the Mantling Zone of the Thor-Odin dome occur on the southerly slopes of Mount Odin.

BIBLIOGRAPHY

EMPR OF 1987-15, p. 44
GSC BULL *195
GSC MAP 1059A
GSC MEM *296, p. 162
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/24

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE022**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINGSTON CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 42 12 N
LONGITUDE: 118 04 52 W
ELEVATION: 1981 Metres

NORTHING: 5617393
EASTING: 423657

LOCATION ACCURACY: Within 500M

COMMENTS: Quartzite in the Mantling Zone of the Thor-Odin dome on a ridge of Mount Hall, west of Upper Arrow Lake and 1.5 kilometres east of Coursier Lake, north of Pingston Creek, about 33 kilometres south of Revelstoke (Geological Survey of Canada Memoir 296, page 162).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
COMMENTS: Quartzite.

MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Pure, coarsely crystalline quartzite is common among strata of the Precambrian-Paleozoic(?) Monashee Complex. These rocks are free from iron-bearing minerals, appear translucent white in hand specimen, and are so homogeneous as to be almost devoid of internal bedding or lamination. Such quartzite may be a potential source of silica for industrial uses where a high degree of purity is demanded. Relatively pure quartzites occur on a ridge west of Upper Arrow Lake, 1.5 kilometres east of Coursier Lake and north of Pingston Creek.

BIBLIOGRAPHY

EMPR OF 1987-15, p. 44
GSC BULL 195
GSC MAP 235A; 1059A
GSC MEM *296, p. 162
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/24

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE023**

NATIONAL MINERAL INVENTORY:

NAME(S): **OM**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10E 082L10W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 42 36 N
LONGITUDE: 118 45 01 W
ELEVATION: 609 Metres

NORTHING: 5619038
EASTING: 376423

LOCATION ACCURACY: Within 500M

COMMENTS: Sample site located between Danforth and Kingfisher creeks, near a road, 2.5 kilometres south of the Kingfisher deposit (082LNE007), about 57 kilometres north-northeast of Vernon (Assessment Report 17470).

COMMODITIES: Marble

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Shuswap Metamorphic Complex

LITHOLOGY: Marble
Calc-silicate Gneiss
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The OM property is underlain by the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex. Locally, thick beds (averaging 61 metres) of marble, calcsilicate gneiss and quartzite are complexly folded and faulted, striking generally north-northeast and dipping southeast. Foliation is subparallel to the layering.

Relatively pure marble containing few sulphides and impurities was sampled and yielded 51.98 per cent CaO, 0.14 per cent Fe₂O₃, 2.33 per cent SiO₂, and 41.81 per cent loss on ignition (Assessment Report 14740). Trace galena and white mica was observed in outcrop.

BIBLIOGRAPHY

EMPR ASS RPT *17470
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE024**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHERPA**

MINING DIVISION: Vernon

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082L10E
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 39 38 N
 LONGITUDE: 118 39 16 W
 ELEVATION: 518 Metres

NORTHING: 5613384
 EASTING: 383066

LOCATION ACCURACY: Within 500M

COMMENTS: Drillholes located near the east shore of Mabel Lake, about 38 kilometres north-northeast of Enderby (Assessment Report 13727).

COMMODITIES: Zinc Lead Silver Gold

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Pyrite Galena

ASSOCIATED: Diopside Phlogopite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Massive
 CLASSIFICATION: Sedimentary Hydrothermal
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Calcareous Quartzite
 Marble
 Calc-silicate Gneiss
 Pelitic Gneiss
 Quartz Feldspar Gneiss
 Graphitic Quartz Feldspar Gneiss
 Sillimanite Gneiss
 Sillimanite Garnet Gneiss
 Amphibolite
 Biotite Quartz Feldspar Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Drill Core

COMMODITY

	<u>GRADE</u>	
Silver	4.6000	Grams per tonne
Gold	0.4100	Grams per tonne
Lead	0.1800	Per cent
Zinc	4.2600	Per cent

COMMENTS: Highest values across variable widths.

REFERENCE: Assessment Report 13727.

CAPSULE GEOLOGY

The property area is within the Precambrian-Paleozoic(?) Monashee Complex (Group) near the eastern edge of the Shuswap Metamorphic Complex, and underlain by a sequence of quartzite, calcsilicate and pelitic gneiss, marble and amphibolite that trends generally northward and dips at various angles to the east. A pronounced foliation, essentially parallel to layering, suggests that the apparently simple homoclinal sequence that hosts the mineral occurrence is, in fact, part of a complex, isoclinally folded metasedimentary package.

Mineralization at the Sherpa occurrence includes disseminated to massive pyrrhotite and sphalerite with minor amounts of pyrite and galena in a generally impure calcareous quartzite unit within pure to siliceous marble. The unit trends northeastward and dips moderately steeply to the southeast into the hillside; its exposed length is in

CAPSULE GEOLOGY

excess of 500 metres.

Diamond drilling intersected a mineralized interval that ranges in thickness from 17 to 27 metres. It is dominated by calcareous to relatively pure quartzite with thin interlayers of unmineralized marble, quartzite and gneiss. Mineralization consists dominantly of rounded, disseminated grains and irregular blebs of pyrrhotite and sphalerite in a medium grained diopside-phlogopite quartzite and also of highly irregular, composite grains interstitial to the quartz grains. Locally, pyrite forms rounded, composite grains within massive pyrrhotite, and galena occurs in trace amounts. As well, pyrrhotite and sphalerite are disseminated in coarse, granular marble units that are within or along the edge of mineralized quartzite layers. Total sulphide content in both quartzite and marble ranges from trace amounts to 30 to 40 per cent. Highest assay values across variable widths from the mineralized intervals were 4.26 per cent zinc, 0.18 per cent lead, 4.6 grams per tonne silver and 0.41 gram per tonne gold (Assessment Report 13727).

Drilling also cored rare sillimanite garnet gneiss, sillimanite gneiss, quartz feldspar gneiss, graphitic quartz feldspar gneiss and biotite quartz feldspar gneiss.

BIBLIOGRAPHY

EMPR ASS RPT 11760, *13727
EMPR FIELDWORK *1985, pp. 56-58
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE025**

NATIONAL MINERAL INVENTORY:

NAME(S): **REVELSTOKE**, REVELSTOKE FLAGSTONE, BEGBIE FLAGSTONE

STATUS: Producer Open Pit

MINING DIVISION: Revelstoke

REGIONS: British Columbia

NTS MAP: 082L16E

BC MAP:

LATITUDE: 50 56 52 N

LONGITUDE: 118 12 40 W

ELEVATION: 541 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry, 4.5 kilometres south of Revelstoke, on the west side of the Columbia River between Highway 23 and the river.

UTM ZONE: 11 (NAD 83)

NORTHING: 5644716

EASTING: 414923

COMMODITIES: Flagstone Dimension Stone Building Stone Aggregate

MINERALS

SIGNIFICANT: Unknown

COMMENTS: Muscovite mica schist.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

Stratabound

CLASSIFICATION: Sedimentary

Industrial Min.

TYPE: R08 Flagstone

R15 Crushed rock

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Monashee Complex

LITHOLOGY: Muscovite Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Monashee

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The Revelstoke flagstone quarry is situated within the Precambrian-Paleozoic(?) Monashee Complex. This small, one-man enterprise was started in 1957 and operates in the summers only. Drilling and blasting is done to loosen the slabs, followed by hand-splitting. The stone is a light grey muscovite mica schist which is supplied to building material companies in British Columbia and Alberta. Production averages about 200 tonnes per year (Z.D. Hora, personal communication, 1993).

BIBLIOGRAPHY

EMPR ENG INSP 1989
EMPR EXPL 1985-A46; 1986-A77; 1996-A13
EMPR INF CIRC 1988-6, p. 26; 1996-1, p. 10; 1997-1, p. 13; 1998-1, p. 15
EMPR MAP 65 (1989)
EMPR MINING 1986-1987, p. 82; 1988, p. 80
EMPR OF 1988-13; 1992-1; 1992-9; 1994-1
GSC MAP 235A; 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1991/02/01
DATE REVISED: 1993/12/30

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LNE026**

NATIONAL MINERAL INVENTORY: 082L16 Phs1

NAME(S): **THREE VALLEY GAP**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 55 34 N
LONGITUDE: 118 23 33 W
ELEVATION: 1400 Metres

NORTHING: 5642532
EASTING: 402136

LOCATION ACCURACY: Within 500M

COMMENTS: Located along the Victor Lake main logging road, which joins the Trans-Canada Highway from the south, approximately 3 kilometres east of Three Valley Gap.

COMMODITIES: Rare Earths

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Carbonatite.
ALTERATION TYPE: Fenitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive
CLASSIFICATION: Magmatic
TYPE: N01 Carbonatite-hosted deposits

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Carbonatite
Leucocratic Syenite
Pelite
Fenite
Pelitic Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Carbonatites and leucosyenites are found along the Victor Lake main logging road, which joins the Trans-Canada Highway from the south, approximately 3 kilometres east of Three Valley Gap. Outcrop is limited to roadcuts, at elevations between 900 and 1500 metres. The road is in good shape and passable by conventional vehicles.

Tentatively the hostrocks are assigned to the Precambrian-Paleozoic(?) Monashee Complex. The carbonatites and syenites occur as thin, discontinuous bedding-parallel lenses in pelitic metasedimentary rocks. Both the intrusions and the hostrocks have been metamorphosed to upper amphibolite facies (sillimanite zone) and the pelites have been extensively migmatized. Carbonatite lenses are generally 20 to 60 centimetres in width and have 10 to 30 centimetre thick envelopes of mafic fenites developed between them and adjacent rocks. Everywhere observed, the fenites are in direct contact with, and gradational to, syenites. Commonly the carbonatite occurs as lenses within the fenite.

The carbonatites are primarily composed of calcite, biotite, apatite, perthite, hornblende, augite and traces of sphene. Fenites generally contain abundant augite, hornblende, calcite, scapolite and plagioclase. The leucosyenites generally contain potassium feldspar, plagioclase, augite and sphene. The origin of the leucosyenites is unclear; unambiguous field relationships are not exposed. These syenites may actually be syenitic fenites, rather than intrusive phases.

BIBLIOGRAPHY

EMPR FIELDWORK 1984, p. 93
EMPR OF *1987-17, pp. 63-64
GSC MAP 143A; 1059A
GSC MEM 296, pp. 31,32

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 36
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481; 658

DATE CODED: 1990/12/17
DATE REVISED: 1994/01/06

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE027**

NATIONAL MINERAL INVENTORY:

NAME(S): **D.S. (REBAR)**, D.S., REBAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 38 59 N
LONGITUDE: 118 32 55 W
ELEVATION: 1646 Metres

NORTHING: 5612018
EASTING: 390521

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, located on the southeast slopes of Mount Mabel, 8.5 kilometres east of Mabel Lake and north and west of Tsuius Creek, about 42 kilometres east-northeast of Enderby (Assessment Report 14612).

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Stratabound
CLASSIFICATION: Sedimentary Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Shuswap Metamorphic Complex

LITHOLOGY: Calcareous Quartzite
Feldspathic Quartzite
Calc-silicate Gneiss
Siliceous Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SHOWING

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

23.0000

Grams per tonne

Lead

4.8000

Per cent

REFERENCE: Fieldwork 1985, page 58.

CAPSULE GEOLOGY

The area is within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex and underlain by a sequence of quartzite, calcsilicate and pelitic gneiss, marble and amphibolite that trends generally northward and dips at various angles to the east. A pronounced foliation, essentially parallel to layering, suggests that the apparently simple homoclinal sequence that hosts the mineral occurrence is, in fact, part of a complex, isoclinally folded metasedimentary package.

The D.S. (Rebar) showing is a rusty-weathering layer of calcareous quartzite a few metres thick that is exposed in a logging roadcut. The layer trends east and dips north at 10 to 15 degrees. Subrounded grains of galena and sphalerite are disseminated through the layer and irregular grains are interstitial to a mosaic of angular quartz grains. Scattered grains of diopside, biotite partially altered to chlorite, and barite are common in the quartzite. The quartzite layer is underlain by interbedded feldspathic quartzites and calcsilicate gneiss layers, and overlain by a rusty, impure siliceous marble and calcsilicate gneiss sequence.

Grab samples assayed up to 4.8 per cent lead, 23 grams per tonne silver and greater than 2 per cent barium (Fieldwork 1985, page 58).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 38
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 12779, 14227, 14347, 14612
EMPR FIELDWORK *1985, pp. 57-58
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637

DATE CODED: 1994/01/17
DATE REVISED: 1994/01/17

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE028**

NATIONAL MINERAL INVENTORY:

NAME(S): **MABEL LAKE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 35 44 N
LONGITUDE: 118 41 48 W
ELEVATION: 518 Metres

NORTHING: 5606225
EASTING: 379917

LOCATION ACCURACY: Within 5 KM

COMMENTS: Exposures of Sicamous Formation limestone, located on the east side of Mabel Lake, about 34 kilometres east of Enderby (Geological Survey of Canada Open File 637; Industrial Mineral File - McCammon, 1979).

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: P04 Crystalline flake graphite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Meta Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

On the east shore of Mabel Lake, bodies of metamorphosed limestone of the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex are impregnated with graphite.

BIBLIOGRAPHY

EMPR IND MIN FILE (*Graphite Occurrences in British Columbia (1979), No. 8, J.W. McCammon - Ministry Library)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC SUM RPT 1931 Part A, p. 67

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE029**

NATIONAL MINERAL INVENTORY:

NAME(S): **SICAMOUS**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L15W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 48 56 N
LONGITUDE: 118 59 49 W
ELEVATION: 366 Metres

NORTHING: 5631215
EASTING: 359326

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located near Sicamous (Industrial Mineral File - Letter from the Provincial Mineralogist to the Kamloops Resident Engineer, September 24, 1929, Graphite Occurrences in British Columbia (1979)).

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: P04 Crystalline flake graphite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Mount Ida	Silver Creek	

LITHOLOGY: Graphitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Graphitic schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Assemblage (Group)) has been reported to occur near Sicamous (McCammon, 1979).

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58; 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (*Graphite Occurrences in British Columbia,
J.W. McCammon (1979), No. 9 - Ministry Library; Letter from
D. Galloway, Provincial Mineralogist, 1929)
GSC MAP 143A; 1059A
GSC MEM 296
GSC OF 481; 637

DATE CODED: 1985/07/24
DATE REVISED: 1994/01/10

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE030**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUEEST MOUNTAIN**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L15W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 48 N
LONGITUDE: 118 53 45 W
ELEVATION: 1829 Metres

NORTHING: 5649312
EASTING: 366918

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located on Queest Mountain, 6 kilometres east of Shuswap Lake and about 18 kilometres north-northeast of Sicamous (Open File 1988-26, Figure 3, Map 2).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Kyanite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

In this area, Hadrynian(?) to Paleozoic rocks of the Eagle Bay Assemblage (Formation) consist mainly of metasedimentary strata. In the Queest Mountain area east of Shuswap Lake, kyanite prisms, 0.5 to 2.5 centimetres in length, are relatively common in schists, and sillimanite is absent.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1988-13; *1988-26; 1990-30
GSC MAP 143A; 1059A
GSC MEM 296, p. 16
GSC OF 481; 637

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE031**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT MACKENZIE**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 00 N
LONGITUDE: 118 06 04 W
ELEVATION: 1752 Metres

NORTHING: 5644842
EASTING: 422653

LOCATION ACCURACY: Within 5 KM

COMMENTS: Showing located on the west flank of Mount Mackenzie, east of the Columbia River, about 8 kilometres south-southeast of Revelstoke (Geological Survey of Canada Memoir 296, page 36).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite Staurolite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Lardeau	Broadview	

LITHOLOGY: Kyanite Staurolite Muscovite Schist
Muscovite Gneiss
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

Blades of kyanite and prisms of staurolite occur together at one locality on the west flank of Mount Mackenzie, southeast of Revelstoke. They appear as subhedral crystals from 0.3 to 2.5 centimetres long with random orientation in layers of muscovite schist, intercalated with muscovite gneiss and quartzite. The hostrocks belong to the Lower Paleozoic Broadview Formation (Lardeau Group).

BIBLIOGRAPHY

EMPR BULL 60
EMPR OF 1988-13
GSC MAP 235A; 1059A
GSC MEM *296, p. 36
GSC OF 481; 658

DATE CODED: 1985/07/24
DATE REVISED: 1993/12/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE032**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEDGE CREEK**

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 31 33 N
LONGITUDE: 118 10 07 W
ELEVATION: 1676 Metres

NORTHING: 5597750
EASTING: 417167

LOCATION ACCURACY: Within 500M

COMMENTS: Typical exposures along the southern branch of Ledge Creek, about 52 kilometres south of Revelstoke (Open File 1988-26, Figure 3, Map 2).

COMMODITIES: Sillimanite

MINERALS

SIGNIFICANT: Sillimanite
ASSOCIATED: Garnet
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Metamorphic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Monashee Complex

LITHOLOGY: Sillimanite Para Gneiss
Sillimanite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

Precambrian-Paleozoic(?) Monashee Complex (Group) rocks are exposed in the Thor-Odin gneiss dome, a part of a large domal complex in the central, eastern part of the Shuswap Metamorphic Complex. The dome is characterized by a structural-stratigraphic succession divided into four lithologically distinct zones. These are: the Core Zone, comprising migmatitic and granitic gneisses in the central part of the gneiss dome; the Mantling Zone, well-differentiated metasedimentary rocks ranging from quartzite and marble through calcsilicate gneiss to pelitic schist; the Fringe Zone, in part overlapping, and in part surrounding the Mantling Zone and characterized by large amounts of granitic and pegmatitic rocks; and the Supracrustal Zone that lies outside the gneiss complex, and forms a cover to the gneisses.

In the Mount Odin-Mount Symonds-Mount Fosthall area, paragneisses and schists of the Mantling Zone are present which contain abundant coarse garnet and prismatic sillimanite. Typical exposures occur along the southern branch of Ledge Creek. These gneisses and schists may contain up to 15 per cent sillimanite which is present in the form of prismatic crystals up to 10 centimetres long, and abundant garnet porphyroblasts, up to 2.5 centimetres in size.

BIBLIOGRAPHY

EMPR OF *1988-26
GSC BULL 195
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1993/12/29
DATE REVISED: / /

CODED BY: GO
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE033**

NATIONAL MINERAL INVENTORY:

NAME(S): **CRAN 2**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 46 50 N
LONGITUDE: 118 02 24 W
ELEVATION: 790 Metres

NORTHING: 5625938
EASTING: 426681

LOCATION ACCURACY: Within 500M

COMMENTS: Radioactive sample located between Highway 23 and the Columbia River, about 25 kilometres south of Revelstoke (Drawing No. 4, Assessment Report 6816).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Uraninite
ASSOCIATED: Biotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Pegmatite
TYPE: O02 Rare element pegmatite - NYF family

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Monashee Complex

LITHOLOGY: Quartz Feldspar Granitic Pegmatite
Biotite Quartz Feldspar Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1977

SAMPLE TYPE: Chip

COMMODITY

GRADE

Uranium

0.3500

Per cent

COMMENTS: An 8.0 centimetre wide sample.

REFERENCE: Assessment Report 6816.

CAPSULE GEOLOGY

Fine to medium grained quartz feldspar granitic pegmatites are interlayered with biotite-quartz-feldspar gneiss of the Precambrian-Paleozoic(?) Monashee Complex. Foliation of the gneiss strikes 080 to 100 degrees and dips 10 to 30 degrees north. Some of the pegmatites crosscut the gneiss as dikes and sills, however, the largest pegmatites are conformable lenses with thicknesses to 5 metres and strike lengths to 70 metres.

Radioactivity is associated with the granitic pegmatites, with anomalous zones up to several metres long and a few centimetres wide. At the Cran 2 showing, mineralization consists of uraninite associated with a biotite clot in an 8 centimetre wide pegmatite. A sample across the 8 centimetres assayed 0.35 per cent uranium (Assessment Report 6816).

BIBLIOGRAPHY

EMPR ASS RPT *6816
EMPR EXPL 1978-99,100
EMPR OF *1990-32
GSC MAP 235A; 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1987/04/02
DATE REVISED: 1993/12/30

CODED BY: LDJ
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE033**

MINFILE NUMBER: **082LNE034**

NATIONAL MINERAL INVENTORY:

NAME(S): **CRAN 4**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 44 15 N
LONGITUDE: 118 00 24 W
ELEVATION: 810 Metres

NORTHING: 5621118
EASTING: 428965

LOCATION ACCURACY: Within 500M

COMMENTS: Pit #3, about 1 kilometre west of Upper Arrow Lake and 32 kilometres south of Revelstoke (Drawing #4, Assessment Report 6816).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Uraninite Autunite
ASSOCIATED: Quartz Feldspar Muscovite Biotite Garnet
COMMENTS: Minor garnet.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite Magmatic
TYPE: O02 Rare element pegmatite - NYF family

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Quartz Feldspar Granitic Pegmatite
Biotite Quartz Feldspar Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: PIT

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1977
SAMPLE TYPE: Chip
COMMODITY: Uranium
GRADE
0.0280 Per cent

COMMENTS: A 5.0 metre long sample.
REFERENCE: Assessment Report 6816.

CAPSULE GEOLOGY

Fine to medium grained quartz feldspar granitic pegmatites are interlayered with biotite-quartz-feldspar gneiss of the Precambrian-Paleozoic(?) Monashee Complex. Foliation of the gneiss strikes 080 to 100 degrees and dips 10 to 30 degrees north. Some of the pegmatites crosscut the gneiss as dikes and sills, however, the largest pegmatites are conformable lenses with thicknesses to 5 metres and strike lengths to 70 metres.

Radioactivity is associated with the granitic pegmatites, with anomalous zones up to several metres long and a few centimetres wide. Mineralization consists of uraninite crystals and fluorescent lemon-yellow to green autunite smears on fractures.

At the Cran 4 showing, pit #3 exposes a 5 by 1 metre radioactive zone within a pegmatite composed of coarse-grained quartz, feldspar, muscovite, biotite and minor garnet. Chip samples along the 5 metre length assayed 0.028 per cent uranium (Assessment Report 6816).

BIBLIOGRAPHY

EMPR ASS RPT *6816
EMPR EXPL 1978-99-100
EMPR OF 1990-32
GSC BULL 195
GSC MAP 235A; 1059A
GSC MEM 296

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 46
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481; 658

DATE CODED: 1987/04/02
DATE REVISED: 1993/12/29

CODED BY: LDJ
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE035**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAMERON (JENKINS 2)**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 46 20 N
LONGITUDE: 118 06 24 W
ELEVATION: 980 Metres

NORTHING: 5625079
EASTING: 421967

LOCATION ACCURACY: Within 5 KM

COMMENTS: Symbol #7, located near the confluence of Cranberry and South Cranberry creeks, west of Highway 23, about 25 kilometres south of Revelstoke (Geological Survey of Canada Open File 658).

COMMODITIES: Thorium

Uranium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Biotite Quartz Feldspar Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The Cameron (Jenkins 2) occurrence area is underlain by layered biotite-quartz-feldspar gneiss of the Precambrian-Paleozoic(?) Monashee Complex. Stratabound thorium and uranium apparently occur in the gneiss.

BIBLIOGRAPHY

EMPR OF *1990-32
GSC MAP 1059A
GSC MEM 296
GSC OF 481; *658

DATE CODED: 1987/04/02
DATE REVISED: 1993/12/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE036**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAMERON (JENKINS 1)**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 47 40 N
LONGITUDE: 118 04 34 W
ELEVATION: 730 Metres

NORTHING: 5627519
EASTING: 424157

LOCATION ACCURACY: Within 5 KM

COMMENTS: Symbol #8, located along Cranberry Creek just west of Highway 23, about 23 kilometres south of Revelstoke (Geological Survey of Canada Open File 658).

COMMODITIES: Thorium Uranium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite Magmatic
TYPE: 002 Rare element pegmatite - NYF family

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Pegmatite
Biotite Quartz Feldspar Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The Cameron (Jenkins 1) occurrence area is underlain by biotite-quartz-feldspar schist, with interlayered quartzite and pegmatite, of the Precambrian-Paleozoic(?) Monashee Complex. Uranium and thorium apparently occur in pegmatites.

BIBLIOGRAPHY

EMPR OF *1990-32
GSC MAP 235A; 1059A
GSC MEM 296
GSC OF 481; *658

DATE CODED: 1987/04/02
DATE REVISED: 1993/12/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE037**

NATIONAL MINERAL INVENTORY:

NAME(S): **KAREN**, ARCL

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 50 30 N
LONGITUDE: 118 06 29 W
ELEVATION: 550 Metres

NORTHING: 5632803
EASTING: 421985

LOCATION ACCURACY: Within 500M

COMMENTS: Radioactive zone, close to Highway 23 and the Columbia River, about 17 kilometres south of Revelstoke (Plate No. 1, Assessment Report 7232).

COMMODITIES: Rare Earths Thorium

MINERALS

SIGNIFICANT: Monazite Allanite Euxenite

COMMENTS: Probable mineralogy.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Muscovite Schist
 Quartzite
 Quartz Muscovite Schist
 Quartz Biotite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Monashee

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The Karen occurrence area is underlain by quartz biotite schist and quartz muscovite schist of the Precambrian-Paleozoic(?) Monashee Complex. The strata strikes northwest and dips moderately to the northeast.

Radioactivity is associated with a narrow zone of weathered muscovite schist flanked by quartzite. A chip sample assayed 0.06 per cent thorium oxide, 0.0036 per cent uranium, 0.36 per cent lanthanum, 0.815 per cent cerium, 0.08 per cent praseodymium, 0.38 per cent neodymium, 0.05 per cent samarium and 0.05 per cent gadolinium (Assessment Report 7232). Probable mineralogy is monazite, allanite and euxenite (Assessment Report 11697).

BIBLIOGRAPHY

EMPR ASS RPT *7232, *11697
EMPR EXPL 1979-107; 1983-152
EMPR OF *1990-32
GSC MAP 235A; 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1987/04/03
DATE REVISED: 1993/12/30

CODED BY: LDJ
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE038**

NATIONAL MINERAL INVENTORY:

NAME(S): **MULVEHILL**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 51 15 N
LONGITUDE: 118 07 24 W
ELEVATION: 500 Metres

NORTHING: 5634209
EASTING: 420930

LOCATION ACCURACY: Within 500M

COMMENTS: Radioactive zone located very near Highway 23 and the Columbia River, about 16 kilometres south of Revelstoke (Industrial Mineral File - Sketch map).

COMMODITIES: Thorium Rare Earths Silica

MINERALS

SIGNIFICANT: Hematite Limonite Quartz
ALTERATION: Hematite Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Hydrothermal
TYPE: C04 Paleoplacer U-Au-PGE-Sn-Ti-diam-mag-gar-zir

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Monashee Complex

LITHOLOGY: Sericitic Quartzite
Quartzitic/Quartzose Schist
Sericitic Quartz Pebble Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The Mulvehill occurrence area is underlain by quartzitic schist of the Precambrian-Paleozoic(?) Monashee Complex. A 500 metre long radioactive zone, with up to 50,000 counts per second on a McPhar TV-1, occurs in impure sericitic quartzite. Foliation strikes 035 degrees and dips 24 degrees southeast. At the north end of the zone is an intraformational, stretched, sericitic quartz pebble conglomerate. Here, radioactivity, over 100,000 counts per second, is associated with hematite and limonite. Thorium and rare earths are the likely source of the radioactivity (see Karen, 082LNE037).

BIBLIOGRAPHY

EMPR OF *1990-32
GSC MAP 235A; 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1987/04/03
DATE REVISED: 1993/12/30

CODED BY: LDJ
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE039**

NATIONAL MINERAL INVENTORY:

NAME(S): **VICTOR LAKE**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 00 N
LONGITUDE: 118 23 04 W

NORTHING: 5645177
EASTING: 402752

ELEVATION: 1234 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing, located south of Victor Lake about 14 kilometres west of Revelstoke (Open File 1988-26, Figure 3, Map 2).

COMMODITIES: Sillimanite Kyanite

MINERALS

SIGNIFICANT: Sillimanite Kyanite

ASSOCIATED: Garnet

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Metamorphic Industrial Min.

TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Pelitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Monashee

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

Near Victor Lake and the Trans-Canada Highway, pelitic schists of the Precambrian-Paleozoic(?) Monashee Complex locally contain abundant prismatic sillimanite (around 10 per cent), kyanite and garnet.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58

EMPR OF *1988-26; 1990-30

GSC MAP 143A; 1059A

GSC MEM 296

GSC OF 481; 658

Hill, R.P. (1975): Structural and Petrological Studies in the Shuswap Metamorphic Complex near Revelstoke, British Columbia, Unpublished M.Sc. thesis, University of Calgary, Calgary, Alberta, 147 pp.

DATE CODED: 1988/03/29
DATE REVISED: 1993/12/29

CODED BY: JP
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE040**

NATIONAL MINERAL INVENTORY:

NAME(S): **ODIN CREEK**

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 33 59 N
LONGITUDE: 118 08 46 W
ELEVATION: 1676 Metres

NORTHING: 5602235
EASTING: 418832

LOCATION ACCURACY: Within 500M

COMMENTS: Typical exposures at the headwaters of Odin Creek, about 47 kilometres south of Revelstoke (Open File 1988, Figure 3, Map 2).

COMMODITIES: Sillimanite Garnet

MINERALS

SIGNIFICANT: Sillimanite Garnet
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Para Gneiss
Schist
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

Precambrian-Paleozoic(?) Monashee Complex (Group) rocks are exposed in the Thor-Odin gneiss dome, a part of a large domal complex in the central, eastern part of the Shuswap Metamorphic Complex. The dome is characterized by a structural-stratigraphic succession divided into four lithologically distinct zones. These are: the Core Zone, comprising migmatitic and granitic gneisses in the central part of the gneiss dome; the Mantling Zone, well-differentiated metasedimentary rocks ranging from quartzite and marble through calcsilicate gneiss to pelitic schist; the Fringe Zone, in part overlapping, and in part surrounding the Mantling Zone and characterized by large amounts of granitic and pegmatitic rocks; and the Supracrustal Zone that lies outside the gneiss complex, and forms a cover to the gneisses.

In the Mount Odin-Mount Symonds-Mount Fosthall area, paragneisses and schists of the Mantling Zone are present which contain abundant coarse garnet and prismatic sillimanite. Typical exposures occur near the headwaters of Odin Creek. These gneisses and schists may contain up to 15 per cent sillimanite which is present in the form of prismatic crystals up to 10 centimetres long, and abundant garnet porphyroblasts, up to 2.5 centimetres in size. In the same area, coarse garnet 1 to 2 centimetres in size may comprise up to 30 per cent of some amphibolite layers, but is more commonly present in quantities of 10 per cent or less.

BIBLIOGRAPHY

EMPR OF *1988-26
GSC BULL 195
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1993/12/29
DATE REVISED: / /

CODED BY: GO
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE041**

NATIONAL MINERAL INVENTORY:

NAME(S): **KINGFISHER MARBLE**, KINGFISHER, WALLED,
KINGFISHER CALCITE, CLIFTON, TSUIUS CREEK,
MABEL LAKE, FRANZ CAPITAL

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L10E

Open Pit

MINING DIVISION: Vernon

BC MAP:
LATITUDE: 50 36 37 N

UTM ZONE: 11 (NAD 83)

LONGITUDE: 118 38 09 W

NORTHING: 5607765

ELEVATION: 914 Metres

EASTING: 384258

LOCATION ACCURACY: Within 500M

COMMENTS: Drillhole #1, located approximately 3 kilometres east of the shore of
Mabel Lake, about 39 kilometres east of Enderby (Assessment Report
7797).

COMMODITIES: Marble Limestone Dolomite Dimension Stone Building Stone
Aggregate

MINERALS

SIGNIFICANT: Calcite Dolomite
ASSOCIATED: Silica Diopside Tremolite Garnet Pyrite
Wollastonite

COMMENTS: Possible wollastonite.

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratiform
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R04 Dimension stone - marble

R09 Limestone

R10 Dolomite

R15 Crushed rock

SHAPE: Tabular

MODIFIER: Fractured

DIMENSION: 500 x 25 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Northern marble horizons.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Shuswap Metamorphic Complex

LITHOLOGY: Marble
Dolomite
Limestone
Granitic Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: NO. 1

REPORT ON: Y

CATEGORY: Inferred

YEAR: 1990

QUANTITY: 2000000 Tonnes

COMMODITY

GRADE

Marble

100.0000 Per cent

COMMENTS: Marble horizons estimated to contain 2 million cubic metres over a
strike length of 500 metres and average thickness of 25 metres.

REFERENCE: Assessment Report 21154, 24607.

CAPSULE GEOLOGY

Dolomite and limestone outcrop on the south side of Tsuius
Creek, 3 kilometres east of Mabel Lake.

The Kingfisher Marble deposit comprises at least four distinct
marble horizons hosted in granitic gneiss of the Precambrian-
Paleozoic(?) Shuswap Metamorphic Complex. These units strike
northwest and dip 10 to 20 degrees southwest. The two northernmost
marble horizons, each in excess of 25 metres thick, have been traced
over a distance of 500 metres (Yorke-Hardy, 1990). Three short
holes, drilled on dolomite outcrop in the southernmost horizons,

CAPSULE GEOLOGY

intersected continuous dolomite to depths of up to 20.7 metres (Assessment Report 7797, Hole DDH 1).

The two northern horizons are comprised of coarse to fine grained whitish marble with alternating greyish streaks and sometimes with pale blue, yellowish or brownish tones. Possible bedding is reflected in bands of differing grain size and colour. The marble frequently contains siliceous inclusions as beds or nodules. A sample of marble analysed by x-ray diffraction identified calcite, dolomite, diopside, tremolite and possible wollastonite (Hardy BBT Ltd., 1990).

Extensive fracturing is evident in outcrop, suggesting most of the marble will not yield large blocks. However, a series of nine blocks ranging in size from 1.2 by 0.9 by 0.38 metres to 2.4 by 1.5 by 1.5 metres were successfully extracted from outcrop. One of the marble horizons is estimated to contain inferred reserves of 2 million cubic metres (approximately 2 million tonnes) over a strike length of 500 metres and an average thickness of 25 metres (Yorke-Hardy, 1990).

Drilling on the two southern horizons intersected light grey to white, medium-grained dolomite with some calcite stringers, minor pyrite and minor garnet, occurring sometimes as thin reddish brown bands. The dolomite also contains a few bands of very light grey recrystallized limestone and is underlain by white to very light grey limestone with occasional garnet and minor pyrite (Assessment Report 7797).

The two northern marble horizons were sampled and drilled by Clifton Development Ltd. of Kelowna in 1990, while the two southern horizons were drilled by Wallace Chaput in 1979. The marbles were evaluated for possible use as dimension stone.

Franz Capital Corporation Ltd. has been delivering stone products from the Kingfisher marble quarry to landscape and brick retail businesses and construction sites in British Columbia and Alberta. The company plans to improve productivity and increase production and sales to approximately 200 tonnes per month. Products manufactured and stockpiled include split stone bricks and marble rock and chips (Information Circular 1996-1, page 10).

Work in 1994 was concentrated in the southwest property area and consisted of bulk sampling and quarry development on the southernmost exposure of the white calcite marble zone. A total of 24,000 tonnes of calcite marble was excavated by drilling and blasting. Some 4000 tonnes has been crushed to minus 2 inch aggregate, 10,000 tonnes remains to be crushed, and 16,000 tonnes of rock is stored in boulder form (Assessment Report 24607).

BIBLIOGRAPHY

EM EXPL 1996-A13
EMPR ASS RPT *7797, *21154, *24607
EMPR INF CIRC 1991-1, p. 61; 1994-19, p. 17; 1995-1, p. 17; 1995-9, p. 10; 1996-1, p. 10; 1997-1, p. 13; 1998-1, p. 15
EMPR OF 1992-18; 1994-1
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637

DATE CODED: 1989/12/20
DATE REVISED: 1994/01/11

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE042**

NATIONAL MINERAL INVENTORY:

NAME(S): **SICAMOUS LIMESTONE**, SALMON ARM

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L15W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 49 58 N
LONGITUDE: 118 59 39 W
ELEVATION: 360 Metres

NORTHING: 5633124
EASTING: 359573

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on the site of sample 3 on the west bank of the Shuswap River across from Sicamous (Minister of Mines Annual Report 1960, page 144).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Carbonate
ASSOCIATED: Quartz Graphite Mica
MINERALIZATION AGE: Proterozoic-Paleoz.

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
COMMENTS: Limestone strikes northwest and dips northeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Mount Ida	Sicamous	

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE:

INVENTORY

ORE ZONE: ROADCUT
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Limestone
GRADE: 38.6600 Per cent
COMMENTS: Sampled across 274 metres. Grade given for calcium oxide.
REFERENCE: Minister of Mines Annual Report 1960, page 144, sample 3.

CAPSULE GEOLOGY

Various exposures of limestone of the Lower Paleozoic Sicamous Formation (Mount Ida Assemblage (Group)) occur on the west bank of the Shuswap River (Sicamous Narrows) just west of Sicamous. The limestone strikes northwest and dips northeast.

The limestone displays thin, grey and white platy bands with pods and lenses of quartz up to 0.2 metre thick. Graphite and mica occur along the partings. The limestone becomes impure and interbedded with other rocks to the west. A sample of chips taken at 6.1-metre intervals along the first 274 metres of a roadcut extending southward from Highway 1, along the west bank of the Shuswap River, analysed 38.66 per cent CaO, 1.34 per cent MgO, 23.84 per cent insolubles, 2.98 per cent R2O3, 2.47 per cent Fe2O3, 0.08 per cent MnO, 0.03 per cent P2O5, 0.28 per cent sulphur and 32.21 per cent ignition loss (Minister of Mines Annual Report 1960, page 144, Sample 3).

BIBLIOGRAPHY

EMPR AR 1960-143,144
EMPR FIELDWORK 1987, pp. 54-58; 1988, pp. 49-54
EMPR OF 1990-30
GSC MAP 143A; 1059A
GSC MEM 296, pp. 21-22
GSC OF 481; 637
CANMET RPT 811, Part 5, p. 187

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 56
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol. 13, pp. 44-53

DATE CODED: 1989/09/19
DATE REVISED: 1994/01/10

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE043**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARLIME** SOLSQUA

STATUS: Past Producer Open Pit

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082L15W

BC MAP:

LATITUDE: 50 51 38 N

LONGITUDE: 118 57 03 W

ELEVATION: 366 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Pit, near the village of Solsqua on the northwest side of Eagle River, about 4 kilometres north-northeast of Sicamous.

UTM ZONE: 11 (NAD 83)

NORTHING: 5636131

EASTING: 362706

COMMODITIES: Marl Travertine

MINERALS

SIGNIFICANT: Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Evaporite Industrial Min.

TYPE: H01 Travertine

SHAPE: Tabular

DIMENSION: 3 Metres

COMMENTS: Flat-lying marl layer.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Marl
Travertine
Soil
Calcareous Rock

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Marlime marl deposit is 4 kilometres north-northeast of Sicamous on the northwest side of the Eagle River. The deposit consists of a layer of marl up to 3 metres thick that is in places extensively contaminated by soil. The marl or travertine was deposited by groundwater seeping to the surface after passing through Hadrynian(?) to Paleozoic calcareous rocks of the Eagle Bay Assemblage (Formation).

The marl was mined by Marlime Ltd. of New Westminster between 1948 and 1950 for agricultural markets in the Fraser Valley.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58; 1988, pp. 49-54
EMPR OF 1990-30
GSC MAP 143A; 1059A
GSC MEM *296, p. 158
GSC OF 481; 637

DATE CODED: 1990/04/26
DATE REVISED: 1994/01/07

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE044**

NATIONAL MINERAL INVENTORY:

NAME(S): **VICTOR LAKE NORTH**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L16W
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 44 N
LONGITUDE: 118 23 20 W
ELEVATION: 1524 Metres

NORTHING: 5648395
EASTING: 402500

LOCATION ACCURACY: Within 500M

COMMENTS: Located 2.3 kilometres north of the Victor Lake showing (082LNE039),
about 14 kilometres west of Revelstoke (Open File 1988-26, Figure 3
Map 2).

COMMODITIES: Andalusite Kyanite

MINERALS

SIGNIFICANT: Andalusite Kyanite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Pegmatite Magmatic Industrial Min.
TYPE: I14 Five-element veins Ni-Co-As-Ag±(Bi, U)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Monashee Complex

LITHOLOGY: Pegmatite
Pelitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Precambrian-Paleozoic(?) Monashee Complex rocks are exposed at the Victor Lake North showing where pegmatites in pelitic schists are reported to contain andalusite crystals as large as 4 by 3 centimetres in size. In this area, quartz veins containing bright blue kyanite blades up to 6 centimetres long, are also common.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 54-58
EMPR OF *1988-26; 1990-30
GSC MAP 143A; 1059A
GSC MEM 296
GSC OF 481; 658
Hill, R.P. (1975): Structural and Petrological Studies in the Shuswap Metamorphic Complex near Revelstoke, British Columbia, Unpublished M.Sc. thesis, University of Calgary, Calgary, Alberta, 147 pp.

DATE CODED: 1994/01/18
DATE REVISED: / /

CODED BY: GO
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNE045**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRIFFIN LAKE**, REVELSTOKE

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L15E 082L16W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 48 N
LONGITUDE: 118 29 59 W
ELEVATION: 600 Metres

NORTHING: 5646818
EASTING: 394685

LOCATION ACCURACY: Within 500M

COMMENTS: Located about 14 kilometres west-southwest of Revelstoke, just east of Griffin Lake and the Trans Canada Highway.

COMMODITIES: Garnet

MINERALS

SIGNIFICANT: Garnet Almandine

COMMENTS: Traces of chalcopyrite.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer Industrial Min.

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Shuswap Metamorphic Complex

LITHOLOGY: Mafic Gneiss
Marble
Quartzite
Schist
Calc-silicate
Pegmatite
Pegmatite Dike
Mafic Felsic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area of the Griffin Lake garnet occurrence is underlain by high grade metamorphic rocks of the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex consisting of gneisses and schists with interlayers of quartzite, marble and calcsilicate rocks. Narrow lenses of pegmatite occur along bedding planes and as dikes along joints and faults. Fine grained felsic to mafic dikes occur in northwest trending, late fractures.

Garnets occur in an alluvial fan just east of Griffin Lake. A comparative investigation was made of the Griffin Lake garnets and those of the Emerald Creek commercial garnet deposit in Idaho (Beaty Geological Report, 1987 (located in Property File)).

The Griffin Lake or Revelstoke almandine garnets were considered to be comparable with the Emerald Creek garnets in almost every aspect except in their degree of fracturing and lack of euhedral crystals. This may be advantageous, however, as they may be capable of producing a sharper, more irregular and angular (ie, more abrasive) particle.

BIBLIOGRAPHY

EMPR OF 1990-30
EMPR PF (*Investigation of Revelstoke Garnet, Beaty Geological Ltd., 1987)
GSC MAP 143A; 1059A
GSC MEM 296
GSC OF 481; 658

DATE CODED: 1998/11/18
DATE REVISED: 1998/11/18

CODED BY: GJP
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW001**

NATIONAL MINERAL INVENTORY:

NAME(S): **FALKLAND**, SALMON RIVER

STATUS: Producer Open Pit

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082L12E

BC MAP:

LATITUDE: 50 30 40 N

LONGITUDE: 119 33 09 W

ELEVATION: 884 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Several quarries on the northeast side of Bolean Creek, 1 kilometre north of Falkland (Minister of Mines Annual Report 1952).

UTM ZONE: 11 (NAD 83)

NORTHING: 5598573

EASTING: 319028

COMMODITIES: Gypsum Anhydrite

MINERALS

SIGNIFICANT: Gypsum

Anhydrite

ASSOCIATED: Pyrite Quartz Albite Tourmaline Calcite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Podiform

Stratabound

Massive

Shear

CLASSIFICATION: Volcanogenic

Hydrothermal

Industrial Min.

TYPE: G03 Volcanogenic anhydrite/gypsum

SHAPE: Bladed

DIMENSION: Metres

STRIKE/DIP: 308/85N

TREND/PLUNGE:

COMMENTS: Shear zones.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Triassic-Jurassic

Nicola

Undefined Formation

LITHOLOGY:

Gypsum

Limy Argillite

Argillite

Schistose Volcanic Flow

Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Falkland gypsum deposits are located in a series of lenses along the northeast side of the Bolean Creek valley, north of Falkland.

Gypsum occurs along two parallel shear zones that are slightly discordant with a northwest striking and northeast dipping sequence of interbedded volcanic and argillaceous rocks of the Upper Triassic and? Lower Jurassic Nicola Group. The dip of the hostrocks varies from 45 degrees to vertical. The shear zones strike 308 degrees with steep and vertical dips to the northeast.

Volcanic rocks consist of a series of flows that are dark grey to grey to black, medium grained, slightly schistose and composed primarily of amphibole. Beneath the flows are thin bedded, fine grained, limy argillites. Argillite close to the gypsum has been altered, generally in the form of colour changes; the colour changes from black to reddish brown. Within the alteration zone, pyrite and quartz stringers and veinlets are common. Underlying this unit are thin bedded, light green to greyish brown, brown-weathering argillites. The oldest rocks consist of bedded tuffs and a lower sequence of interbedded black argillite and tuff.

Gypsum, which is conformable with the enclosing rock, occurs in a series of irregular, discontinuous lenses along strike for 2.4 kilometres. The irregular nature of these lenses, both in plan and vertical section, is partly attributed to displacement along the shear zones. It varies in colour from pure white through various shades of grey, grey and white banded, brown and white banded to reddish brown. Locally, the siliceous and argillaceous content reaches considerable proportions especially in certain banded and brecciated material. Variations are sharp but generally unpredictable. Also present within the gypsum, are inclusions of dark red-brown to orange-brown, severely fractured argillaceous rocks

CAPSULE GEOLOGY

that range in size from masses measuring 10 by 15 metres, down to dust size. These inclusions consist of a fine grained aggregate of quartz and albite, pyrite cubes, tiny tourmaline prisms and calcite in masses and small rhombs. At depths ranging between 20 and 35 metres gypsum grades abruptly into anhydrite. Mineable gypsum was generally confined to depths less than 25 metres.

In thin section, the gypsum consists of subhedral crystals, fibrous masses and aggregates of gypsum with various impurities. Also observed is anhydrite being replaced by gypsum. The gypsum remaining appears to be of high purity.

McCammon (Minister of Mines Annual Report 1952) believed that the gypsum formed by the hydrothermal replacement of argillites and tuffs along a shear zone. He based his interpretation on the fact that the gypsum is related to the shear zones. In thin section, he observed that gypsum was the last mineral to form and that it replaced all other minerals. The mineral assemblage observed was at least partially a hydrothermal suite. Cummings (1940) interpreted the gypsum to have formed by the replacement of limestone by sulphate solutions. This replacement was believed to have been related to volcanic activity. He was able to observe calcite crystals being replaced by gypsum. Anhydrite then formed as a result of the metamorphism of gypsum and then subsequently was re-hydrated to form gypsum in the uppermost parts of the deposit. Baird (1964) concluded that the gypsum-anhydrite bodies were deposited pre-Nicola as part of a sedimentary sequence and were later squeezed into their present position by plastic flow.

The gypsum deposits were first staked in 1894 with production beginning in 1926. Production was continuous through to 1956 during which time 1.25 million tonnes were produced. During the period 1976-1980, gypsum and anhydrite was mined intermittently from 7 quarries and trucked to the Canada Lafarge Cement plant, 18 kilometres east of Kamloops. There is still minor intermittent quarrying being done at these quarries, although these deposits are virtually mined out of gypsum. Anhydrite is still present in the deeper part of the quarries.

BIBLIOGRAPHY

- EMPR AR 1913-K205,K206; 1915-K219; 1919-N179,N180; 1922-N153; 1923-A169; 1924-B157; 1925-A189; 1926-A189; 1927-C199; 1928-C213; 1929-C229; 1930-A197; 1932-A285,A286; 1934-G40,G41,D29; 1935-D16, G32; 1936-D58; 1939-A112; 1940-A98; 1941-A92,A93; 1942-A90,A91; 1943-A85,A86; 1944-A81,A82; 1945-A131; 1946-A204,A205; 1947-A214; 1948-A188; 1949-A255; 1950-A220; 1951-A219; *1952-251-257; 1953-A190; 1954-A179; 1955-93; 1956-A152
- EMPR ENG INSP 1989
- EMPR MAP 65 (1989)
- EMPR MINING 1975-1980 Vol.I, p. 44; 1981-1985, p. 60,61; 1986-1987, pp. 85,86; 1988, p. 84
- EMPR OF *1991-15; 1992-1; 1992-9; 1994-1; 1995-1; 1998-8-L, pp. 1-49
- EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet; see 082LNW077 (Squillax) - Western Homes and Living, October 1961, pp. 21,22; Cummings, J.M. (1940): Preliminary Geological Report on Falkland Gypsum Deposits)
- GSC ANN RPT 1888-89; 1895-37; 1931-96,97
- GSC MAP 1059A
- GSC MEM 296
- GSC OF 481; 637 (Occurrence 226)
- GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60; 90-1E
- CJES Vol.1, No.1, pp. 1-9 (Baird, 1964); Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LNW002**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUENOSE (NORTH)**, BLUENOSE 9, KAL,
CYE

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 53 54 N
LONGITUDE: 119 02 29 W
ELEVATION: 492 Metres

NORTHING: 5640504
EASTING: 356450

LOCATION ACCURACY: Within 500M

COMMENTS: Main workings, located near the east shore of Shuswap Lake (Salmon Arm), between Quartzite Point and Hungry Cove, about 28 kilometres north-northeast of the community of Salmon Arm (Assessment Report 1635).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrrhotite Hornblende Garnet
ALTERATION: Hornblende Garnet Malachite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Hornblende Skarn
Marble
Quartzite
Para Gneiss
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Bluenose property is underlain by rocks of the Hadrynian? to Paleozoic Eagle Bay assemblage. These comprise quartzite, marble, hornblende-rich skarn and pink to grey paragneiss. In general, bedding or gneissosity dips at low angles to the east. The rocks are highly deformed and minor tight folds are very abundant.

The North zone is about 91 metres above the lake and is poorly exposed over a length of 91 metres by several pits, cuts and trenches. It occurs in a hornblende-garnet? skarn with limy sections. Pyrrhotite and chalcopyrite are irregularly distributed over a width of at least 6 metres, with some fairly massive sections. A pit, about 30 metres southwest of the main trend of workings, contains abundant malachite and minor chalcopyrite in a hornblende-rich skarn. Coarsely porphyritic dikes trending slightly east of north and dipping steeply, cut paragneiss about 61 metres above this showing.

BIBLIOGRAPHY

EMPR AR 1968-169
EMPR ASS RPT *1635, 2021, 13604
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1969-239,240
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 164)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

MINFILE NUMBER: **082LNW002**

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 63
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW003**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUENOSE (SOUTH)**, BLUENOSE 1, IRON MASK

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 53 19 N
LONGITUDE: 119 02 34 W
ELEVATION: 396 Metres

NORTHING: 5639426
EASTING: 356322

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft, located near the east shore of Shuswap Lake (Salmon Arm), between Quartzite Point and Hungry Cove, about 28 kilometres north-northeast of the community of Salmon Arm (Assessment Report 1635).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite
ASSOCIATED: Pyrrhotite Pyrite Hornblende
ALTERATION: Hornblende Malachite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Hornblende Skarn
Marble
Quartzite
Para Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Bluenose property is underlain by rocks of the Hadrynian? to Paleozoic Eagle Bay assemblage. These comprise quartzite, marble, hornblende-rich skarn and pink to grey paragneiss. In general, bedding or gneissosity dips at low angles to the east. The rocks are highly deformed and minor tight folds are very abundant.

The South zone, about 61 metres above the lake, is exposed by two cuts, a shaft and an adit reported to be about 76 metres long. The entrance of this adit is badly caved, but it was reported to contain about 3 metres of highly oxidized sulphide near the shaft. Mineralization exposed on surface consists of pyrite, pyrrhotite, chalcopyrite and sphalerite in brecciated hornblende-rich skarn, over a width of about 7.6 metres. The zone of brecciation appears to strike north-northeast and dips steeply east. About 122 metres south of the main showing, two adits are driven into paragneiss and are both about 15 metres long. Minor sphalerite, chalcopyrite and pyrite is exposed at the entrance of the most southerly adit.

BIBLIOGRAPHY

EMPR AR 1900-890; 1901-1080; 1968-169
EMPR ASS RPT *1635, 2021, 13604
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1969-239,240
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 165)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 65
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW004**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUENOSE (UPPER)**, KAL, CYE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 53 21 N
LONGITUDE: 119 02 06 W
ELEVATION: 678 Metres

NORTHING: 5639473
EASTING: 356871

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft, located near the east shore of Shuswap Lake (Salmon Arm), between Quartzite Point and Hungry Cove, about 28 kilometres north-northeast of the community of Salmon Arm (Assessment Report 1635).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz Pyrrhotite Pyrite Hornblende
ALTERATION: Hornblende Malachite
ALTERATION TYPE: Skarn Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u> Proterozoic-Paleoz.	<u>GROUP</u> Undefined Group	<u>FORMATION</u> Eagle Bay	<u>IGNEOUS/METAMORPHIC/OTHER</u>
---	---------------------------------	-------------------------------	----------------------------------

LITHOLOGY: Limy Skarn
Marble
Para Gneiss
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Bluenose property is underlain by rocks of the Hadrynian? to Paleozoic Eagle Bay assemblage. These comprise quartzite, marble, hornblende-rich skarn and pink to grey paragneiss. In general, bedding or gneissosity dips at low angles to the east. The rocks are highly deformed and minor tight folds are very abundant.

The Upper zone is on a relatively flat shelf above a series of high cliffs. The rock exposed along the cliffs is largely gently dipping paragneiss with sections of limy skarn and marble. The main showing is a shaft, partly collapsed and filled with water. Material on the dump is heavily mineralized with pyrrhotite and chalcopyrite, mostly in a quartz breccia. An adit, 91 metres in length, is about 61 metres vertically below the shaft and cuts paragneiss and marble dipping about 10 degrees east. Very minor pyrite and pyrrhotite are present in several patches. A second adit at the same elevation as the shaft and about 61 metres south, cuts entirely barren gneiss for 15 metres. A pit, about 91 metres south of the shaft, exposes light coloured quartz-rich marble with abundant malachite and minor chalcopyrite.

BIBLIOGRAPHY

EMPR AR 1968-169
EMPR ASS RPT *1635, 2021, 13604
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1969-239,240
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 167)

MINFILE NUMBER: **082LNW004**

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 67
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW005**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAHILTY 1, S.B., CAHILTY 4, HELEN**

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082L13W
 BC MAP:

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 06 N
 LONGITUDE: 119 50 00 W
 ELEVATION: 1501 Metres

NORTHING: 5648273
 EASTING: 300996

LOCATION ACCURACY: Within 500M

COMMENTS: Trench adjacent to a logging road, on the east slope of Mount Cahilty, about 18 kilometres north-northwest of the community of Chase (Assessment Report 17699).

COMMODITIES: Lead Zinc Silver Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite
 ASSOCIATED: Quartz Pyrite Pyrrhotite
 MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Disseminated
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Mount Ida	Tsalkom	
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Phyllite
 Limestone
 Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: TRENCH REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1982
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	156.6000 Grams per tonne
Gold	1.3000 Grams per tonne
Copper	0.0100 Per cent
Lead	4.3700 Per cent
Zinc	0.6200 Per cent

REFERENCE: Assessment Report 11146, page 9.

CAPSULE GEOLOGY

In the Cahilty 1 showing area, folded and faulted metasediments of the lower Paleozoic Tsalkom Formation (Mount Ida Group) are intruded by Cretaceous? quartz monzonite.

The main showing is located on the south side and adjacent to a logging road. It is exposed by trenching over a length of about 14 metres along a strike of 350 degrees and across a width of about 3 metres. The dip of this zone is about 60 degrees east. Lenses of pyrite, pyrrhotite with minor amounts of galena, sphalerite and chalcopyrite occur in a quartz vein hosted in phyllite. A chip sample assayed 4.37 per cent lead, 0.62 per cent zinc, 0.01 per cent copper, 156.6 grams per tonne silver and 1.3 grams per tonne gold (Assessment Report 11146, page 9). A similar showing is also exposed in a trench on the north side of the road, about 80 metres northeast of the main showing.

Sparsely disseminated sulphides (pyrite, chalcopyrite, galena and sphalerite) also occur in a crystalline limestone (marble) unit.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 69
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1965-160
EMPR ASS RPT 1652, *11146, 17699
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 126)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW006**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAHILTY 7, HELEN, S.B.**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 58 N
LONGITUDE: 119 49 09 W
ELEVATION: 1524 Metres

NORTHING: 5649840
EASTING: 302053

LOCATION ACCURACY: Within 500M

COMMENTS: Showing located at the end of an old logging road, on the east slope of Mount Cahilty, about 19 kilometres north-northwest of the community of Chase (Assessment Report 1652).

COMMODITIES: Lead Copper

MINERALS

SIGNIFICANT: Galena Chalcopyrite
ASSOCIATED: Quartz Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Mount Ida	Tsalkom	
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

In the Cahilty 7 showing area, folded and faulted metasediments of the lower Paleozoic Tsalkom Formation (Mount Ida Group) are intruded by Cretaceous? quartz monzonite.

A number of very sparsely mineralized quartz veins cut pyritic quartz monzonite. The quartz veins are subparallel, striking 080 degrees and dipping 70 degrees south. Several of the exposed veins contain minor galena and are up to 60 centimetres wide. In the vicinity of the veins, there is a minute amount of chalcopyrite evident in tiny fractures.

BIBLIOGRAPHY

EMPR AR 1965-160
EMPR ASS RPT *1652, 11146, 17699
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 126)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW007**

NATIONAL MINERAL INVENTORY:

NAME(S): **BONNIE BRAE** LOBO, JOHN

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L11W
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 39 57 N
LONGITUDE: 119 17 36 W
ELEVATION: 792 Metres

NORTHING: 5615175
EASTING: 337933

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, along the bank of Hobson Creek, on the northern slopes of Mount Ida, about 3.5 kilometres south of the community of Salmon Arm (Assessment Report 12055).

COMMODITIES: Silver Lead Zinc

MINERALS

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

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Mount Ida	Silver Creek	
Paleozoic	Mount Ida	Sicamous	
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Mica Schist
Calcareous Phyllite
Limestone
Porphyritic Felsic Dike
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The lower Paleozoic Sicamous Formation (Mount Ida Group) comprised of calcareous phyllite and limestone is underlain by schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). This sequence is intruded by altered Cretaceous? granites and capped by Eocene volcanics of the Kamloops Group.

The Bonnie Brae workings expose a reticulate system of quartz veins striking north to northeast in highly sheared and fractured mica schists cut by porphyritic felsic dikes, adjacent to a granitic intrusion. Mineralization occurs along sheeted fracture zones and milky quartz veins and lenses 0.3 to 1.8 metres wide, and comprises pyrite, sphalerite and argentiferous galena. Pyrrhotite occurs locally in lower workings. Silicification is prevalent.

A number of opencuts along a northeast trend exposes a series of the quartz lenses. A tunnel had been driven for 21 metres in a general southerly direction, following the course of a porphyry dike which lies on the west side of a zone of shearing. Between 1967 and 1969, seven trenches were completed totalling 548 metres, and 2 diamond-drill holes were drilled totalling 609 metres.

BIBLIOGRAPHY

EMPR AR 1926-188; *1930-A183,A184; 1967-135
EMPR ASS RPT 12055, *17144, 19867
EMPR GEM 1969-240
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 142

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 72
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481; 637 (Occurrence 184)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/01

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW008**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT IDA**, EVERGLADE, SILVER SCEPTRE,
EXCELSIOR, LEAH ROSE, ALIDA,
EVA, WHITE CLIFF, MOUNTAIN VIEW,
MT. IDA

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L11W 082L11E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 39 50 N
LONGITUDE: 119 14 59 W
ELEVATION: 786 Metres

NORTHING: 5614864
EASTING: 341008

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, on the northerly slopes of Mount Ida, about 4.5 kilometres
south of the community of Salmon Arm (Assessment Report 8995).

COMMODITIES: Silver Lead Zinc Gold Platinum

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Mount Ida	Silver Creek	
Paleozoic	Mount Ida	Sicamous	

LITHOLOGY: Micaceous Schist
Quartzite
Limestone
Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The lower Paleozoic Sicamous Formation (Mount Ida Group) comprised of calcareous phyllite and limestone is underlain by schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). This sequence is intruded by altered Cretaceous? granites and capped by Eocene volcanics of the Kamloops Group.

The rocks in the vicinity of the Mount Ida workings comprise mica schist, grey gneiss, crystalline limestone and quartzite. In this sequence, a system of parallel quartz veins, from 0.4 to 2.1 metres wide, are mineralized with argentiferous galena, sphalerite and pyrite. These bodies occur at the contact between micaceous schist and quartzite, and between schist and limestone. The strike of these is approximately northeast with 65 degree to almost vertical dips to the southeast.

All the development work had been performed on the Everglade claim and consists of an upper adit 39 metres long, and a lower adit 70 metres long. Shafts, 4.8 and 4.5 metres respectively, had also been sunk. Opencuts have also been made.

In 1918, a chip sample of the sulphides in the quartz veins was taken at random from both walls of a lower tunnel (described to be on the White Cliff claim, but may in fact be the Everglade claim) and yielded 13.0 grams per tonne gold and 1.02 grams per tonne platinum (Munition Resources Commission, Final Report 1920, page 184).

BIBLIOGRAPHY

EM GEOFILE 2000-2, 2000-5
EMPR AR 1899-733,734; 1901-1080; 1904-G232,G233; *1913-K198,K199
EMPR ASS RPT 8995, 10244, 11047
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 74
REPORT: RGEN0100

BIBLIOGRAPHY

GSC EC GEOL 13, p. 103
GSC MAP 1059A
GSC MEM 296, p. 148
GSC OF 481; 637 (Occurrence 212)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
*Munition Resources Commission, Final Report 1920, pp. 183-185

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/05

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW009**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUGAR LOAF**, CHIEFTAN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

Underground

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 38 24 N
LONGITUDE: 119 09 46 W
ELEVATION: 640 Metres

NORTHING: 5612025
EASTING: 347074

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located about 10 kilometres north of the community of Enderby.

COMMODITIES: Lead Gold

MINERALS

SIGNIFICANT: Galena Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: 105 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 61 x 2 Metres
COMMENTS: Quartz vein.

STRIKE/DIP: 360/

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Mount Ida

FORMATION

Sicamous

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

At the Sugar Loaf showing, a tunnel approximately 18 metres in length had been driven on a well defined quartz vein about 2.1 metres wide. The vein strikes north and dips steeply west in a unit described as a quartzite formation, and has been traced for about 61 metres on surface. The vein is sparsely mineralized with pyrite and galena; gold values are reported to be associated with the pyrite.

Recent geology maps indicates the area is underlain by the lower Paleozoic Sicamous Formation (Mount Ida Group) near the contact with Cretaceous? granodiorite.

BIBLIOGRAPHY

EMPR AR 1906-H176; *1929-C228,C229; 1930-A184
EMPR BULL 1 (1932), p. 69
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 150
GSC OF 481; 637 (Occurrence 214)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW010**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRANDVIEW**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 40 00 N
LONGITUDE: 119 09 46 W
ELEVATION: 807 Metres

NORTHING: 5614990
EASTING: 347161

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located about 9 kilometres east-southeast of the community of Salmon Arm.

COMMODITIES: Lead Gold Silver

MINERALS

SIGNIFICANT: Galena Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Mount Ida	Sicamous	

LITHOLOGY: Quartzite
Chloritic Phyllite
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

At the Grandview showing, two wide belts of north-trending quartzite form prominent ridges rising to a height of about 183 metres above the valley, in contact with chloritic phyllite and chlorite schist. Several prominent fracture sets cut the quartzite. Recent geology maps indicates this area is underlain by the lower Paleozoic Sicamous Formation (Mount Ida Group).

The principal work has been done on the steep face of the eastern belt of quartzite, at about 15 metres below the summit of the ridge. Here, an opening 1.5 by 1.5 metres extends into the cliff for 1 metre. It exposes a fracture zone striking 300 degrees and dipping 30 degrees north, and a weaker fracture system striking 290 degrees and dipping 45 degrees south. Minor fine galena and pyrite occur on the face of the old working. Narrow quartz segregations are present in the quartzite as bands 2-15 centimetres wide paralleling the 300 degrees, 30 degrees north dipping fractures.

Gold and silver values are reported to be associated with the galena and pyrite (Minister of Mines Annual Report 1928, page C211).

BIBLIOGRAPHY

EMPR AR 1928-C211; 1930-A184
EMPR ASS RPT *12587
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 144
GSC OF 481; 637 (Occurrence 187)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW011**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAST CHANCE** IRON MOUNTAIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 44 00 N
LONGITUDE: 119 03 04 W
ELEVATION: 365 Metres

NORTHING: 5622177
EASTING: 355257

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located along the Canadian Pacific Railway tracks near the western shore of Mara Lake, about 21 kilometres north of the community of Enderby (Minister of Mines Annual Report 1926).

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartzofeldspathic Gneiss
Pelitic Schist
Hornblende Sill
Calc-silicate Gneiss
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

At the Last Chance showing, several shafts, tunnels and opencuts have been sunk and driven alongside the track of the Canadian Pacific Railway, near the western shore of Mara Lake about 21 kilometres north of the community of Enderby.

The hostrocks are described as the "lowest members" of the Shuswap Metamorphic Complex, comprising sediments and hornblende intrusive sills. There is a pronounced fracturing cutting the general northwesterly trend of the country rock, with a number of quartz veins and silicified seams. Some of these are reported to carry gold values (Minister of Mines Annual Report 1926, page A188).

Recent geology maps indicates the area is underlain by Proterozoic and/or Paleozoic Shuswap assemblage quartzofeldspathic gneiss, pelitic schist, calcsilicate gneiss and marble.

BIBLIOGRAPHY

EMPR AR 1908-J122; *1926-A188
EMPR FIELDWORK 1987, pp. 54-58; 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 146
GSC OF 481; 637 (Occurrence 190)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.19 (Feb.1982), pp. 288-307; Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW012**

NATIONAL MINERAL INVENTORY:

NAME(S): **ONYX**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 59 39 N
LONGITUDE: 119 18 54 W
ELEVATION: 640 Metres

NORTHING: 5651727
EASTING: 337546

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located 6.4 kilometres up Onyx Creek from Shuswap Lake, about 32.5 kilometres northeast of the community of Chase (Minister of Mines Annual Report 1934, page D29).

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Undefined Group	Eagle Bay	

LITHOLOGY: Limestone
Greenstone
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The Onyx showing area is underlain by pyritic greenstone and phyllite of the Lower Cambrian Johnson Lake unit of the Eagle Bay assemblage. The phyllite has been variably silicified with local development of abundant quartz veins and stringers.

The showing is described as "very high grade argentiferous galena associated with quartz in sedimentary rocks" and is hosted by limestone.

BIBLIOGRAPHY

EMPR AR *1934-D29
EMPR ASS RPT 13498
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 139)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/23

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW013**

NATIONAL MINERAL INVENTORY:

NAME(S): **VICTORY**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 45 43 N
LONGITUDE: 119 02 19 W
ELEVATION: 350 Metres

NORTHING: 5625334
EASTING: 356227

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, located about 3 metres above lake level (Mara Lake), on the south end of the promontory of Black Point, 19 kilometres east-northeast of the community of Salmon Arm (Minister of Mines Annual Report 1927).

COMMODITIES: Zinc Silver

MINERALS

SIGNIFICANT: Sphalerite
ASSOCIATED: Pyrite Garnet
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Garnetiferous Gneiss
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Victory showing is a silicified zone, about 2.7 metres wide, that contains minor disseminated sphalerite and pyrite, and which is hosted in garnetiferous gneiss of the Proterozoic and/or Paleozoic Shuswap assemblage. The zone strikes about 325 degrees across Black Point, a promontory about 2 kilometres in length that juts into Mara Lake on the west side. The zone is characterized by considerable development of pegmatite.

A tunnel had been driven along this zone for 8.5 metres from a point at the south end of the promontory, at about 3 metres above the level of the lake. It followed a well-defined hangingwall with a northerly strike and dip to the west. At a distance of a metre from the portal, sphalerite was reported to be distributed in small quantities throughout the whole width of the zone. A shipment of about 37 tonnes of this material was made to the Trail smelter. Returns from this shipment were not available, but it is understood that they did not come up to the owner's expectations (Minister of Mines Annual Report 1927, page C198).

A sample taken across 2.4 metres of the silicified zone, at the face of the tunnel, assayed trace gold, 6.8 grams per tonne silver and nil zinc (Minister of Mines Annual Report 1927, page C198).

BIBLIOGRAPHY

EMPR AR *1927-C197,C198; 1936-D53
EMPR FIELDWORK 1987, pp. 54-58; 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 150
GSC OF 481; 637 (Occurrence 175)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 80
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.19 (Feb.1982), pp. 288-307; Vol.21 (Oct.1984), pp. 1171-1193
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1995/07/05

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW014**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHU**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 57 42 N
LONGITUDE: 119 26 31 W
ELEVATION: 975 Metres

NORTHING: 5648401
EASTING: 328519

LOCATION ACCURACY: Within 500M

COMMENTS: Sample site, east of Scotch Creek, about 23.5 kilometres northeast of the community of Chase (Assessment Report 15427).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ALTERATION: Limonite Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Siltstone
Sandstone
Quartz Sericite Schist
Chloritic Phyllite
Limestone
Meta Chert
Argillite
Conglomerate
Chlorite Schist
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Chip

COMMODITY

Gold

GRADE

1.3000

Grams per tonne

REFERENCE: Assessment Report 15427, page 30.

CAPSULE GEOLOGY

The Shu property is underlain by a west to northwest trending sequence of greenschist facies rocks of the Lower Cambrian Johnson Lake unit of the Eagle Bay assemblage. Four main rock units are recognized and comprise chloritic phyllite including metavolcanic rocks, limestone, metachert?, and argillite with lesser sandstone and pebble to cobble conglomerate. Locally, there are dacitic and rhyolitic as well as feldspar porphyritic basaltic dikes.

Pyrite occurs as disseminated, oxidized, euhedral porphyroblasts in various rock types. Coarse to finely disseminated pyrite occurs in quartz sericite schists, quartz veins, chlorite schists, greenstones and fractures. Limonite staining and limonite-lined, cubic vugs are very common. Hematite and specular hematite occur to a lesser degree.

Chip sample 2773 taken from an altered, interlaminated siltstone with fine-grained sandstone analysed 1.3 grams per tonne gold. Sample 2774 is from a hematitic quartz sericite schist and analysed 0.61 gram per tonne gold (Assessment Report 15427, pages 30, 31).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 82
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 13380, 14620, *15427
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/22

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW015**

NATIONAL MINERAL INVENTORY:

NAME(S): **IRON POT**, PEARLMARIE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 10 N
LONGITUDE: 119 27 59 W
ELEVATION: 609 Metres

NORTHING: 5649323
EASTING: 326832

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralization in a small unnamed creek that flows into Scotch Creek, about 23 kilometres northeast of the community of Chase (Assessment Report 5682).

COMMODITIES: Lead Zinc Copper Gold Nickel

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite

ASSOCIATED: Quartz Pyrrhotite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Schist
Dike
Basaltic Dike
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Iron Pot showing is located on the bank of a small creek which flows into Scotch Creek from the west. The country rock is described as schist with flat dips to the south. The schist is cut by several dikes.

A number of mineralized quartz veins striking east and dipping south are exposed in the bed of the creek. Mineralization comprises pyrrhotite with some galena and sphalerite. The veins lie within a zone about 122 metres wide. The best showing is at the highest point on the side of the hill on the footwall of the zone. Two short tunnels had been driven at this point on a vein 0.6 metre wide. It has been reported that "some fair gold values have been obtained from the lower seams and that nickel is also found with the pyrrhotite" (Minister of Mines Annual Report 1930, page A189).

Later prospecting (circa 1975) describes a quartzite intruded by basaltic dikes, both dipping steeply to the north-northeast. The dikes contain chalcopyrite mineralization which has spread into the quartzite.

The area of the showing is underlain by the Devonian and/or older? Woolford Creek unit and Devonian Skwaam Bay unit, both of the Eagle Bay assemblage.

BIBLIOGRAPHY

EMPR AR *1930-A188,A189
EMPR ASS RPT 5433, 5682, 5837, 9153
EMPR EXPL 1975-E55; 1976-E57
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 145
GSC OF 481; 637 (Occurrence 133)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 84
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/21

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW016**

NATIONAL MINERAL INVENTORY:

NAME(S): **SCOTCH CREEK, SHUSWAP**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5649406
EASTING: 328982

LATITUDE: 50 58 15 N
LONGITUDE: 119 26 09 W
ELEVATION: 807 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Trenches located between Scotch and Hlina creeks, about 24.5 kilometres northeast of the community of Chase (Assessment Report 16191).

COMMODITIES: Gold Silver Lead Copper

MINERALS

SIGNIFICANT: Magnetite Hematite Pyrite Galena Chalcopyrite
ASSOCIATED: Silica Jasper Quartz Calcite Carbonate
ALTERATION: Magnetite Hematite Pyrite Quartz Carbonate
Sericite Malachite

ALTERATION TYPE: Oxidation Sericitic Carbonate
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Stratiform Stratabound Vein
CLASSIFICATION: Volcanogenic Hydrothermal Epigenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 1300 x 5 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Iron formation.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE: Lower Cambrian GROUP: Undefined Group FORMATION: Eagle Bay IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Mafic Intermediate Volcanic
Chert
Mudstone
Tuff
Agglomerate
Limestone
Meta Limestone
Marble
Chlorite Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Drill Core
COMMODITY: GRADE
Silver 29.0000 Grams per tonne
Gold 9.0500 Grams per tonne
COMMENTS: Highest values across 0.22 metre of iron formation.
REFERENCE: Assessment Report 16191, page i.

CAPSULE GEOLOGY

The Scotch Creek property is underlain by the Lower Cambrian Johnson Lake unit of the Eagle Bay assemblage. The dominant rock type on the property is a pyritic, mafic to intermediate volcanic unit which has undergone greenschist facies metamorphism. Typically, exposures are weakly to well foliated, dark green to grey, calcareous and spotted with calcite and/or iron carbonate rhombs. Overprinting the greenschist metamorphism is locally intense quartz-carbonate-sericite alteration, probably associated with hydrothermal activity along shear zones and fracture systems. Although exposures showing

CAPSULE GEOLOGY

primary textures, specifically fragments and amygdules, are very rare, original lithologies ranging from mudstones, possibly of volcanic origin, to thin-bedded tuff and agglomerate to flows are observed. A quartz vein, 15 centimetres wide, cuts variably calcareous chlorite-sericite schist and is mineralized with pyrite, chalcopyrite, galena and malachite.

Two distinct and apparently unrelated limestone or meta-limestone/marble units have been mapped. The first is massive, white to beige, fine to coarse-grained limestone. Stockwork quartz veins, up to 20 centimetres wide, cut the limestone with northwest strikes and steep southwest dips. An old shaft explores chalcopyrite-pyrite-galena mineralization in stockwork quartz veins. This shaft may be the shaft referred to as the Shuswap showing in Minister of Mines Annual Report 1934. The Shuswap group of claims was described as being situated 1.6 kilometres south of Sturdy's ranch. Several opencuts and two adits have been driven on a 1.8-metre wide quartz vein containing segregations of galena and pyrite in schistose rocks (Minister of Mines Annual Report 1934, page D29).

The second limestone is grey to black, translucent and cryptocrystalline to medium grained. Exposure is relatively scarce, but the limestone is typically cut by quartz and/or calcite veins which may carry trace pyrite.

A pyritic, ferruginous chert horizon (siliceous oxide facies iron formation) has been traced and tested by diamond drilling over a strike length of at least 1300 metres. Typical exposures are mottled grey and black to mottled grey and purple. Generally, it is aphanitic to fine grained with locally intense quartz-carbonate veining. Banding is visible locally. Iron mineralization includes local jasper to 10 per cent, magnetite to 50 per cent and hematite to 30 per cent. Pyrite content ranges from trace amounts to 15 per cent and occurs as disseminated cubes between 0.5 and 8 millimetres. Traces of chalcopyrite are present locally. The unit is somewhat discontinuous, ranges in apparent thickness between 1 and 5 metres, and resembles an overturned "V" in plan view.

Samples of iron formation taken from drill core analysed up to 9.05 grams per tonne gold and 29.0 grams per tonne silver over 0.22 metre, and 1.21 grams per tonne gold and 1.1 grams per tonne silver over 5.46 metres (Assessment Report 16191, page i). The iron formation has been folded and re-folded into an overturned anticline which plunges to the northwest. Gold grades increase towards the hinge zone.

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 297-306
EMPR AR 1934-D29
EMPR ASS RPT 12879, *16191
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 149
GSC OF 481; 637 (Occurrence 137)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
WWW http://www.infomine.com/index/properties/SCOTCH_CREEK.html

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/22

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW017**

NATIONAL MINERAL INVENTORY:

NAME(S): **COPPER ISLAND**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 54 32 N
LONGITUDE: 119 24 18 W
ELEVATION: 365 Metres

NORTHING: 5642448
EASTING: 330922

LOCATION ACCURACY: Within 500M

COMMENTS: South part of Copper Island, in Shuswap Lake, about 23 kilometres northeast of the community of Chase.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Bright copper stain is observed on the south side of Copper Island where disseminated chalcopyrite is hosted in a 1.8-metre wide band of chlorite schist, near a fault zone. The hostrock is part of the Devonian and/or older? Woolford Creek unit of the Eagle Bay assemblage.

Copper Island is part of Shuswap Lake Provincial Park.

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC ANN RPT *1877-78, p. 98B
GSC MAP 1059A
GSC MEM 296, p. 143
GSC OF 481; 637 (Occurrence 156)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/27

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW018**

NATIONAL MINERAL INVENTORY:

NAME(S): **COPPER CUP**, JEN, COPPER NUGGET

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 52 47 N
LONGITUDE: 119 19 54 W

NORTHING: 5639040
EASTING: 335974

ELEVATION: 701 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, situated on a hill between Little White Lake to the east and Blind Bay of Shuswap Lake to the west, about 20 kilometres north of the community of Salmon Arm (Assessment Report 13378).

COMMODITIES: Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Surface and underground work (pits, trenches, tunnels) were completed between 1928 and 1930 on the Copper Cup, Copper Chief (082LNW019) and Vimy (082LNW020) showings. The Copper Chief adjoined the Copper Cup to the east, and the Vimy adjoined the Copper Cup to the southeast.

At the Copper Cup showing, northwest trending silicified zones traverse west striking, north dipping (35 degrees) chlorite schist of the Devonian and/or older? Woolford Creek unit of the Eagle Bay assemblage. These zones contain small bodies of chalcopyrite and pyrite associated with quartz seams and cut the hostrock obliquely. Some disseminated mineralization also occurs.

BIBLIOGRAPHY

EMPR AR *1928-C210,C211; 1929-C217; 1930-A183
EMPR ASS RPT 2415, 3036, 3429, *13378, 15902
EMPR GEM 1971-434,435; 1972-82
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 143
GSC OF 481; 637 (Occurrence 157)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/28

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW019**

NATIONAL MINERAL INVENTORY:

NAME(S): **COPPER CHIEF**, JEN, COPPER NUGGET

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 53 00 N
LONGITUDE: 119 19 42 W
ELEVATION: 792 Metres

NORTHING: 5639434
EASTING: 336222

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, situated on a hill between Little White Lake to the east and Blind Bay of Shuswap Lake to the west, about 20 kilometres north of the community of Salmon Arm (Assessment Report 3429).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Surface and underground work (pits, trenches, tunnels) were completed between 1928 and 1930 on the Copper Cup, Copper Chief (082LNW019) and Vimy (082LNW020) showings. The Copper Chief adjoined the Copper Cup to the east, and the Vimy adjoined the Copper Cup to the southeast.

At the Copper Chief showing, disseminated chalcopyrite occurs throughout a wide zone near a shear zone in west striking, north dipping (35 degrees) chlorite schist of the Devonian and/or older? Woolford Creek unit of the Eagle Bay assemblage.

BIBLIOGRAPHY

EMPR AR 1929-C217; 1930-A183
EMPR ASS RPT 2415, 3036, 3429, *13378, 15902
EMPR GEM 1971-434,435; 1972-81
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 143
GSC OF 481; 637 (Occurrence 157)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/28

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW020**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIMY, JEN, COPPER NUGGET**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 52 50 N
LONGITUDE: 119 19 19 W
ELEVATION: 594 Metres

NORTHING: 5639111
EASTING: 336661

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, situated on a hill between Little White Lake to the east and Blind Bay of Shuswap Lake to the west, about 20 kilometres north of the community of Salmon Arm (Assessment Report 3429).

COMMODITIES: Copper Silver Gold

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Surface and underground work (pits, trenches, tunnels) were completed between 1928 and 1930 on the Copper Cup, Copper Chief (082LNW019) and Vimy (082LNW020) showings. The Copper Chief adjoined the Copper Cup to the east, and the Vimy adjoined the Copper Cup to the southeast.

At the Vimy showing, silicified zones traverse west striking, north dipping (35 degrees) chlorite schist of the Devonian and/or older? Woolford Creek unit of the Eagle Bay assemblage. These zones contain small bodies of chalcopyrite and pyrite associated with quartz seams which cut the hostrock obliquely.

A sample taken from some of the best ore assayed 0.34 gram per tonne gold, 13.7 grams per tonne silver and 14.4 per cent copper (Minister of Mines Annual Report 1928, page C211).

BIBLIOGRAPHY

EMPR AR 1928-C211
EMPR ASS RPT 2415, 3036, 3429, *13378, 15902
EMPR GEM 1971-434,435; 1972-81
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 150
GSC OF 481; 637 (Occurrence 157)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/28

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW021**

NATIONAL MINERAL INVENTORY: 082L14 Pb1

NAME(S): **ANNIS (MAIN)**, ANNIS 5,6, LARCH HILLS,
ANNIS MINES, LG

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

Underground

MINING DIVISION: Kamloops

LATITUDE: 50 47 38 N
LONGITUDE: 119 03 18 W
ELEVATION: 835 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5628918
EASTING: 355170

LOCATION ACCURACY: Within 500M

COMMENTS: Adit in the Larch Hills, between Shuswap and Mara lakes, about 19 kilometres northeast of the community of Salmon Arm (Property File - Sketch map of trenches and drillholes, 1966).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite
ASSOCIATED: Pyrrhotite Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Mount Ida Silver Creek

LITHOLOGY: Biotite Schist
Quartz Mica Schist
Quartzite
Micaceous Quartzite
Granitic Dike
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1966
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	143.9000 Grams per tonne
Lead	13.0000 Per cent
Zinc	4.3000 Per cent

COMMENTS: Samples of sulphides from trenches A to J in the main showing area across widths that varied from 0.6 to 3.3 metres. Lead assayed from 1.1 to 13 per cent, zinc from trace to 4.3 per cent, and silver from trace to 143.9 grams per tonne.

REFERENCE: Property File - Sketch map of trenches and drillholes, 1966.

CAPSULE GEOLOGY

The Annis showings are underlain by quartzite, micaceous quartzite and quartz mica schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). The mica schists are the most common rock type observed. Muscovite is dominant in these schists, however, lenses rich in biotite and chlorite have been observed. Intercalated with the mica schists are lenses of massive, generally fine grained, micaceous quartzite. Narrow, granitic and pegmatite dikes are common, in places cutting the local planes of schistosity. Observed schistosity attitudes are variable, with strikes ranging from 070 to 145 degrees and dipping from 40 to 50 degrees to the north.

Within the workings area, the rocks consist of alternating, comparatively thin bands of quartzite and quartz mica schist. The quartz mica schist is largely a biotite schist, but bands do occur

CAPSULE GEOLOGY

where the mica is entirely muscovite or muscovite-sericite. In places, this becomes an almost pure muscovite or sericite schist. The rock units are from several centimetres to a couple of tens of metres thick.

Mineralization consists of massive to semi-massive sulphides made up of galena, sphalerite, minor chalcopyrite, pyrite and considerable pyrrhotite. Sulphide bands are found in biotite schist, usually with quartzite, and appear conformable to bedding. These bands vary from several centimetres to 1 metre wide. Locally, closely spaced sulphide bands occur over a 3 to 3.6 metre width.

Samples of sulphides from trenches A to J in the main showing area assayed from 1.1 to 13 per cent lead, trace to 4.3 per cent zinc and trace to 143.9 grams per tonne silver, across widths that varied from 0.6 to 3.3 metres (Sketch map of trenches, 1966).

The main Annis showing (this description) is developed by an adit 48 metres long and by several pits (A to J). Three southernmost trenches/pits (2, 3 and 6) comprise the Annis 11 showing (082LNW025), and are located 304 metres south of the adit. Trench 5, 122 metres north of the Annis 11 showing, comprises the Annis 5 showing (082LNW024). Three pits/trenches (K to M), about 182 metres north-northwest of the adit, comprises the Annis 8 showing (082LNW023) (Sketch map of trenches, 1966).

BIBLIOGRAPHY

- EM EXPL 1998-57-64
- EMPR AR 1964-105; 1965-205,206; *1966-146-148; 1967-135
- EMPR ASS RPT 4453, 5864, 6621, 10745, 15523, 18701, *19824
- EMPR EXPL 1976-E57,E58
- EMPR FIELDWORK 1988, pp. 49-54
- EMPR GEM 1970-319; 1973-103,104
- EMPR OF 1990-30
- EMPR PF (Drill sections; Claim location map; Geological plan map of adit; Location map of trenches and diamond-drill holes; Photographs of camp and adit portal; Prospectus, May 4, 1966, Annis Mines Ltd.; General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
- EMR MP CORPFILE (Annis Mines Ltd.)
- GSC MAP 1059A
- GSC MEM 296
- GSC OF 481; 637 (Occurrence 173)
- GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
- CJES Vol.19 (Feb.1982), pp. 288-307; Vol.21 (Oct.1984), pp. 1171-1193
- Statement of Material Facts, Jan. 1976, Sicamous Resources Ltd.
- EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1995/07/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW022**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUNSET, MILLER**

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082L11W
 BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 39 35 N
 LONGITUDE: 119 18 31 W
 ELEVATION: 807 Metres

NORTHING: 5614529
 EASTING: 336832

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, on the north bank of Rumball Creek, on the northern slopes of Mount Ida, about 5 kilometres south of the community of Salmon Arm (Assessment Report 12055).

COMMODITIES: Silver Tin Lead Antimony Zinc Platinum Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite
 ASSOCIATED: Quartz Pyrite
 ALTERATION: Silica Quartz Clay Sericite Pyrite
 ALTERATION TYPE: Silicific'n Sericitic
 MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Mount Ida	Silver Creek	
Paleozoic	Mount Ida	Sicamous	
Cretaceous			Unnamed/Unknown Informal

LITHOLOGY: Micaceous Meta Sediment/Sedimentary
 Calcareous Meta Sediment/Sedimentary
 Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1990
 SAMPLE TYPE: Grab

COMMODITY	GRADE	
Copper	0.1800	Per cent
Lead	13.6500	Per cent
Antimony	0.1700	Per cent
Tin	0.5800	Per cent
Zinc	0.3500	Per cent

COMMENTS: A 2-metre true width sample across a quartz vein zone in phyllic alteration.

REFERENCE: Assessment Report 19867, page 11.

CAPSULE GEOLOGY

The lower Paleozoic Sicamous Formation (Mount Ida Group) comprised of calcareous phyllite and limestone is underlain by schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). This sequence is intruded by altered Cretaceous? granites and capped by Eocene volcanics of the Kamloops Group.

The Miller tunnel, about 83 metres long, is in strongly fractured and silicified, micaceous metasediments less than 20 metres north of a granitic intrusion. The tunnel follows a northeasterly trending shear containing a quartz vein system mineralized with sphalerite, galena, chalcopyrite and pyrite. In 1918, a 1.4-metre sample across the full width of the face (at the bottom) analysed 8.2 grams per tonne gold and 0.68 gram per tonne platinum. Another sample from a mineralized streak, 3.8 centimetres wide, in the face,

CAPSULE GEOLOGY

analysed 4.7 grams per tonne gold and 1.02 grams per tonne platinum (Munition Resources Commission, Final Report 1920, page 185). Recent work has failed to duplicate the gold and platinum values.

Trenches expose strongly altered and fractured micaceous and locally calcareous metasedimentary rocks. Original textures are obscured by strong silicification or phyllic alteration (quartz-clay-sericite-pyrite). A number of milky quartz veins trending east to northeast cut both types of alteration. They locally reach 20 centimetres in width, though generally are much narrower and in swarms with blebs of pyrite, galena, sphalerite and some finer chalcopyrite. A 2.0-metre true width sample across a quartz vein zone in phyllic alteration yielded 13.65 per cent lead, 0.18 per cent copper, 0.35 per cent zinc, 0.58 per cent tin and 0.17 per cent antimony (Assessment Report 19867, page 11).

BIBLIOGRAPHY

EM GEOFILE 2000-2, 2000-5
EMPR AR 1930-A184
EMPR ASS RPT 8995, 12055, 14218, *19867
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC EC GEOL 13, pp. 79,103
GSC MAP 1059A
GSC MEM 296, p. 150
GSC OF 481; 637 (Occurrence 185)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
Munition Resources Commission, Final Report 1920, pp. 183-185

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/02

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW023**

NATIONAL MINERAL INVENTORY: 082L14 Pb1

NAME(S): **ANNIS 8, ANNIS 7,8, LARCH HILLS,
ANNIS MINES, LG**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 47 46 N
LONGITUDE: 119 03 28 W
ELEVATION: 777 Metres

NORTHING: 5629170
EASTING: 354981

LOCATION ACCURACY: Within 500M

COMMENTS: Pit L showing in the Larch Hills, between Shuswap and Mara lakes,
about 19 kilometres northeast of the community of Salmon Arm
(see Annis (Main), 082LNW021 - Sketch map of trenches and drillholes,
1966).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite
ASSOCIATED: Pyrrhotite Pyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Mount Ida	Silver Creek	

LITHOLOGY: Biotite Schist
Quartz Mica Schist
Quartzite
Micaceous Quartzite
Granitic Dike
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The Annis showings are underlain by quartzite, micaceous quartzite and quartz mica schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). The mica schists are the most common rock type observed. Muscovite is dominant in these schists, however, lenses rich in biotite and chlorite have been observed. Intercalated with the mica schists are lenses of massive, generally fine grained, micaceous quartzite. Narrow, granitic and pegmatite dikes are common, in places cutting the local planes of schistosity. Observed schistosity attitudes are variable, with strikes ranging from 070 to 145 degrees and dipping from 40 to 50 degrees to the north.

Within the workings area, the rocks consist of alternating, comparatively thin bands of quartzite and quartz mica schist. The quartz mica schist is largely a biotite schist, but bands do occur where the mica is entirely muscovite or muscovite-sericite. In places, this becomes an almost pure muscovite or sericite schist. The rock units are from several centimetres to a couple of tens of metres thick.

Mineralization consists of massive to semi-massive sulphides made up of galena, sphalerite, minor chalcopyrite, pyrite and considerable pyrrhotite. Sulphide bands are found in biotite schist, usually with quartzite, and appear conformable to bedding. These bands vary from several centimetres to 1 metre wide. Locally, closely spaced sulphide bands occur over a 3 to 3.6 metre width.

Drillholes 11 and 12 in Pit L intersected a zone of mineralization 3.6 metres thick, in which individual sulphide bands 0.9 to 1.2 metres wide, assayed from 0.5 to 2.9 per cent combined lead-zinc (see Annis (Main), 082LNW021 - Prospectus, Annis Mines Ltd., May 4, 1966).

CAPSULE GEOLOGY

The main Annis showing (082LNW021) is developed by an adit 48 metres long and by several pits (A to J). Three southernmost trenches/pits (2, 3 and 6) comprise the Annis 11 showing (082LNW025), and are located 304 metres south of the adit. Trench 5, 122 metres north of the Annis 11 showing, comprises the Annis 5 showing (082LNW024). Three pits/trenches (K to M), about 182 metres north-northwest of the adit, comprises the Annis 8 showing (this description) (see Annis (Main), 082LNW021 - Sketch map of trenches, 1966).

BIBLIOGRAPHY

EM EXPL 1998-57-64
EMPR AR 1964-105; 1965-205,206; *1966-146-148; 1967-135
EMPR ASS RPT 4453, 5864, 6621, 10745, 15523, 18701, *19824
EMPR EXPL 1976-E57,E58
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1970-319; 1973-103,104
EMPR OF 1990-30
EMPR PF ((see Annis (Main), 082LNW021 for Drill sections; Claim location map; Geological plan map of adit; Location map of trenches and diamond-drill holes; Photographs of camp and adit portal; Prospectus, May 4, 1966, Annis Mines Ltd.); General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
EMR MP CORPFILE (Annis Mines Ltd.)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 173)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.19 (Feb.1982), pp. 288-307; Vol.21 (Oct.1984), pp. 1171-1193
Statement of Material Facts, Jan. 1976, Sicamous Resources Ltd.
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1995/07/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW024**

NATIONAL MINERAL INVENTORY: 082L14 Pb1

NAME(S): **ANNIS 5**, LARCH HILLS, ANNIS MINES,
LG

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 47 32 N
LONGITUDE: 119 03 14 W
ELEVATION: 841 Metres

NORTHING: 5628730
EASTING: 355243

LOCATION ACCURACY: Within 500M

COMMENTS: Trench 5 showing in the Larch Hills, between Shuswap and Mara lakes, about 19 kilometres northeast of the community of Salmon Arm (see Annis (Main), 082LNW021 - Sketch map of trenches and drillholes, 1966).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite

ASSOCIATED: Pyrrhotite Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratabound

CLASSIFICATION: Sedimentary

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Mount Ida

FORMATION

Silver Creek

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Biotite Schist
Quartz Mica Schist
Quartzite
Micaceous Quartzite
Granitic Dike
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Annis showings are underlain by quartzite, micaceous quartzite and quartz mica schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). The mica schists are the most common rock type observed. Muscovite is dominant in these schists, however, lenses rich in biotite and chlorite have been observed. Intercalated with the mica schists are lenses of massive, generally fine grained, micaceous quartzite. Narrow, granitic and pegmatite dikes are common, in places cutting the local planes of schistosity. Observed schistosity attitudes are variable, with strikes ranging from 070 to 145 degrees and dipping from 40 to 50 degrees to the north.

Within the workings area, the rocks consist of alternating, comparatively thin bands of quartzite and quartz mica schist. The quartz mica schist is largely a biotite schist, but bands do occur where the mica is entirely muscovite or muscovite-sericite. In places, this becomes an almost pure muscovite or sericite schist. The rock units are from several centimetres to a couple of tens of metres thick.

Mineralization consists of massive to semi-massive sulphides made up of galena, sphalerite, minor chalcopyrite, pyrite and considerable pyrrhotite. Sulphide bands are found in biotite schist, usually with quartzite, and appear conformable to bedding. These bands vary from several centimetres to 1 metre wide. Locally, closely spaced sulphide bands occur over a 3 to 3.6 metre width.

Grab samples from trench 5 assayed from 1.15 to 1.75 per cent lead, 0.42 to 0.8 per cent zinc and 3.4 to 22.2 grams per tonne silver (see Annis (Main), 082LNW021 - Sketch map of trenches, 1966).

The main Annis showing (082LNW021) is developed by an adit 48 metres long and by several pits (A to J). Three southernmost

CAPSULE GEOLOGY

trenches/pits (2, 3 and 6) comprise the Annis 11 showing (082LNW025), and are located 304 metres south of the adit. Trench 5, 122 metres north of the Annis 11 showing, comprises the Annis 5 showing (this description). Three pits/trenches (K to M), about 182 metres north-northwest of the adit, comprises the Annis 8 showing (082LNW023) (see Annis (Main), 082LNW021 - Sketch map of trenches, 1966).

BIBLIOGRAPHY

EMPR AR 1964-105; 1965-205,206; *1966-146-148; 1967-135
EMPR ASS RPT 4453, 5864, 6621, 10745, 15523, 18701, *19824
EMPR EXPL 1976-E57,E58
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1970-319; 1973-103,104
EMPR OF 1990-30
EMPR PF ((see Annis (Main), 082LNW021 for Drill sections; Claim location map; Geological plan map of adit; Location map of trenches and diamond-drill holes; Photographs of camp and adit portal; Prospectus, May 4, 1966, Annis Mines Ltd.); General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
EMR MP CORPFILE (Annis Mines Ltd.)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 173)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.19 (Feb.1982), pp. 288-307; Vol.21 (Oct.1984), pp. 1171-1193
Statement of Material Facts, Jan. 1976, Sicamous Resources Ltd.
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1995/07/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW025**

NATIONAL MINERAL INVENTORY: 082L14 Pb1

NAME(S): **ANNIS 11**, LARCH HILLS, ANNIS MINES,
LG

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 47 28 N
LONGITUDE: 119 03 15 W
ELEVATION: 838 Metres

NORTHING: 5628607
EASTING: 355220

LOCATION ACCURACY: Within 500M

COMMENTS: Pit 2 in the Larch Hills, between Shuswap and Mara lakes, about 19 kilometres northeast of the community of Salmon Arm (see Annis (Main), 082LNW021 - Sketch map of trenches and drillholes, 1966).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite

ASSOCIATED: Pyrrhotite Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Mount Ida	Silver Creek	

LITHOLOGY: Biotite Schist
Quartz Mica Schist
Quartzite
Micaceous Quartzite
Granitic Dike
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Annis showings are underlain by quartzite, micaceous quartzite and quartz mica schist of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). The mica schists are the most common rock type observed. Muscovite is dominant in these schists, however, lenses rich in biotite and chlorite have been observed. Intercalated with the mica schists are lenses of massive, generally fine grained, micaceous quartzite. Narrow, granitic and pegmatite dikes are common, in places cutting the local planes of schistosity. Observed schistosity attitudes are variable, with strikes ranging from 070 to 145 degrees and dipping from 40 to 50 degrees to the north.

Within the workings area, the rocks consist of alternating, comparatively thin bands of quartzite and quartz mica schist. The quartz mica schist is largely a biotite schist, but bands do occur where the mica is entirely muscovite or muscovite-sericite. In places, this becomes an almost pure muscovite or sericite schist. The rock units are from several centimetres to a couple of tens of metres thick.

Mineralization consists of massive to semi-massive sulphides made up of galena, sphalerite, minor chalcopyrite, pyrite and considerable pyrrhotite. Sulphide bands are found in biotite schist, usually with quartzite, and appear conformable to bedding. These bands vary from several centimetres to 1 metre wide. Locally, closely spaced sulphide bands occur over a 3 to 3.6 metre width.

Grab samples from pit 2 assayed 1.27 to 2.85 per cent lead, 1.8 to 2.9 per cent zinc and 17.1 to 27.4 grams per tonne silver (see Annis (Main), 082LNW021 - Sketch map of trenches, 1966).

The main Annis showing (082LNW021) is developed by an adit 48 metres long and by several pits (A to J). Three southernmost

CAPSULE GEOLOGY

trenches/pits (2, 3 and 6) comprise the Annis 11 showing (this description), and are located 304 metres south of the adit. Trench 5, 122 metres north of the Annis 11 showing, comprises the Annis 5 showing (082LNW024). Three pits/trenches (K to M), about 182 metres north-northwest of the adit, comprises the Annis 8 showing (082LNW023) (see Annis (Main), 082LNW021 - Sketch map of trenches, 1966).

BIBLIOGRAPHY

EMPR AR 1964-105; 1965-205,206; *1966-146-148; 1967-135
EMPR ASS RPT 4453, 5864, 6621, 10745, 15523, 18701, *19824
EMPR EXPL 1976-E57,E58
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1970-319; 1973-103,104
EMPR OF 1990-30
EMPR PF ((see Annis (Main), 082LNW021 for Drill sections; Claim location map; Geological plan map of adit; Location map of trenches and diamond-drill holes; Photographs of camp and adit portal; Prospectus, May 4, 1966, Annis Mines Ltd.); General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
EMR MP CORPFILE (Annis Mines Ltd.)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 173)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.19 (Feb.1982), pp. 288-307; Vol.21 (Oct.1984), pp. 1171-1193
Statement of Material Facts, Jan. 1976, Sicamous Resources Ltd.
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1995/07/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW026**

NATIONAL MINERAL INVENTORY:

NAME(S): **QUARTZITE POINT**, SHUSWAP LAKE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

Open Pit Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 54 53 N
LONGITUDE: 119 02 28 W
ELEVATION: 365 Metres

NORTHING: 5642326
EASTING: 356520

LOCATION ACCURACY: Within 500M

COMMENTS: Quartzite Point is located on the east shore of Salmon Arm of Shuswap Lake, about 29 kilometres northeast of the community of Salmon Arm (Open File 1987-15).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R07 Silica sandstone
DIMENSION: 275 x 9 Metres
COMMENTS: Quartzite band.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Silica

YEAR: 1928

GRADE: 45.9000 Per cent

COMMENTS: Representative sample.
REFERENCE: Open File 1987-15, page 23.

CAPSULE GEOLOGY

The Quartzite Point occurrence is located close to the east shore of Shuswap Lake, about 9.4 kilometres northwest of Sicamous. Quartzite occurs as a band, 7.6 to 9.1 metres thick, between layers of gneiss within the Hadrynian? to Paleozoic Eagle Bay assemblage. It is exposed for 275 metres and trends northeasterly with a gentle dip to the southeast. The quartzite is medium grained and white to glassy, with patches of brown stain on fracture surfaces.

In 1928, one sample reported as a representative sample from a trench, assayed 98.20 per cent SiO₂, 0.12 per cent Fe₂O₃, 0.77 per cent Al₂O₃, 0.57 per cent CaO, 0.34 per cent MgO and 0.17 per cent LOI. In 1958, another chip sample taken across the width of the quarry exposure assayed 97.48 per cent SiO₂, 0.59 per cent Al₂O₃ and 0.02 per cent Fe (Open File 1987-15, pages 23,24).

Development work consisted of a quarry 12 by 4.5 metres, pits, stripping, two adits (7.6 metres and 18.2 metres) and a crushing plant. A shipment of 90 tonnes was made in 1923 and an unknown amount around 1962-1965.

BIBLIOGRAPHY

EMPR AR 1913-204; 1923-172; 1958-104; 1965-274
EMPR FIELDWORK 1988, pp. 49-54
EMPR OF *1987-15, pp. 23,24

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 102
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 163)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CANMET RPT 686, Part II, p. 38
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/29

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW027**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOPEFUL**, SHUSWAP LAKE, DEBBIE LYNN

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5642750
EASTING: 357958

LATITUDE: 50 55 08 N
LONGITUDE: 119 01 15 W
ELEVATION: 541 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Located near Quartzite Point, on the east shore of Salmon Arm of Shuswap Lake, about 30 kilometres northeast of the community of Salmon Arm (Open File 1987-15).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
ASSOCIATED: Pyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R07 Silica sandstone
DIMENSION: Metres
COMMENTS: Attitude of quartzite band.

Massive
Industrial Min.

STRIKE/DIP: 035/10E
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Quartzite
Biotite Hornblende Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1965
SAMPLE TYPE: Grab
COMMODITY: Silica GRADE: 45.4000 Per cent

COMMENTS: A mixed grab sample consisting of chips gathered from all of the workings.

REFERENCE: Minister of Mines Annual Report 1965, page 275.

CAPSULE GEOLOGY

The Hopeful quartzite deposit is 243 metres above Shuswap Lake, about 1828 metres up an old logging road that starts on the lakeshore 800 metres northeast of Quartzite Point.

A medium grained, white quartzite band, 9.1 to 12.2 metres thick, is interbedded with biotite hornblende gneiss within the Hadrynian? to Paleozoic Eagle Bay assemblage. The quartzite band is well exposed for 304 metres along a strike of 035 degrees on the surface of a small flat bench and in bluffs along its edge. It dips 10 degrees to the southeast. Although much of it is glassy to milky white, some is stained yellow to brown. Scattered patches of pyrite are present.

Workings on the deposit consist of one pit 1.8 by 0.9 metres, a cut on the edge of a bluff that is 4.5 by 3 by 2.4 metres, and three small blastholes. A mixed grab sample consisting of chips gathered from all of the workings analysed 97.28 per cent SiO₂, 0.29 per cent Al₂O₃, 2.09 per cent CaO and 0.25 per cent Fe (total) (Minister of Mines Annual Report 1965, page 275).

BIBLIOGRAPHY

EMPR AR *1965-275; 1968-330
EMPR FIELDWORK 1988, pp. 49-54

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 104
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1969-405
EMPR OF *1987-15, pp. 23,24
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet; Gavel, G.H. (1970): Report on Mineral Claims Debbie Lynn
#1, 2 and 3)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 141)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW028**

NATIONAL MINERAL INVENTORY:

NAME(S): **GALAXY**, NOVA, FLY HILL,
MARK, ED

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 41 36 N
LONGITUDE: 119 23 41 W
ELEVATION: 1272 Metres

NORTHING: 5618459
EASTING: 330868

LOCATION ACCURACY: Within 500M

COMMENTS: Showing on the Galaxy 9 claim, near the headwaters of the east
tributary of Gordon Creek, about 8 kilometres west of the community
of Salmon Arm (Assessment Report 2756).

COMMODITIES: Nickel Copper

MINERALS

SIGNIFICANT: Pyrrhotite Pentlandite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: M02 Tholeiitic intrusion-hosted Ni-Cu

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: Pyroxenite Sill
Pyroxenite Dike
Pyroxenite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

At the Galaxy showing, pyroxenite dikes and sills containing fracture fillings and disseminations of pyrrhotite and pentlandite, intrude Cretaceous? granitic rocks near the contact with metasediments of the Hadrynian and/or Paleozoic Silver Creek Formation.

In 1967, work performed comprised three bulldozer trenches for a total of 396 metres, stripping across a 60 by 91 metre area, an open-cut 5.4 metres into bedrock, and 2 diamond-drill holes for a total of 152 metres.

BIBLIOGRAPHY

EMPR AR 1964-105; 1967-136
EMPR ASS RPT *2756
EMPR GEM 1970-319
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 180)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW029**

NATIONAL MINERAL INVENTORY:

NAME(S): **CB, PRITCHARD**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 42 52 N
LONGITUDE: 119 48 51 W
ELEVATION: 548 Metres

NORTHING: 5621848
EASTING: 301337

LOCATION ACCURACY: Within 500M

COMMENTS: Main showing located north of the South Thompson River and the Trans-Canada Highway, about 3 kilometres north of the community of Pritchard (Assessment Report 2403).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
COMMENTS: Possible bornite.
ASSOCIATED: Quartz Carbonate Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au
DIMENSION: 9 x 6 Metres
COMMENTS: Main showing.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP
Triassic-Jurassic Nicola

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Andesite Lava
Andesite Tuff
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock

YEAR: 1969

COMMODITY
Copper

GRADE
0.5100 Per cent

REFERENCE: Assessment Report 2403.

CAPSULE GEOLOGY

At the main CB showing in an area 9 by 6 metres, chalcopyrite, pyrite, malachite and bornite? occur sporadically in narrow quartz-carbonate veins and veinlets, up to 15 centimetres wide, which are associated with shears intersecting a fault striking between 045 and 090 degrees. Hostrocks comprise Upper Triassic and? Lower Jurassic Nicola Group andesite lava with interbedded tuff and minor argillite. A rock sample assayed 0.51 per cent copper (Assessment Report 2403).

The original showings on the property were hand trenched probably early in the 1900s. Kamad Silver Co. Ltd. acquired the property and completed a prospecting program accompanied by four bulldozer trenches. In 1966, Nordco Explorations Limited carried out an induced polarization survey over 6 lines. From 1969 to 1970, geological, geochemical, ground magnetometer and an airborne geophysical (magnetometer and electromagnetic) survey were performed. In 1971, 2 holes were diamond drilled totalling 122 metres.

BIBLIOGRAPHY

EMPR ASS RPT 1008, *2403, 2990

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 107
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1971-434; 1972-81
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 179)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW030**

NATIONAL MINERAL INVENTORY:

NAME(S): **K, PRITCHARD**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 43 03 N
LONGITUDE: 119 48 37 W
ELEVATION: 640 Metres

NORTHING: 5622178
EASTING: 301625

LOCATION ACCURACY: Within 500M

COMMENTS: Located north of the South Thompson River and the Trans-Canada Highway, about 3 kilometres north of the community of Pritchard (Assessment Report 2403).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
COMMENTS: Possible bornite.
ASSOCIATED: Quartz Carbonate Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Andesite Lava
Andesite Tuff
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

At the K showing, chalcopyrite, pyrite, malachite and bornite? occur sporadically in narrow quartz-carbonate veins and veinlets, up to 15 centimetres wide, which are associated with shears intersecting a fault striking between 045 and 090 degrees. Hostrocks comprise Upper Triassic and? Lower Jurassic Nicola Group andesite lava with interbedded tuff and minor argillite.

BIBLIOGRAPHY

EMPR ASS RPT 1008, *2403, 2990
EMPR GEM 1971-434; 1972-81
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 178)
GSC P 48-1; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW031**

NATIONAL MINERAL INVENTORY:

NAME(S): **FS, CHASE SILICA**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L13W
BC MAP:

Open Pit

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 48 25 N
LONGITUDE: 119 49 46 W
ELEVATION: 1082 Metres

NORTHING: 5632173
EASTING: 300653

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein at the northern outcrop, along Niskonlith Creek, about 10 kilometres west of the community of Chase (Open File 1987-15).

COMMODITIES: Silica Copper Lead Zinc Tungsten

MINERALS

SIGNIFICANT: Quartz Silica
ASSOCIATED: Pyrite Chalcopyrite Pyrrhotite Sphalerite Galena
 Scheelite
ALTERATION: Fuchsite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork Shear
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I07 Silica veins I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
DIMENSION: 15 Metres STRIKE/DIP: 360/80 TREND/PLUNGE:
COMMENTS: Southern exposure of quartz vein.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Cretaceous	Mount Ida	Silver Creek	Unnamed/Unknown Informal

LITHOLOGY: Felsic Schist
Amphibolite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1969
SAMPLE TYPE: Chip
COMMODITY GRADE
Silica 46.6000 Per cent
COMMENTS: Random sample from northern exposure. Also analysed 0.064 per cent total Fe, trace Al₂O₃ and nil CaO.
REFERENCE: Open File 1987-15, page 29.

CAPSULE GEOLOGY

The FS occurrence is located on Niskonlith Creek about 10 kilometres west of Chase. The occurrence consists of two exposures of thick, milky white quartz veins separated by about 400 metres in a north-south direction. Drilling has established continuity between the two outcrops.

Rocks underlying the area are comprised mainly of schist and amphibolite of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). The quartz veining appears to be hosted in a fault zone near the contact between the Silver Creek Formation rocks and Cretaceous? granite.

At the southern outcrop, the quartz vein strikes northerly, dips steeply and is 3.5 to 15 metres wide. Surrounding rocks are mainly felsic schists and amphibolites. The quartz is milky white and coarse grained with occasional well-formed crystals reaching 10 to 20 centimetres in length. Minor impurities that are present throughout the width of the vein include seams of fuchsite and reddish,

CAPSULE GEOLOGY

rust-stained patches. A zone of impure vein quartz, up to 7.5 metres wide, is transitional to extensive quartz stockwork in altered country rock on either side of the main vein. The pit walls contain variable amounts of quartz stockwork veining. The impure margins of the main vein and the quartz stockwork veining are mineralized with pyrite, chalcopyrite, pyrrhotite, sphalerite, galena, scheelite and possibly tungstenite. The vein is visually estimated to be composed of greater than 98 per cent quartz.

Several shipments were made from a quarry on the southern outcrop to silicon and silicon carbide plants in Oregon. In 1982, the north-south elongated quarry measured 110 by 35 metres but no production figures are available.

At the northern outcrop (granite dome outcrop), a quartz vein striking 040 degrees with a steep dip occurs within leucocratic granitic rocks. The vein is 20 metres wide. The quartz is coarse grained, massive and milky white. Minor yellow and orange rust staining occurs on fractures and rare grains of sulphides are present in the quartz. Quartz stockwork veining occurs throughout the granite. A random chip sample in 1969 assayed 99.74 per cent SiO₂, 0.064 per cent total Fe, trace Al₂O₃ and nil CaO (Open File 1987-15, page 29).

BIBLIOGRAPHY

- EMPR AR 1968-330
- EMPR ASS RPT 9529
- EMPR EXPL 1978-98,293; 1980-542
- EMPR FIELDWORK 1979, p. 118; 1982, p. 197; 2000, pp. 67-74
- EMPR GEM 1969-405
- EMPR MAP 56
- EMPR OF *1987-15, pp. 28,29
- EMPR PF (Sketch map with assays; Application for a Limited Production Permit; General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
- GSC MAP 1059A
- GSC MEM 296
- GSC OF 481; 637 (Occurrence 170)
- GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
- CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/07

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LNW032**

NATIONAL MINERAL INVENTORY:

NAME(S): **THUNDERBOLT, ANNEX**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 54 17 N
LONGITUDE: 119 02 25 W
ELEVATION: 426 Metres

NORTHING: 5641212
EASTING: 356548

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located near the east shore of Shuswap Lake (Salmon Arm), south of Quartzite Point, about 29 kilometres north-northeast of the community of Salmon Arm (Minister of Mines Annual Report 1913).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE:

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist
Mica Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Thunderbolt showing is underlain by chlorite schist, mica schist and quartzite of the Hadrynian? to Paleozoic Eagle Bay assemblage. Two adits have been driven and several pits (shafts) have been sunk on narrow, pyritic quartz veins in the chlorite and mica schists. The veins assayed trace gold.

One adit is about 91 metres above the lake, the other on the lakeshore. The upper adit is 7.6 metres long, the lower one 18.2 metres long. Near the lower adit, on the north side, is an outcrop of impure iron ore in mica schist which, several years ago, a pit was sunk 3.6 metres wide by about 3.6 metres long at its mouth, tapering to 1.2 by 1.5 metres at a depth of 2.4 metres, below which sinking had been continued, but to an unknown depth due to water (Minister of Mines Annual Report 1913, page K205).

BIBLIOGRAPHY

EMPR AR *1913-K192,K204,K205; 1932-A146
EMPR FIELDWORK 1988, pp. 49-54
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 141
GSC OF 481; 637 (Occurrence 166)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW033**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACK POINT**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 45 46 N
LONGITUDE: 119 02 34 W
ELEVATION: 350 Metres

NORTHING: 5625435
EASTING: 355935

LOCATION ACCURACY: Within 500M

COMMENTS: A bubbling spring in Mara Lake, located about 18.5 kilometres northeast of the community of Salmon Arm (GSC Memoir 296).

COMMODITIES: Hotspring

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Carbon dioxide gas.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Hydrothermal
TYPE: T02 Geothermal spring

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Gneiss
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

A bubbling spring is located in Mara Lake, just south of Black Point, and has been active since early Indian times. The gas that issues from this spring is largely carbon dioxide. Rumour states that a company intends to capture the gas, compress it, and market it for industrial use (GSC Memoir 296, page 162).

Recent geology maps indicates the area is underlain by gneiss and schist of the Proterozoic and/or Paleozoic Shuswap assemblage.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM *296, p. 162
GSC OF 481; 637 (Occurrence 174)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.19 (Feb.1982), pp. 288-307; Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/07/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW034**

NATIONAL MINERAL INVENTORY: 082L13 Fsp1

NAME(S): **TO**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 49 27 N
LONGITUDE: 119 40 23 W
ELEVATION: 442 Metres

NORTHING: 5633677
EASTING: 311738

LOCATION ACCURACY: Within 500M

COMMENTS: Highway cut along the Trans-Canada Highway just east of the community of Chase (Assessment Report 3915).

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.

TYPE: I11 Barite-fluorite veins

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Ordovician

Mount Ida

Undefined Formation

Proterozoic-Paleoz.

Mount Ida

Silver Creek

LITHOLOGY: Granitic Gneiss
Granite
Dioritic Gneiss
Amphibolite
Mica Schist

HOSTROCK COMMENTS: Little Shuswap orthogneiss of the Mount Ida assemblage.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The To showing is situated near the contact between the Ordovician Little Shuswap orthogneiss of the Mount Ida Group and the Hadrynian and/or Paleozoic Silver Creek Formation. In the showing area, the Little Shuswap orthogneiss comprises granitic to dioritic gneisses and the Silver Creek Formation comprises mica schists and amphibolites.

Fluorite is observed in amphibolite and granite gneiss (described as andesite and syenite respectively, in Assessment Report 3915). The fluorite is associated with fractures, either as a constituent of quartz veins up to 20 centimetres wide, or as a thin coating on fracture surfaces. Where the fluorite occurs as coatings on fracture surfaces, it averages about 2 millimetres wide although in some instances the coatings attain a width of about 10 millimetres.

The fluorite mineralization is associated with a fracture system that strikes to the northeast and dips steeply either to the northwest or southeast. The fluorite mineralization occurs over a distance of 485 metres.

BIBLIOGRAPHY

EMPR ASS RPT *3915
EMPR GEM 1972-587
EMPR OF 1992-16
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 171)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 114
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW035**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUDGET, MM, SWAN,
BLAIR, CHAR**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L12E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 33 46 N
LONGITUDE: 119 35 36 W
ELEVATION: 1067 Metres

NORTHING: 5604417
EASTING: 316334

LOCATION ACCURACY: Within 500M

COMMENTS: Showing located along a roadcut, south of Blair Creek and about 7 kilometres north of Falkland (Assessment Report 4045).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Malachite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Cretaceous

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Andesite
Andesite Flow
Andesite Tuff
Argillite
Siltstone
Phyllite
Diorite
Quartz Diorite
Meta Sediment/Sedimentary
Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1988

SAMPLE TYPE: Rock

COMMODITY

GRADE

Copper

0.1700

Per cent

REFERENCE: Assessment Report 18716, page 17.

CAPSULE GEOLOGY

The Budget occurrence is located near the eastern margin of the Quesnel Terrane and the eastern boundary of the Intermontane Belt. The property is close to the contact between mafic volcanic rocks and fine clastic sedimentary rocks of the Upper Triassic and? Lower Jurassic Nicola Group. The strata have been folded and faulted along northwest trending axes and regionally metamorphosed to lower greenschist facies.

The showing is underlain by dark green and black, fine grained clastic sedimentary rocks (siltstone, argillite and/or phyllite) and green mafic flows and tuffs (andesite). The sedimentary rocks commonly contain 1 to 2 per cent pyrite or pyrrhotite and are locally graphitic and calcareous. The strata strikes northwest with steep dips, mainly to the southeast. Several small dike-like and sill-like bodies of quartz diorite and diorite are associated with the mafic volcanic rocks. Two large bodies of quartz diorite, several hundred

CAPSULE GEOLOGY

metres in diameter, have been mapped east and south and are believed to be Cretaceous?

Minor disseminated and fracture-controlled chalcopyrite and some malachite occur in metasedimentary and metavolcanic rocks along roadcuts. A rock sample of silicified brown schist containing pyrite and malachite assayed 0.17 per cent copper (Assessment Report 18716, page 17).

The first record of work was during 1969 and 1970 when a geological and magnetometer survey was completed, and 219 soil samples collected by Gunnex Ltd. on the Swan claims. In 1971, additional claims were staked and an additional 269 soil samples were collected. In 1972, Canadian Johns Manville Co. acquired the property and in 1973 they completed a magnetic, geological and 800-sample soil geochemistry survey. In 1973, six lines of induced polarization surveying were completed in addition to detailed geological mapping and 1297 soil samples. In 1974, 15 vertical percussion drill holes (614 metres) were completed. The focus of the exploration work was for porphyry-style mineralization.

BIBLIOGRAPHY

EMPR ASS RPT *4045, 4271, 4735, 4975, 18716, *23435
EMPR GEM 1972-81; 1973-102; 1974-94
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrences 224, 225)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW036**

NATIONAL MINERAL INVENTORY:

NAME(S): **NIK, COMSTOCK, CORN,
EAST, AD**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 59 28 N
LONGITUDE: 119 33 16 W
ELEVATION: 1463 Metres

NORTHING: 5651943
EASTING: 320734

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone near the headwaters of the main, east tributary of
Nikwikwaia Creek, about 21 kilometres north-northeast of the
community of Chase (Assessment Report 14385).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite
ASSOCIATED: Pyrite Pyrrhotite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Stratiform
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Dacite
Dacite Tuff
Dacite Flow
Dacite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Nik showing is underlain by metamorphosed mafic to felsic volcanic rocks of the Devonian Skwaam Bay unit of the Eagle Bay assemblage. The units have a well developed foliation which dips moderately (20-45 degrees) to the west and northwest. The rocks comprise dacite tuffs and flows, which are divided by dacite schists and occasionally bands of basalt.

Sulphide zones occur within the dacite and dacite schist and near their contact. Most of the mineralization occurs as stratiform disseminations of pyrite and pyrrhotite with minor chalcopyrite and sphalerite. These zones appear to range up to 1.5 to 2.0 metres in thickness and 10 to 30 metres in length.

BIBLIOGRAPHY

EMPR ASS RPT 13048, *14385, 15039, 16211
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 130)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/19

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW037**

NATIONAL MINERAL INVENTORY:

NAME(S): **SABRE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 52 12 N
LONGITUDE: 119 13 16 W
ELEVATION: 777 Metres

NORTHING: 5637719
EASTING: 343718

LOCATION ACCURACY: Within 500M

COMMENTS: Claim centre, south of White Lake, about 20 kilometres north of the community of Salmon Arm.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite

ASSOCIATED: Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Phyllite
Quartz Chlorite Phyllite
Sericite Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

At the Sabre showing, pyrite, chalcopyrite and molybdenite occur as disseminations on foliation planes and in fractures in chlorite phyllite, quartz chlorite phyllite and sericite phyllite of the Devonian Skwaam Bay unit of the Eagle Bay assemblage.

Trenching (61 metres), stripping (743 square metres) and 2 percussion-drill holes (152 metres total) were completed in 1972.

BIBLIOGRAPHY

EMPR ASS RPT *7755
EMPR EXPL 1979-107
EMPR GEM *1972-83
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 159)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/27

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 119
REPORT: RGEN0100

MINFILE NUMBER: **082LNW038**

NATIONAL MINERAL INVENTORY:

NAME(S): **AB 10**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 30 17 N
LONGITUDE: 119 29 24 W
ELEVATION: 1166 Metres

NORTHING: 5597712
EASTING: 323435

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone outcrop in a creek bed located 3 kilometres south of Bolean Lake, west of Silvernail Lake, about 6 kilometres east of the community of Falkland (Assessment Report 4830).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Upper Triassic
GROUP: Nicola

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The AB 10 showing consists of disseminated chalcopyrite and pyrite in a small outcrop of impure, brown limestone located in a creek bed. The limestone is within an argillite sequence of the Upper Triassic Nicola Group.

BIBLIOGRAPHY

EMPR ASS RPT *4830
EMPR GEM 1973-100,101
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 228)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/10

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW038**

MINFILE NUMBER: **082LNW039**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZETT**, EAGLE, JAY

MINING DIVISION: Vernon
Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5614270
EASTING: 357336

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

LATITUDE: 50 39 46 N
LONGITUDE: 119 01 07 W
ELEVATION: 1158 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized outcrop located 500 metres south of Blurton Creek, about 15 kilometres north-northeast of the community of Enderby (Assessment Report 2510).

COMMODITIES: Nickel

MINERALS

SIGNIFICANT: Pentlandite Pyrrhotite

COMMENTS: Probably pentlandite.

ALTERATION: Chlorite Talc

ALTERATION TYPE: Chloritic

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: M02 Tholeiitic intrusion-hosted Ni-Cu

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic
Proterozoic-Paleoz.

GROUP

Mount Ida

FORMATION

Tsalkom

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY:

Peridotite
Pyroxenite
Ultramafic
Granite Gneiss
Feldspar Hornblende Biotite Gneiss
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1969

SAMPLE TYPE: Grab

COMMODITY

GRADE

Nickel

0.2800

Per cent

COMMENTS: Average assay from seven representative grab samples.

REFERENCE: Assessment Report 2510, page 6.

CAPSULE GEOLOGY

The Zett property is located near the fault contact between the Proterozoic and/or Paleozoic Shuswap assemblage and the lower Paleozoic Tsalkom Formation (Mount Ida Group). Shuswap rocks comprise granite gneiss, feldspar (hornblende, biotite) gneiss and marble while ultramafic bodies of the Tsalkom Formation consist of peridotites to pyroxenites.

Chlorite (and locally talc) is the most common alteration product and usually occurs close to large shear zones.

Nickel is present in sulphide form (probably pentlandite) and is associated with pyrrhotite as very fine disseminations in the ultramafic rocks. In an irregularly shaped plug outcropping over an area of 304 by 152 metres, seven representative grab samples yielded an average 0.28 per cent nickel (Assessment Report 2510, page 6). Two small bands of ultramafic rock cross an access road, about 1500 metres south of the main plug. A sample from here assayed 0.18 per cent nickel over 3 metres (Assessment Report 2510, page 6).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 121
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *2510
EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 219)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/12

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW040**

NATIONAL MINERAL INVENTORY:

NAME(S): **BURN**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 43 04 N
LONGITUDE: 119 09 46 W
ELEVATION: 945 Metres

NORTHING: 5620672
EASTING: 347327

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located near the headwaters of East Canoe Creek, about 8 kilometres east of the community of Salmon Arm (Assessment Report 3111).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite

ASSOCIATED: Quartz Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Porphyry

TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.
Cretaceous

Mount Ida

Silver Creek

Unnamed/Unknown Informal

LITHOLOGY: Granite
Graphitic Limestone
Calcareous Graphitic Phyllite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Burns showing is predominantly underlain by a series of uniform, contorted, dark grey to black, fine grained graphitic limestones, calcareous graphitic phyllites and thin marble bands of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group). The rocks are tightly folded and dips vary from near horizontal to vertical. Numerous concordant bodies of fine grained granitic rock intrude this sequence. These granitic rocks may be related to a nearby, larger Cretaceous? intrusion to the northeast.

Irregular, discontinuous quartz veins, veinlets, lenses and blebs permeate most of the exposed granite. The veins generally strike southerly in the south part of the property, and more westerly in the north part of the property.

Numerous occurrences of molybdenite have been noted throughout the property. In most cases, the molybdenite occurs as fine to medium grained, discrete flakes along the margins of the quartz veins. Disseminated pyrite is common in the granite near mineralized quartz veins.

BIBLIOGRAPHY

EMPR ASS RPT *3111
EMPR GEM 1971-433
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW040**

MINFILE NUMBER: **082LNW041**

NATIONAL MINERAL INVENTORY:

NAME(S): **HY 7**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 48 17 N
LONGITUDE: 119 58 02 W
ELEVATION: 1256 Metres

NORTHING: 5632307
EASTING: 290937

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond-drill hole collar on the Hy 7 claim, near the north end of Hyas Lake, about 20 kilometres west of the community of Chase (Assessment Report 4944).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite Pyrrhotite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic
Triassic-Jurassic

GROUP

Harper Ranch
Nicola

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone Breccia
Limestone
Argillite
Argillaceous Limestone
Argillaceous Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

A diamond-drill hole on the Hy 7 claim intersected a sequence of interbedded argillite, argillaceous shale, limestone, argillaceous limestone and limestone breccia, of the Mississippian to Triassic Harper Ranch and? Nicola groups.

Pyrite, pyrrhotite and specks of chalcopyrite were noted in the limestone breccia. Some chalcopyrite also occurs as smears in shears.

BIBLIOGRAPHY

EMPR ASS RPT *4944
EMPR EXPL 1975-E54,E55
EMPR GEM 1973-103; 1974-94,95
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet; Bacon, W.R. (1972): Report on Several B.C. Properties)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 169)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW042**

NATIONAL MINERAL INVENTORY:

NAME(S): **SWORD**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 51 42 N
LONGITUDE: 119 10 04 W
ELEVATION: 1501 Metres

NORTHING: 5636681
EASTING: 347443

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of claims, about 20 kilometres north-northeast of the community of Salmon Arm.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Phyllite
Sericite Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

At the Sword showing, trace amounts of chalcopyrite occur in chlorite and sericite phyllite of the Hadrynian? to Paleozoic Eagle Bay assemblage.

BIBLIOGRAPHY

EMPR GEM *1972-83
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 160)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/27

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 125
REPORT: RGEN0100

MINFILE NUMBER: **082LNW043**

NATIONAL MINERAL INVENTORY:

NAME(S): **SCIMITAR**, NN

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 53 28 N
LONGITUDE: 119 09 11 W
ELEVATION: 1160 Metres

NORTHING: 5639924
EASTING: 348575

LOCATION ACCURACY: Within 500M

COMMENTS: Drillhole NN-1 collar, 5 kilometres east of White Lake, about 24 kilometres north of the community of Salmon Arm (Assessment Report 7055).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Phyllite
Sericite Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Diamond drilling at the Scimitar showing has intersected trace amounts of chalcopyrite in chlorite and sericite phyllite of the Hadrynian? to Paleozoic Eagle Bay assemblage.

BIBLIOGRAPHY

EMPR ASS RPT 6591, *7055
EMPR EXPL 1977-E86; 1978-E99
EMPR FIELDWORK 1988, pp. 49-54
EMPR GEM 1972-83
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 161)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/26

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW043**

MINFILE NUMBER: **082LNW044**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER QUEEN**, SILVER KING, CEDAR

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 40 N
LONGITUDE: 119 27 25 W
ELEVATION: 426 Metres

NORTHING: 5650227
EASTING: 327526

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized veins located along Scotch Creek, about 24 kilometres northeast of the community of Chase (Assessment Report 12483).

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Quartz Carbonate

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Greenschist
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Silver Queen showing comprises a quartz-carbonate vein system about 30 metres wide striking northwest and dipping gently southwest, hosted in greenschist and marble. Mineralization in the veins consists of argentiferous galena and sphalerite. The veins extend north across Scotch Creek at low water.

The showing area is underlain by the Lower Cambrian Johnson Lake unit and the Devonian and/or older? Woolford Creek unit, both of the Eagle Bay assemblage.

BIBLIOGRAPHY

EMPR ASS RPT 5452, 10733, *12483
EMPR EXPL 1975-E55; *1977-E85
EMPR PF (*Statement of Exploration and Development Work, 1977;
General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 134)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/21

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 127
REPORT: RGEN0100

MINFILE NUMBER: 082LNW045

NATIONAL MINERAL INVENTORY:

NAME(S): GRAVEL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

LATITUDE: 50 54 30 N
LONGITUDE: 119 31 55 W
ELEVATION: 373 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Located 15 kilometres northeast of the community of Chase, on the north side of Shuswap Lake, straddling Corning Creek, 500 metres from the lake shore (Exploration in British Columbia 1976).

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

NORTHING: 5642685
EASTING: 321996

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Mount Ida	Silver Creek	

LITHOLOGY: Pelitic Schist
 Quartzite
 Micaceous Quartzite
 Calcareous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Gravel showing is underlain by pelitic schist, semi-pelitic schist, quartzite, micaceous quartzite and calcareous quartzite of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida assemblage). Exposed and bedded? sulphides (galena, sphalerite and pyrite) trend north-northwest.

The showing is near salmon spawning grounds and in an area of subdivision development (circa 1976).

BIBLIOGRAPHY

EMPR ASS RPT *5920
EMPR EXPL 1976-E56
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 155)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/19

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: 082LNW045

MINFILE NUMBER: **082LNW046**

NATIONAL MINERAL INVENTORY:

NAME(S): **SCOTCH**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L14W 082L13E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5647779
EASTING: 324925

LATITUDE: 50 57 18 N
LONGITUDE: 119 29 34 W
ELEVATION: 1249 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Drillhole collars between Corning and Scotch creeks, north of Shuswap Lake, about 20 kilometres northeast of the community of Chase (Assessment Report 17643). The main mineralization is 2000 metres to the east.

COMMODITIES: Copper Zinc Lead

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena
ASSOCIATED: Pyrrhotite Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Massive Stratiform Stratabound
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Sericite Chlorite Phyllite
Graphitic Argillite
Argillaceous Marble
Calcareous Argillite
Chlorite Sericite Schist
Quartz Sericite Schist
Calcareous Argillaceous Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The Scotch occurrence area is underlain by a tightly folded and overturned? sequence of metavolcanic and metasedimentary rocks of the Devonian Skwaam Bay unit and Devonian and/or older? Woolford Creek unit, both of the Eagle Bay assemblage. The rocks exhibit a well developed foliation generally striking west and dipping between 25 and 30 degrees north.

Diamond drilling has intersected a stratigraphic sequence comprised of sericite chlorite phyllite, graphitic argillite, interbanded argillaceous marble and calcareous argillite, chlorite sericite schist, quartz sericite schist and calcareous argillaceous siltstone.

Stratabound and stratiform dispersed and massive sulphide mineralization has been discovered in several places on and near the property, as well as in drillholes. The predominant sulphide mineral is pyrrhotite, with lesser pyrite and variable amounts of sphalerite, galena and chalcopyrite.

A drillhole located 2000 metres west of the main mineralized area intersected minor interbands and stringers of pyrrhotite, pyrite, chalcopyrite, sphalerite and galena.

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 297-306
EMPR ASS RPT 3511, 6237, 6419, 7691, 12216, 14998, 16176, *17643
EMPR EXPL 1976-E57; 1977-E83,E84; 1979-106,107
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 129
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 296
GSC OF 481; 637 (Occurrence 132)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
GCNL #165(Aug.27), 1976

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/20

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW047**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOAT A**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 42 30 N
LONGITUDE: 119 08 04 W
ELEVATION: 983 Metres

NORTHING: 5619564
EASTING: 349297

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate centre of the Goat A claim, located at the headwaters of Violet Creek about 10 kilometres east of the community of Salmon Arm (Exploration in British Columbia 1978).

COMMODITIES: Silica Lead Molybdenum

MINERALS

SIGNIFICANT: Silica Galena Molybdenite
COMMENTS: The sulphide mineralization occurs in the 240-metre wide silica deposit.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R07 Silica sandstone
DIMENSION: 240 Metres STRIKE/DIP: 105 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Silica deposit. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Mount Ida Silver Creek

LITHOLOGY: Quartzite
Micaceous Quartzite
Calcareous Quartzite
Pelitic Schist
Semi Pelitic Schist
Limestone
Marble
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

Prospecting, soil testing, drilling, blasting and trenching have been performed on the Goat A claims in the exploration for high-grade silica. Low grade molybdenite and galena was discovered while prospecting and trenching. The galena occurs within the 240-metre wide silica deposit.

Recent geology maps indicates the area is underlain by the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group) comprised of quartzite, micaceous quartzite and calcareous quartzite, pelitic and semi-pelitic schist, lesser limestone, marble and amphibolite.

BIBLIOGRAPHY

EMPR EXPL 1977-E82; *1978-E97
EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW047**

MINFILE NUMBER: **082LNW048**

NATIONAL MINERAL INVENTORY: 082L13 Fsp2

NAME(S): **LITTLE SHUSWAP LAKE**, LITTLE SHUSWAP

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 51 03 N
LONGITUDE: 119 39 49 W
ELEVATION: 356 Metres

NORTHING: 5636618
EASTING: 312510

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the second rocky point from the east end of Little Shuswap Lake, on the north side, about 4 kilometres from the community of Chase (GSC Annual Report 1877-78).

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I11 Barite-fluorite veins

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Ordovician	Mount Ida	Undefined Formation	

LITHOLOGY: Granitic Gneiss
Granite

HOSTROCK COMMENTS: Little Shuswap orthogneiss of the Mount Ida assemblage.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE:

CAPSULE GEOLOGY

At the Little Shuswap Lake showing, quartz veinlets contain crystals of pale purple fluorite, hosted in granitic gneisses of the Ordovician Little Shuswap orthogneiss of the Mount Ida Group. This showing is the first reported fluorspar locality in the province.

BIBLIOGRAPHY

EMPR OF 1992-16
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC ANN RPT *1877-78, p. 101B
GSC MAP 1059A
GSC MEM 296, p. 159
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW049**

NATIONAL MINERAL INVENTORY: 082L14 Fsp1

NAME(S): **TAPPEN CREEK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 46 48 N
LONGITUDE: 119 23 52 W
ELEVATION: 701 Metres

NORTHING: 5628101
EASTING: 330964

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located near the mouth of a small creek that flows north into Tappen Creek, about 21 kilometres east of the community of Chase.

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I11 Barite-fluorite veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP
Cretaceous

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Unnamed/Unknown Informal

LITHOLOGY: Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

At the Tappen Creek showing, irregular fluorite veins up to 10 centimetres wide occur in Cretaceous? granite.

BIBLIOGRAPHY

EMPR OF 1992-16
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW050**

NATIONAL MINERAL INVENTORY:

NAME(S): **ENDERBY**, ENDERBY BRICK AND TILE

STATUS: Past Producer Open Pit

MINING DIVISION: Vernon

REGIONS: British Columbia

NTS MAP: 082L11E

BC MAP:

LATITUDE: 50 33 46 N

LONGITUDE: 119 08 27 W

ELEVATION: 354 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Old workings along the bank of the Shuswap River, near the Enderby railway station (GSC Memoir 24-E, page 118).

UTM ZONE: 11 (NAD 83)

NORTHING: 5603394

EASTING: 348378

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay

ASSOCIATED: Mica

COMMENTS: Also iron oxide.

MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Massive

Stratabound

CLASSIFICATION: Residual

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

Calcareous Clay

Silty Clay

Sand

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Enderby Brick and Tile Company's works are located on the bank of the Shuswap River, near the railway station.

A stratified, yellow, calcareous clay strongly impregnated with iron oxide, is obtained from the river terrace. The clay bed is discontinuous, and is laterally replaced by sand. It has been mined to about 1.2 metres in depth for brick making; there is very little overburden. The clay is slightly silty, contains an abundance of mica scales, and is only moderately plastic.

The clay worked up with 28 per cent of water to a mass whose air shrinkage was 6.3 per cent and average tensile strength 290 pounds per square inch (1999 kPa).

In burning, the wet moulded bricklets behaved as follows:

CONE	FIRE SHRINKAGE(%)	ABSORPTION(%)	COLOUR
010	0	20.76	Red
03	3	14.77	Red
1	7.3	0.23	Dark Red
5	Fused		

The clay is steel hard at cone 03 and makes a good common brick. It burns to a vitrified body at cone 1, but the fire shrinkage is rather high at this temperature. It is more refractory than most surface clays tested, and the bricks could be burned hard enough for underground work where a non-absorbent brick was required. The clay, as dug, is too silty to use in a stiff-mud brick machine, but the lower portion of the bank, which is more plastic, would probably serve for this process.

A soft-mud brick machine is used, and a small quantity of facing bricks are re-pressed by a hand machine. The burning is done in scove kilns, with dry wood for fuel. The bricks have a good hard red body when burned, but the colour of the faces is somewhat obscured by the impure sand used in moulding. "Some 331 M bricks were kilned in 1920" (GSC Memoir 296, page 158).

The product of this yard was shipped south in the Okanagan Valley as far as Kelowna, and east along the main line of the

CAPSULE GEOLOGY

Canadian Pacific Railway as far as Revelstoke.

BIBLIOGRAPHY

EMPR AR 1920-N169
EMPR BULL 30, p. 50
EMPR FIELDWORK 1988, pp. 49-54
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 1059A
GSC MEM *24-E, pp. 118-120; *296, p. 158
GSC OF 481; 637 (Occurrence 229)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
Falconbridge File

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/10

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW051**

NATIONAL MINERAL INVENTORY:

NAME(S): **SERPENT**, EVE

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 59 27 N
LONGITUDE: 119 46 37 W
ELEVATION: 914 Metres

NORTHING: 5652476
EASTING: 305120

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralization in the bed of an unnamed tributary to Bush Creek, about 20 kilometres north of the community of Chase (Assessment Report 8799).

COMMODITIES: Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite

ASSOCIATED: Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Siliceous Phyllite
Graphitic Schist
Calcareous Shale
Limestone
Meta Arkose

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Grab

COMMODITY

GRADE

Copper

0.0400

Per cent

Lead

1.9000

Per cent

Zinc

1.6500

Per cent

REFERENCE: Assessment Report 8799, page 4.

CAPSULE GEOLOGY

The Serpent showing is underlain by siliceous phyllite of the Devonian and/or older? Dixon Ridge unit (Eagle Bay assemblage), graphitic schist, calcareous shale and limestone of the lower Paleozoic Sicamous Formation (Mount Ida Group), and meta-arkose of the lower Paleozoic Forest Lake unit (Eagle Bay assemblage). These rocks exhibit several episodes of deformation.

The mineralization occurs in the bed of an unnamed tributary to Bush Creek, and consists of very thin bands and lenses (maximum 4 centimetres) of fine-grained pyrite, sphalerite, galena and very minor chalcopyrite in a thinly laminated siliceous phyllite. The phyllite is commonly "cherty looking". Disseminated pyrite and galena was noted over a section of approximately 20 metres. One grab sample of a sulphide lens assayed 1.9 per cent lead, 1.65 per cent zinc and 0.04 per cent copper (Assessment Report 8799, page 4).

BIBLIOGRAPHY

EMPR ASS RPT *8799

EMPR FIELDWORK 2000, pp. 67-74

EMPR OF 1999-2

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 136
REPORT: RGEN0100

BIBLIOGRAPHY

Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 127)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW052**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEEP 3, EVE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 59 39 N
LONGITUDE: 119 43 49 W
ELEVATION: 524 Metres

NORTHING: 5652725
EASTING: 308408

LOCATION ACCURACY: Within 500M

COMMENTS: Trench, near the west shore of Adams Lake, north of Bush Creek, about 19.5 kilometres north of the community of Chase (Assessment Report 19514).

COMMODITIES: Lead Gold Copper

MINERALS

SIGNIFICANT: Galena Chalcopyrite
COMMENTS: Possible chalcopyrite.
ASSOCIATED: Quartz Pyrite
ALTERATION TYPE: Skarn
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Skarn
TYPE: K02 Pb-Zn skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Mount Ida	Sicamous	

LITHOLOGY: Phyllitic Argillaceous Limestone
Phyllitic Calc-silicate Skarn
Garnet Skarn
Calc-silicate Rock
Quartz Sericite Phyllite
Quartz Feldspar Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Steep 3 showing is underlain by lower Paleozoic Sicamous Formation (Mount Ida Group) phyllitic, argillaceous limestone, phyllitic calcsilicate skarn, garnet skarn, banded to massive calcsilicate rocks and quartz sericite phyllite. These have been intruded by late quartz feldspar porphyry dikes. The skarns are an extension of skarns on the Steep occurrence (082M 118) to the north.

The strike of bedding varies from 270 degrees to 360 degrees, suggesting a broad fold structure. Dips average about 50 degrees north to east.

A trench exposes galena mineralization in massive calcsilicate skarn and quartz veining. Pyrite and chalcopyrite? were also observed. A sample from an adjacent quartz porphyry dike analysed 445 parts per billion gold (Assessment Report 19514, page 7).

BIBLIOGRAPHY

EMPR ASS RPT *19514
EMPR FIELDWORK 2000, pp. 67-74
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 128)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW053**

NATIONAL MINERAL INVENTORY:

NAME(S): **NIK (EAST)**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 58 N
LONGITUDE: 119 35 57 W
ELEVATION: 716 Metres

NORTHING: 5651126
EASTING: 317563

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the east bank of Nikwikwaia Creek, about 19 kilometres north of the community of Chase (Assessment Report 8800).

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Galena Chalcopyrite
ASSOCIATED: Silica Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Podiform
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist
Quartz Sericite Schist
Sericite Schist
Greenstone
Felsite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1980

COMMODITY

COMMODITY	GRADE	Per cent
Copper	0.2700	Per cent
Lead	0.9700	Per cent
Zinc	2.5500	Per cent

REFERENCE: Assessment Report 8800, page 6.

CAPSULE GEOLOGY

The Nik (East) showing is located on the east bank of Nikwikwaia Creek, and is underlain by a sequence of pyritic chlorite schist, quartz sericite schist and sericite schist of the Devonian and/or older? Woolford Creek unit of the Eagle Bay assemblage. Massive greenstone is also found within this sequence. Felsite dikes are common.

Massive pyrrhotite with associated sphalerite and galena and minor chalcopyrite occur as lenses 5-10 centimetres wide and 5-10 centimetres long, hosted in chlorite schist. The lenses have significant amounts of silica. Selected grab samples of this mineralization analysed a maximum of 0.27 per cent copper, 0.97 per cent lead and 2.55 per cent zinc (Assessment Report 8800, page 6).

Malachite staining occurs along joint planes and fractures at several locations on the west bank of Nikwikwaia Creek.

BIBLIOGRAPHY

EMPR ASS RPT *8800, 13400, 14359, 16965, 19632, 20640
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 139
REPORT: RGEN0100

BIBLIOGRAPHY

Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 129)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW054**

NATIONAL MINERAL INVENTORY:

NAME(S): **AD, CORN EAST, CORNING CREEK,
EAST**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 29 N
LONGITUDE: 119 32 12 W
ELEVATION: 1295 Metres

NORTHING: 5650077
EASTING: 321918

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone in the bed of Corning Creek, near its headwaters,
about 20 kilometres north-northeast of the community of Chase
(Assessment Report 14385).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite
ASSOCIATED: Pyrite Pyrrhotite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Stratiform
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Dacite
Dacite Tuff
Dacite Flow
Dacite Schist
Basalt
Mafic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Ad showing is underlain by metamorphosed mafic to felsic volcanic rocks of the Devonian Skwaam Bay unit of the Eagle Bay assemblage. The units have a well developed foliation which dips moderately (20-45 degrees) to the west and northwest. The rocks comprise dacite tuffs and flows, which are divided by dacite schists and occasionally bands of basalt. Local small-scale mafic dikes occur.

Sulphide zones occur within the dacite and dacite schist, and are in close proximity to their contact. Most of the mineralization occurs as stratiform disseminations of pyrite and pyrrhotite with minor chalcopyrite and sphalerite. These zones appear to range up to 1.5 to 2.0 metres in thickness and 10 to 30 metres in length.

BIBLIOGRAPHY

EMPR ASS RPT 13048, *14385
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 131)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/19

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW055**

NATIONAL MINERAL INVENTORY:

NAME(S): **LISLE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 59 40 N
LONGITUDE: 119 09 23 W
ELEVATION: 1310 Metres

NORTHING: 5651420
EASTING: 348676

LOCATION ACCURACY: Within 500M

COMMENTS: Showing located near the crossing of the Ross Creek forestry road with a tributary of Hudson Creek, about 42 kilometres northeast of the community of Chase (Assessment Report 22078).

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Limestone
Phyllite
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The Lisle showing is underlain by limestone, phyllite and quartzite of the Hadrynian? to Paleozoic Eagle Bay assemblage. A concordant, northwest dipping quartz vein hosted in limestone is mineralized with argentiferous galena.

BIBLIOGRAPHY

EMPR ASS RPT *22078
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/23

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW056**

NATIONAL MINERAL INVENTORY:

NAME(S): **HLINA CREEK**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 22 N
LONGITUDE: 119 24 55 W
ELEVATION: 544 Metres

NORTHING: 5649575
EASTING: 330432

LOCATION ACCURACY: Within 1 KM

COMMENTS: Hlina Creek flows southeast into Shuswap Lake, on its north shore,
at the community of Celista.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

Minor amounts of placer gold were reported from Hlina Creek. No other information is available.

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 138)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/22

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW057**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALINE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 58 48 N
LONGITUDE: 119 03 58 W
ELEVATION: 396 Metres

NORTHING: 5649633
EASTING: 354966

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing located near the south shore of Shuswap Lake, northeast of Wild Rose Bay, about 35 kilometres north-northeast of the community of Salmon Arm (GSC Open File 637).

COMMODITIES: Lead

Zinc

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

Recent geology maps indicates the Aline showing is underlain by limestone of the Hadrynian? to Paleozoic Eagle Bay assemblage. GSC Open File 637 indicates a lead-zinc showing; no other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 54-58
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; *637 (Occurrence 140)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/26

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW058**

NATIONAL MINERAL INVENTORY:

NAME(S): **MCGILLIVRAY CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L13W
BC MAP:

Open Pit

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 51 56 N
LONGITUDE: 119 56 47 W
ELEVATION: 945 Metres

NORTHING: 5639011
EASTING: 292675

LOCATION ACCURACY: Within 5 KM

COMMENTS: Located 19 kilometres west-northwest of the community of Chase.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

Bulletin 28 reports gold production from McGillivray Creek during the period 1936 to 1945. No other information is available.

BIBLIOGRAPHY

EMPR BULL *28, p. 39
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 154)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/12

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW059**

NATIONAL MINERAL INVENTORY:

NAME(S): **SABRE NORTH**, SABRE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 52 30 N
LONGITUDE: 119 13 46 W
ELEVATION: 731 Metres

NORTHING: 5638292
EASTING: 343149

LOCATION ACCURACY: Within 500M

COMMENTS: Located about 21 kilometres north of the community of Salmon Arm.

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite

ASSOCIATED: Pyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Phyllite
Quartz Chlorite Phyllite
Sericite Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

At the Sabre North showing, pyrite, chalcopyrite and molybdenite occur as disseminations on foliation planes and in fractures in chlorite phyllite, quartz chlorite phyllite and sericite phyllite of the Devonian Skwaam Bay unit of the Eagle Bay assemblage.

Trenching (61 metres), stripping (743 square metres) and 2 percussion-drill holes (152 metres total) were completed in 1972.

BIBLIOGRAPHY

EMPR ASS RPT *7755
EMPR EXPL 1979-107
EMPR GEM *1972-83
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 158)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/27

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 146
REPORT: RGEN0100

MINFILE NUMBER: **082LNW060**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHORELINE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 52 06 N
LONGITUDE: 119 05 04 W
ELEVATION: 396 Metres

NORTHING: 5637253
EASTING: 353328

LOCATION ACCURACY: Within 500M

COMMENTS: Showing located on the west shore of Shuswap Lake (Salmon Arm), about 24 kilometres north-northeast of the community of Salmon Arm (GSC Open File 637).

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Undefined Group	Eagle Bay	

LITHOLOGY: Quartzite
 Phyllite
 Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Shoreline copper-lead showing is located on the west shore of Shuswap Lake (Salmon Arm). This area is underlain by quartzite, phyllite and schist of the Hadrynian? to Paleozoic Eagle Bay assemblage. No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; *637 (Occurrence 162)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/26

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW060**

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 147
REPORT: RGEN0100

MINFILE NUMBER: **082LNW061**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROADSIDE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 47 24 N
LONGITUDE: 119 06 58 W
ELEVATION: 503 Metres

NORTHING: 5628607
EASTING: 350851

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located south of the Trans-Canada Highway and Shuswap Lake, in the Larch Hills, about 15 kilometres northeast of the community of Salmon Arm (GSC Open File 637).

COMMODITIES: Copper Zinc Lead

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.	Mount Ida	Sicamous	

LITHOLOGY: Pelitic Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Roadside copper-zinc-lead showing is located from GSC Open File 637 and underlain by pelitic schist and quartzite of the Hadrynian and/or Paleozoic Sicamous Formation (Mount Ida Group). No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; *637 (Occurrence 172)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/07/04

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW061**

MINFILE NUMBER: **082LNW062**

NATIONAL MINERAL INVENTORY:

NAME(S): **JEN JEN**, MICROWAVE

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 41 35 N
LONGITUDE: 119 24 04 W
ELEVATION: 1402 Metres

NORTHING: 5618443
EASTING: 330416

LOCATION ACCURACY: Within 500M

COMMENTS: Radioactive contact, near the microwave tower at the headwaters of the east tributary of Gordon Creek, about 9 kilometres west of the community of Salmon Arm (Assessment Report 6982, figure 181-5A).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I15 Classical U veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Proterozoic-Paleoz.
Cretaceous

GROUP

Mount Ida

FORMATION

Silver Creek

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Schist
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group), a sequence of highly deformed, moderately metamorphosed rocks comprised of micaceous schist and quartzite, is intruded by Cretaceous? granodiorite and pegmatite equivalents. These rocks are locally overlain by conglomerates, which are overlain by andesitic and basaltic flows, all of the Eocene Kamloops Group.

A strongly radioactive zone is associated with the contact between the granodiorite and dark grey to black schist. The rocks are cut by quartz-feldspar-mica pegmatite. The north-northeast trending zone coincides with an interpreted fault. A GR410 Exploranium spectrometer recorded a total count of 10,430 counts per minute, with a uranium count of 598 counts per minute (backgrounds are 6000 counts per minute and 300 counts per minute, respectively). A nearby water sample analysed 20 parts per billion uranium and downslope soils assayed up to 130 parts per million uranium (Assessment Report 6982). Another radioactive zone occurs 1000 metres to the north.

This area also contains paleochannel gravels capped by basalt. However, no significant radioactivity was discovered associated with the indurated gravels.

BIBLIOGRAPHY

EMPR ASS RPT *6982, 7580
EMPR EXPL 1978-97; 1979-105
EMPR OF 1990-32
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 181)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 149
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/05

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW063**

NATIONAL MINERAL INVENTORY:

NAME(S): **SYPHON**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 43 20 N
LONGITUDE: 119 23 09 W
ELEVATION: 1120 Metres

NORTHING: 5621650
EASTING: 331599

LOCATION ACCURACY: Within 500M

COMMENTS: Geochemical sample site between Syphon and Palmer creeks, about 8 kilometres west of the community of Salmon Arm (Assessment Report 7319, figure 11-C).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I15 Classical U veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz. Cretaceous	Mount Ida	Silver Creek	Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Pegmatite
Micaceous Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group), a sequence of highly deformed, moderately metamorphosed rocks comprised of micaceous schist and quartzite, is intruded by Cretaceous? granodiorite and pegmatite equivalents. These rocks are locally overlain by conglomerates, which are overlain by andesitic and basaltic flows, all of the Eocene Kamloops Group. A strong north-northeast lineation cuts the rocks.

A geochemical anomaly occurs over the granodiorite and linear trend. A sample assayed 0.054 per cent uranium by hot nitric acid extraction and 0.045 per cent uranium by neutron activation. The value is supported with a 20,000 counts per minute reading on a McPhar TV-1A spectrometer. Background is 6000 counts per minute (Assessment Report 7319).

BIBLIOGRAPHY

EMPR ASS RPT *7319, 7806
EMPR EXPL 1978-98; 1979-105-106
EMPR OF 1990-32
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 182, 183)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/05

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW064**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLIND BAY**, NOTCH HILL, SHUSWAP LAKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5639100
EASTING: 333121

LATITUDE: 50 52 46 N
LONGITUDE: 119 22 20 W

ELEVATION: 351 Metres
LOCATION ACCURACY: Within 1 KM

COMMENTS: Located on the southwest side of Blind Bay (CANMET Report 811, page 185).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Graphite Mica Quartz
MINERALIZATION AGE: Paleozoic

DEPOSIT

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

DIMENSION: Metres

STRIKE/DIP: 005/15W

TREND/PLUNGE:

COMMENTS: Bedding attitude along beach.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Mount Ida

FORMATION

Sicamous

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1944

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

51.7800

Per cent

COMMENTS: Across 3.0 metres of strata. Grade given for calcium oxide.

REFERENCE: CANMET Report 811, page 191, sample 50.

CAPSULE GEOLOGY

Limestone outcrops along the beach on the southwest side of Blind Bay, on the south shore of Shuswap Lake. The limestone lies on the northern edge of a belt of limestone and schist of the lower Paleozoic Sicamous Formation (Mount Ida Group), which trends westward for 27 kilometres. The limestone on the beach strikes 005 degrees and dips 15 degrees west.

The beach exposures reveal fine grained, dark blue, thinly bedded, graphitic limestone displaying mica flakes along bedding planes. Numerous white calcite veins and a few quartz veins, 5 to 10 centimetres thick, cut across the bedding. Several thin, platy masses of dark blue dolomite are exposed at one point.

A chip sample taken across 3.0 metres of strata analysed 51.78 per cent CaO, 0.75 per cent MgO, 4.04 per cent SiO₂, 0.59 per cent Al₂O₃, 0.66 per cent Fe₂O₃ and 0.06 per cent sulphur (CANMET Report 811, page 191, Sample 50).

BIBLIOGRAPHY

EMPR AR 1960-143
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, pp. 21-22
GSC OF 481; 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 152
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CANMET RPT 811, Part 5, pp. 185,187,191
CJES Vol.13, pp. 44-53; Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1989/09/19
DATE REVISED: 1995/06/27

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW065**

NATIONAL MINERAL INVENTORY:

NAME(S): **BENCH**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

MINING DIVISION: Vernon
Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 40 00 N
LONGITUDE: 119 07 58 W
ELEVATION: 716 Metres

NORTHING: 5614928
EASTING: 349281

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located from GSC Open File 637 (Occurrence 188), situated about 11 kilometres east-southeast of the community of Salmon Arm.

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Mount Ida	Tsalkom	

LITHOLOGY: Chloritic Phyllite
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Bench showing is located within the lower Paleozoic Tsalkom Formation (Mount Ida Group) which is comprised of chloritic phyllite and greenstone, with minor amphibolite, black phyllite, limestone, marble, conglomerate and serpentinite. GSC Open File 637 (Occurrence 188) indicates that it is a copper-lead-zinc showing. No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; *637 (Occurrence 188)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW066**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARA**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 40 48 N
LONGITUDE: 119 05 04 W
ELEVATION: 503 Metres

NORTHING: 5616313
EASTING: 352738

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located from GSC Open File 637 (Occurrence 189), about 14 kilometres east of the community of Salmon Arm.

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Mount Ida	Tsalkom	

LITHOLOGY: Phyllite
Greenstone
Limestone
Marble
Conglomerate
Serpentinite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Mara occurrence is located from GSC Open File 637 (Occurrence 189) and is described as a copper-lead showing. Nothing else is known about the mineralization. Recent geology maps indicates the area is underlain by the lower Paleozoic Tsalkom Formation (Mount Ida Group) comprising greenstone, phyllite, minor amphibolite, limestone, conglomerate and serpentinite.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; *637 (Occurrence 189)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW068**

NATIONAL MINERAL INVENTORY:

NAME(S): **ELMER**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 35 06 N
LONGITUDE: 119 12 16 W
ELEVATION: 609 Metres

NORTHING: 5605997
EASTING: 343947

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located south of Gardom Lake, about 6 kilometres north-northwest of the community of Enderby (GSC Open File 637 (Occurrence 213)).

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P METAMORPHIC-HOSTED

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Mount Ida	Silver Creek	

LITHOLOGY: Micaceous Schist
Pelitic Schist
Quartzite
Micaceous Quartzite
Calcareous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Elmer mica occurrence is located from GSC Open File 637 and is situated northwest of the community of Enderby. Jones (GSC Memoir 296) describes that some of the more highly metamorphosed parts of the Silver Creek Formation contain highly micaceous schists. Current geology maps indicate the area of the showing is underlain by pelitic schist, quartzite, micaceous quartzite and calcareous quartzite of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group).

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296, p. 157
GSC OF 481; *637 (Occurrence 213)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW069**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOGAN GULCH**, ENDERBY COAL MINING

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 36 06 N
LONGITUDE: 119 03 25 W
ELEVATION: 1128 Metres

NORTHING: 5607550
EASTING: 354439

LOCATION ACCURACY: Within 5 KM

COMMENTS: A number of claims owned by the Enderby Coal Mining Company, situated on the east side of the Shuswap River about 8 kilometres northeast of the community of Enderby (Minister of Mines Annual Report 1905).

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Fossil Fuel
TYPE: A04 Bituminous coal

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Sandstone
Shale
Conglomerate
Coal
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage Kootenay
PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The location of the Logan Gulch coal occurrence is described as claims situated on the east side of the Shuswap River about 8 kilometres northeast of Enderby (Minister of Mines Annual Report 1905, page J193). Current geology maps indicates the area is close to the contact between a predominantly volcanic succession of andesite, basalt, dacite, trachyte flows, breccias and tuffs, and a sedimentary succession comprised of conglomerate, sandstone, shale, coal and tuff. All rock units are part of the Eocene Kamloops Group.

Cairnes (1932) describes the Tertiary coal occurrences in the area as seams varying from a few centimetres to over 30 centimetres in thickness, composed of alternating thin layers of coal and sandstone or shale. In other instances, the coal seams are merely strata containing abundant, partly to completely carbonized fossil remains of plants.

Minister of Mines Annual Report 1904 (page G233) describes the discovery of a seam of coal near the summit of a mountain, about 8 kilometres north of Enderby. The coal is said to be of excellent quality and is stated to be 1.2 metres thick, but may prove to be of greater extent, as it is partly covered by slides from the mountain.

BIBLIOGRAPHY

EMPR AR *1904-G233; 1905-J193
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM *296, pp. 162,163
GSC OF 481; 637 (Occurrence 215)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
Falconbridge File

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW070**

NATIONAL MINERAL INVENTORY:

NAME(S): **COAL GULCH**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 37 36 N
LONGITUDE: 119 04 04 W
ELEVATION: 792 Metres

NORTHING: 5610351
EASTING: 353750

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located from GSC Open File 637 (Occurrence 216) and situated about 10 kilometres north-northeast of the community of Enderby.

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Fossil Fuel
TYPE: A04 Bituminous coal

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Eocene

GROUP

Kamloops

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sandstone
Shale
Coal
Conglomerate
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Coal Gulch occurrence is located from GSC Open File 637 (Occurrence 216) and is situated 10 kilometres north-northeast of the community of Enderby. Current geology maps indicates the area is close to the contact between a predominantly volcanic succession of andesite, basalt, dacite, trachyte flows, breccias and tuffs, and a sedimentary succession comprised of conglomerate, sandstone, shale, coal and tuff. All rock units are part of the Eocene Kamloops Group.

Cairnes (1932) describes the Tertiary coal occurrences in the area as seams varying from a few centimetres to over 30 centimetres in thickness, composed of alternating thin layers of coal and sandstone or shale. In other instances, the coal seams are merely strata containing abundant, partly to completely carbonized fossil remains of plants.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM *296, pp. 162,163
GSC OF 481; *637 (Occurrence 216)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/11

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW071**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARA COPPER**, MARA 2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

MINING DIVISION: Kamloops
Vernon
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 39 09 N
LONGITUDE: 119 03 11 W
ELEVATION: 670 Metres

NORTHING: 5613194
EASTING: 354871

LOCATION ACCURACY: Within 1 KM

COMMENTS: Near the falls in Bongard Creek, about 13 kilometres north-northeast of the community of Enderby (Property File - Sketch map, 1954).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Chalcopyrite is inferred; trace of copper is reported.
ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic Proterozoic-Paleoz.	Mount Ida	Tsalkom	Shuswap Metamorphic Complex

LITHOLOGY: Argillite
Slate
Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Mara Copper showing is located near the fault contact between the Proterozoic and/or Paleozoic Shuswap assemblage and the lower Paleozoic Tsalkom Formation (Mount Ida Group). Several quartz veins appear to cut argillite and slate of the Tsalkom Formation with Shuswap assemblage gneiss outcrops nearby. A trace of copper has been reported (chalcopyrite is the inferred mineralization).

BIBLIOGRAPHY

EMPR ASS RPT 3394
EMPR FIELDWORK 1988, pp. 49-54
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet; *Sketch map, 1954)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 217)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/12

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW072**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER CREEK**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 35 24 N
LONGITUDE: 119 01 52 W
ELEVATION: 792 Metres

NORTHING: 5606202
EASTING: 356231

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located from GSC Open File 637 (Occurrence 218), near Brash Creek and about 9 kilometres east-northeast of the community of Enderby.

COMMODITIES: Silver

MINERALS

SIGNIFICANT: Unknown

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartzofeldspathic Gneiss
Biotite Quartz Schist
Amphibolite
Quartzite
Marble
Granite
Granodiorite
Pegmatite
Granodiorite Tonalite Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Silver Creek showing is located from GSC Open File 637 (Occurrence 218) and is described as a silver occurrence in quartz veins (GSC Memoir 296, page 150). Geology maps show the area to be underlain by the Proterozoic and/or Paleozoic Shuswap assemblage consisting of quartzofeldspathic gneiss, biotite quartz schist, amphibolite, quartzite, marble, granite, granodiorite, pegmatite and granodioritic to tonalitic gneiss.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 49-54
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM *296, p. 150
GSC OF 481; *637 (Occurrence 218)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/10

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW073**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARA 1**

MINING DIVISION: Kamloops
Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5612805
EASTING: 356648

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

LATITUDE: 50 38 58 N
LONGITUDE: 119 01 40 W
ELEVATION: 1067 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located along the south fork of Ptarmigan Creek, about 14 kilometres north-northeast from the community of Enderby (Property File - Sketch map).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite
COMMENTS: Inferred from "Zn show".
ASSOCIATED: Quartz Carbonate Pyrite
ALTERATION: Silica Carbonate
ALTERATION TYPE: Silicific'n Carbonate
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Mount Ida	Tsalkom	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Mara 1 showing is located near the fault contact between the Proterozoic and/or Paleozoic Shuswap assemblage and the lower Paleozoic Tsalkom Formation (Mount Ida Group). A zone, 1.8 to 2.4 metres thick, of parallel, bedded quartz-carbonate-pyrite veins occur in silicified and carbonatized argillite of the Tsalkom Formation. A shear is evident in the vein zone. The country rock strikes 320 degrees and dips 20 to 25 degrees southwest. The main zinc showing is on the south side of the south fork of Ptarmigan Creek.

BIBLIOGRAPHY

EMPR FIELDWORK 1988, pp. 54-58
EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet; *Sketch map, 1954)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW074**

NATIONAL MINERAL INVENTORY:

NAME(S): **AB 9**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 30 01 N
LONGITUDE: 119 29 28 W
ELEVATION: 1005 Metres

NORTHING: 5597221
EASTING: 323339

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located south of Bolean Lake, west of Silvernail Lake, about 6 kilometres east of the community of Falkland (Assessment Report 4830).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
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>
Upper Triassic	Nicola	Undefined Formation	

LITHOLOGY: Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The AB 9 showing is inferred to be similar to the AB 10 showing (082LNW038), 500 metres to the north. It consists of disseminated chalcopyrite and pyrite in impure, brown limestone. The limestone is within an argillite sequence of the Upper Triassic Nicola Group.

BIBLIOGRAPHY

EMPR ASS RPT *4830
EMPR GEM 1973-100,101
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637 (Occurrence 227)
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW075**

NATIONAL MINERAL INVENTORY:

NAME(S): **SORRENTO LIMESTONE**, NOTCH HILL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 52 40 N
LONGITUDE: 119 25 39 W
ELEVATION: 457 Metres

NORTHING: 5639041
EASTING: 329227

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centred on the site of Sample 1, 3.0 kilometres east of the community of Sorrento (Minister of Mines Annual Report 1960, page 143).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Graphite Mica Quartz Pyrite
MINERALIZATION AGE: Paleozoic

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Mount Ida

FORMATION

Sicamous

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: ROADCUT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1960

SAMPLE TYPE: Chip

COMMODITY

Limestone

GRADE

46.4400 Per cent

COMMENTS: Taken along a 259 metre long roadcut. Grade given for calcium oxide.

REFERENCE: Minister of Mines Annual Report 1960, page 144, Sample 1.

CAPSULE GEOLOGY

Various exposures of limestone occur along Highway 1 (Trans-Canada Highway), 1.6 to 3 kilometres east of Sorrento. These outcrops are situated near the west end of a 27 kilometre long, west-trending belt of limestone and schist of the lower Paleozoic Sicamous Formation (Mount Ida Group).

The limestone is fine grained and dark grey. Micaceous and graphitic partings give the limestone a platy appearance. Numerous white calcite veinlets and white quartz veins cut the rock. Scattered patches of pyrite are also present.

A sample composed of chips taken at 6.1-metre intervals along a 259 metre long roadcut, 3 kilometres east of Sorrento, analysed 46.44 per cent CaO, 0.90 per cent MgO, 11.84 per cent insolubles, 1.20 per cent R2O3, 1.29 per cent Fe2O3, 0.04 per cent MnO, 0.021 per cent P2O5, 0.04 per cent sulphur and 38.77 per cent ignition loss (Minister of Mines Annual Report 1960, page 144, Sample 1).

BIBLIOGRAPHY

EMPR AR 1960-143,144

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)

GSC MAP 1059A

GSC MEM 296, pp. 21,22

GSC OF 481; 637

GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

MINFILE NUMBER: **082LNW075**

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 164
REPORT: RGEN0100

BIBLIOGRAPHY

CANMET RPT 811, Part 5, p. 185
CJES Vol.13, pp. 44-53; Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/27

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 165
REPORT: RGEN0100

MINFILE NUMBER: **082LNW076**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROBBINS CREEK**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 36 49 N
LONGITUDE: 119 57 31 W
ELEVATION: 609 Metres

NORTHING: 5611037
EASTING: 290694

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located just east of Robbins Creek, about 4 kilometres south of the community of Monte Creek and the South Thompson River (GSC Paper 72-53).

COMMODITIES: Agate

Gemstones

MINERALS

SIGNIFICANT: Agate Amethyst
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: Q03 Agate Q04 Amethyst

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

Agate and amethyst-lined geodes occur in bluffs of columnar basalt of the Eocene Kamloops Group. This locality has been hunted for years so that material is less abundant than now; most of the specimens were labouriously chiseled from the parent rock (GSC Paper 72-53, page 23).

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet; see 082LNW077 (Squilax) - Western Homes and Living, October 1961, pp. 21,22)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; *72-53, pp. 22,23; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-11931

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/02

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW076**

MINFILE NUMBER: **082LNW077**

NATIONAL MINERAL INVENTORY:

NAME(S): **SQUILAX**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 51 32 N
LONGITUDE: 119 35 57 W
ELEVATION: 366 Metres

NORTHING: 5637352
EASTING: 317078

LOCATION ACCURACY: Within 1 KM

COMMENTS: Located 8 kilometres east of the community of Chase (Western Homes and Living, October 1961).

COMMODITIES: Agate Gemstones

MINERALS

SIGNIFICANT: Agate

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Industrial Min.
TYPE: Q03 Agate

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Unknown

Unnamed/Unknown Group

Unnamed/Unknown Formation

LITHOLOGY: Talus

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

A fine quality of blue agate is reported to occur 8 kilometres east of the community of Chase. The slide in which it is found meets the Trans-Canada Highway at the Little River fishing camp, beside Little Shuswap Lake. The Little River itself contains some carnelian agate of good quality. Also, the road from Squilax station through Turtle Valley leads to several locations on the south slope of Squilax Mountain.

BIBLIOGRAPHY

EMPR PF (*Western Homes and Living, Oct.1961, pp. 21,22; General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193
Western Homes and Living Oct. 1961

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/12

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW078**

NATIONAL MINERAL INVENTORY:

NAME(S): **WOOF 3, ADAM-C**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5650616
EASTING: 314519

LATITUDE: 50 58 38 N
LONGITUDE: 119 38 32 W
ELEVATION: 1240 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Drillhole collar located near the headwaters of Hustalen Creek, east of Adams Lake, about 18 kilometres north of the community of Chase (Assessment Report 20640).

COMMODITIES: Copper Zinc Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite
ASSOCIATED: Pyrite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Sericite Schist
Quartz Sericite Schist
Chlorite Phyllite
Argillaceous Sediment/Sedimentary
Granodiorite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1990
SAMPLE TYPE: Drill Core
COMMODITY GRADE

Copper	0.4000	Per cent
Zinc	0.5800	Per cent

COMMENTS: Drill core was re-logged and resampled with results of 0.58 per cent zinc over 4.14 metres, followed by 0.68 metre unmineralized, in turn followed by 0.40 per cent copper over 4.15 metres including 1.04 per cent copper over 1 metre.

REFERENCE: Assessment Report 20640, page 12.

CAPSULE GEOLOGY

The Woof 3 occurrence area is underlain by a northeast trending belt of Devonian and/or older? felsic volcanics (sericite and quartz-sericite schists) of the Woolford Creek unit of the Eagle Bay assemblage, bounded to the north and south by intermediate volcanics of the Devonian Skwaam Bay unit of the Eagle Bay assemblage. Felsic volcanics consist largely of fragmental rocks (tuffs, lapilli tuffs, breccias). Local hard, massive exposures may represent flows. Due to surface oxidation, fragmental textures are generally only recognizable in drill core. Felsic volcanics characteristically contain 1-5 per cent disseminated and fracture-fill pyrite. The belt of felsic volcanics thins dramatically eastward. Lineations in the area plunge shallowly to the west-northwest.

Surrounding intermediate volcanics consist of a fairly monotonous sequence of chlorite phyllites. At the south end of the area, the chlorite phyllites are hornfelsic and intruded by dikes of foliated granodiorite.

CAPSULE GEOLOGY

Minor argillaceous sediments have been identified in drill core along the southern felsic-intermediate volcanic contact. Minor disseminated and fracture-fill pyrite, chalcopyrite and sphalerite is present on surface and in drill core near this contact. Drill core from 1987 drilling was re-logged and re-sampled. Results include 0.58 per cent zinc over 4.14 metres, followed by 0.68 metre unmineralized, in turn followed by 0.40 per cent copper over 4.15 metres including 1.04 per cent copper over 1 metre (Assessment Report 20640, page 12).

In 1990, prospecting along the contact identified pyrite-chalcopyrite mineralization 350 metres to the east. A grab sample analysed 0.89 per cent copper, 17.6 grams per tonne silver and 0.20 gram per tonne gold (Assessment Report 20640, page 14).

BIBLIOGRAPHY

EMPR ASS RPT 13400, 14359, 16965, 17232, 19632, *20640
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW079**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROCKY POINT**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5637573
EASTING: 313465

LATITUDE: 50 51 35 N
LONGITUDE: 119 39 02 W
ELEVATION: 356 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the first rocky point from the east end of Little Shuswap Lake, on the north side, about 5 kilometres from the community of Chase (GSC Annual Report 1877-78).

COMMODITIES: Bismuth

MINERALS

SIGNIFICANT: Bismuthinite
ASSOCIATED: Quartz
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE

Ordovician

GROUP

Mount Ida

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Granitic Gneiss
Granite

HOSTROCK COMMENTS: Little Shuswap orthogneiss of the Mount Ida assemblage.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

At the Rocky Point showing, irregular quartz veins up to 15 centimetres wide, contain large prismatic crystals of bismuthinite. The hostrock is granitic gneiss of the Ordovician Little Shuswap orthogneiss of the Mount Ida Group. The granite at the showing contains large twinned orthoclase crystals.

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC ANN RPT *1877-78, p. 101B
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/07

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 170
REPORT: RGEN0100

MINFILE NUMBER: **082LNW080**

NATIONAL MINERAL INVENTORY:

NAME(S): **TAPPEN**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 42 31 N
LONGITUDE: 119 21 21 W
ELEVATION: 487 Metres

NORTHING: 5620069
EASTING: 333668

LOCATION ACCURACY: Within 1 KM

COMMENTS: South-half of Sec.30 Tp.20 R10 W6, about 6.5 kilometres west of the community of Salmon Arm.

COMMODITIES: Gypsum

MINERALS

SIGNIFICANT: Gypsum

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP
Cretaceous

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Unnamed/Unknown Informal

LITHOLOGY: Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

No information is available regarding the Tappen gypsum showing. Recent geology maps indicates the area is underlain by Cretaceous? granodiorite.

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW080**

MINFILE NUMBER: **082LNW081**

NATIONAL MINERAL INVENTORY:

NAME(S): **POOLEY LAKE**, YOO HOO, EP 2

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5617015
EASTING: 288181

LATITUDE: 50 39 59 N
LONGITUDE: 119 59 51 W
ELEVATION: 700 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Yoo Hoo showing located 1.75 kilometres north of the South Thompson River and the Trans-Canada Highway, about 3.5 kilometres west-northwest from the community of Monte Creek (Assessment Report 20016).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite Tetrahedrite
COMMENTS: Possibly tetrahedrite.

ASSOCIATED: Quartz Chalcedony Carbonate
ALTERATION: Silica Carbonate Hematite Epidote Limonite
Clay Chlorite

ALTERATION TYPE: Silicific'n Propylitic Carbonate Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epithermal
TYPE: H05 Epithermal Au-Ag: low sulphidation

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Andesite
Andesitic Flow
Lapilli Tuff
Sediment/Sedimentary
Feldspar Porphyritic Diorite Dike
Porphyritic Syeno Diorite Dike
Gossan

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: VEINS

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Gold
GRADE: 3.0000 Grams per tonne

REFERENCE: Assessment Report 20016, page 24.

CAPSULE GEOLOGY

The Pooley Lake property lies near the eastern margin of the Intermontane Belt and covers northwesterly striking Upper Triassic Nicola Group volcanics overlain by flat lying Eocene basalts of the Kamloops Group.

Volcanic and volcanoclastic rocks of the Nicola Group dominate the southern part of the property and comprise massive and variably porphyritic andesitic flows, lapilli tuffs and minor sedimentary units. This thick, north to northwesterly trending sequence is cut by a number of feldspar porphyritic syenodiorite and diorite dikes.

A significant amount of brittle fracturing is evident where faulting occurs as well defined single fractures, zones of multiple fractures, breccia zones and areas of pervasive weak brecciation with gradational boundaries. Three dominant fracture orientations control veining and alteration and the average strikes and dips are: 145 degrees dipping 70 degrees southwest; 074 degrees dipping 30 degrees northwest to 20 degrees southeast; and 034 degrees dipping 80 degrees

CAPSULE GEOLOGY

northwest to 80 degrees southeast.

Alteration can be divided into two distinct types: 1) Alteration associated with well defined faults and structural zones. a) Associated with veining - wallrock silicification and carbonate alteration. The type depends largely on vein composition i.e. quartz and/or carbonate. b) Veining weak to absent. Virtually all the fault structures on the cliff face are oxidized to some degree. Most are limonitic, some are strongly hematitic. Many of the stronger structures have associated clay alteration. Structurally controlled breccia zones fall into this category including chloritic and strongly hematitic breccia zones, largely at the Yoo Hoo showing. c) Wallrock silicification adjacent to diorite and syenodiorite dikes. In addition, some dikes have been subject to later fracturing and silicification. 2) Widespread, pervasive alteration. Fairly large areas at the Yoo Hoo and EP 2 showings have been subject to pervasive hematitic alteration which is not clearly related to well defined structural zones. Moderate to strong, pervasive epidote (propylitic) alteration occurs at both showings and is patchy. A core zone of strong alteration and usually moderate fracturing/jointing fades outwards to patchy, pervasive (weak) alteration then veinlet epidote.

At the Yoo Hoo showing, northwesterly trending and steeply dipping structures commonly contain narrow quartz-chalcedony veins with minor carbonate mineralized with local fine arsenopyrite, pyrite and tetrahedrite? These are narrow, between 0.5 and 1.8 metres wide, with much pinch and swell. They can be traced for over 100 metres; vein contacts are sharp with little wallrock silicification. Most of the gold values greater than 3 grams per tonne and up to 14.6 grams per tonne come from these veins (Assessment Report 20016, page 24). Mapping shows a close spatial relationship between these veins and a series of alkaline, dioritic to syenodioritic dikes with similar trend.

Flat-lying structures generally feature narrow, clay alteration zones with or without quartz-carbonate veining in the western part of the showing area. In the eastern part, these zones combined with a large number of other vein structures form a prominent and limonitic gossan. This apparently flat lying alteration/vein zone is over 300 metres long with widespread bleaching obscuring original textures. Vein and fault structures pinch and swell, changing orientation over short distances with numerous truncations. The veins themselves can be quartz and/or carbonate and/or chalcedony. Many tend to be narrow and in swarms. Gold values (up to 3 grams per tonne) appear to be associated with white to grey quartz, not chalcedony.

The EP 2 showing, about 1800 metres east of the Yoo Hoo showing, is dominated by a number of strong, northeasterly trending, poorly mineralized quartz-carbonate vein systems between 1 and 10 metres wide. These veins vary from single veins through stockworks to silicified breccias, and display massive to locally vuggy textures. Milky quartz and carbonate dominate with lesser amounts of banded grey quartz, chalcedony and white barite. Sulphides are generally rare. Wallrock alteration consisting of bleaching, silicification, carbonate, limonitic and/or hematitic alteration may extend for many metres from the veins. Of 68 chip samples taken, only two produced significant gold values with 1 gram per tonne and 0.3 gram per tonne; both samples were 2-metre panel samples from flat-lying veins.

BIBLIOGRAPHY

EMPR ASS RPT 18868, *20016
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 887A; 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/04

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW082**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARNES LAKE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 37 21 N
LONGITUDE: 119 59 47 W
ELEVATION: 533 Metres

NORTHING: 5612132
EASTING: 288062

LOCATION ACCURACY: Within 500M

COMMENTS: Located 4 kilometres south-southwest from the community of Monte Creek, about 3 kilometres south of the Trans-Canada Highway and the South Thompson River (Bulletin 4).

COMMODITIES: Hydromagnesite Sodium Carbonate

MINERALS

SIGNIFICANT: Hydromagnesite Natron
COMMENTS: Also Natron.

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive
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
Soil

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1937
SAMPLE TYPE: Grab
COMMODITY: Sodium Carbonate GRADE: 97.5000 Per cent
COMMENTS: Also analysed 0.5 per cent NaCl, 0.9 per cent insolubles and 0.7 per cent Fe2O3.
REFERENCE: Bulletin 4, page 29.

CAPSULE GEOLOGY

Impure, grey hydromagnesite, up to 60 centimetres thick, and covered with about 30 centimetres of soil, underlies a couple of hectares near the north end of Barnes Lake.

The lake, with an area of 14 to 16 hectares, also contains a sodium carbonate brine to an average depth of 15 centimetres over a large part of the bed. The muddy shoreline and dry portions of the bed are heavily encrusted with dried soda (circa 1937). In the autumn of 1932, a 7-centimetre layer of natron covered a large part of the lake, a sample of which analysed 97.5 per cent Na2CO3, 0.5 per cent NaCl, 0.9 per cent insolubles and 0.7 per cent Fe2O3. Recalculated to a 100 per cent water free basis, the sample as assayed contained 58.9 per cent water of composition (Bulletin 4, page 29).

Several 1.2-metre holes at various points about 4.5 metres from the shore were drilled; no deposit of solid crystals were intersected, but small natron crystals were noted in the mud. Apparently, the muddy bottom contains a fairly high proportion of disseminated crystals and it is reported that a solid layer, 7 to 15 centimetres thick, was intersected at a depth of 1.8 metres (Bulletin 4, page 29).

BIBLIOGRAPHY

EMPR BULL *4, pp. 29,103,115
EMPR FIELDWORK 2000, pp. 327-336

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 174
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1987-13
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 887A; 1059A
GSC MEM 118; 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/04

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW083**

NATIONAL MINERAL INVENTORY:

NAME(S): **CANOE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 47 00 N
LONGITUDE: 119 10 04 W
ELEVATION: 400 Metres

NORTHING: 5627971
EASTING: 347188

LOCATION ACCURACY: Within 500M

COMMENTS: Located in the Larch Hills, 4 kilometres east of the community of Canoe and 10 kilometres northeast of the community of Salmon Arm.

COMMODITIES: Feldspar

MINERALS

SIGNIFICANT: Feldspar

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: O04 Feldspar-quartz pegmatite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Mount Ida	Silver Creek	
Paleozoic	Mount Ida	Tsalkom	

LITHOLOGY: Felsite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

No information is available for the Canoe feldspar showing, except for the description of a felsite rock. Recent geology maps indicates the area is near the contact between the Hadrynian and/or Paleozoic Silver Creek Formation and the lower Paleozoic Tsalkom Formation (both of the Mount Ida Group).

BIBLIOGRAPHY

EMPR OF 1990-30
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW084**

NATIONAL MINERAL INVENTORY:

NAME(S): **WOOLFORD CREEK**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 59 34 N
LONGITUDE: 119 40 10 W
ELEVATION: 1249 Metres

NORTHING: 5652414
EASTING: 312671

LOCATION ACCURACY: Within 500M

COMMENTS: Sample site located west of Woolford Creek, east of Adams Lake, about 19 kilometres north of the community of Chase (Assessment Report 20640).

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Chalcopyrite Galena
COMMENTS: Trace galena.
ASSOCIATED: Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Phyllite
Sericite Schist
Quartz Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1990

COMMODITY

Copper

GRADE

0.1400

Per cent

REFERENCE: Assessment Report 20640, page 13.

CAPSULE GEOLOGY

The Woolford Creek showing area is underlain by intermediate volcanics, generally chlorite phyllite, of the Devonian Skwaam Bay unit of the Eagle Bay assemblage. A narrow band of felsic volcanics (sericite and quartz sericite schist) of the Devonian and/or older? Woolford Creek unit of the Eagle Bay assemblage is also evident. A narrow zone of heavy pyrite with malachite and chalcopyrite is related to crosscutting fractures in chlorite phyllite. A sample from here analysed 0.14 per cent copper (Assessment Report 20640, page 13). Trace galena was noted in a trench.

BIBLIOGRAPHY

EMPR ASS RPT 13400, 14359, 16965, 19632, *20640
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 177
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/06/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW085**

NATIONAL MINERAL INVENTORY:

NAME(S): **TOP**, FK, CAMPBELL

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 31 00 N
LONGITUDE: 119 35 54 W
ELEVATION: 1070 Metres

NORTHING: 5599303
EASTING: 315800

LOCATION ACCURACY: Within 500M

COMMENTS: Area of drilling and trenching, about 3 kilometres north-northwest of Falkland (Assessment Report 13867).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Chalcocite Malachite Digenite

COMMENTS: Possible digenite.

ALTERATION: Calcite Albite Chlorite Quartz K-Feldspar

Biotite Amphibole

ALTERATION TYPE: Propylitic Potassic

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Vein Shear

CLASSIFICATION: Volcanogenic

TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcanic Breccia
Augite Porphyry Breccia
Andesite
Rhyolite
Rhyolite Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

3.8000

Grams per tonne

Copper

0.9000

Per cent

COMMENTS: The best chip sample over 1.4 metres.

REFERENCE: Assessment Report 13867, page 6.

CAPSULE GEOLOGY

The Top showing is underlain by rocks of the Upper Triassic and? Lower Jurassic Nicola Group. Mineralization comprises finely disseminated and fracture filling chalcopyrite, bornite, malachite, chalcocite and possibly digenite, found in a coarse volcanic breccia. This "augite porphyry" breccia is interbanded with some rhyolite and light-coloured flow rocks; some of the rhyolites are flow banded. The mineralization is proximal to a Triassic diatreme.

Values from grab samples range up to 4.3 per cent copper and 18 grams per tonne silver; the best values occurring when chalcopyrite, chalcocite or bornite are present. The best chip sample assayed 0.9 per cent copper and 3.8 grams per tonne silver over 1.4 metres (Assessment Report 13867, page 6).

Fragments in the volcanic breccia are predominantly porphyritic green and buff lava, chert, micrite and rhyolite, generally in a finer, clastic crystal fragment-bearing green matrix. The porphyritic green phase is the most common rock type and, in mineralized areas, it has been altered predominantly to calcite with 20 per cent albite and some chlorite, quartz and K-feldspar. Phenocrysts are altered to vermiculite-hydrobiotite with small

CAPSULE GEOLOGY

amounts of chlorite, calcite and amphibole.

Away from the mineralized area, the volcanic breccia consists of sericitic to kaolinitic altered porphyry and clasts of altered microlitic volcanic flows. In this unit, relatively fresh augite phenocrysts are present. Apatite is often present in the chert and veinlets of quartz, K-feldspar and calcite are occasionally present.

South of the mineralized area, 1.5-metre green porphyry blocks are set in a fragmental green porphyry matrix. Occasional clasts are mineralized with copper and there are infrequent, well rounded, 5-centimetre diameter milled rock fragments.

To the north of the mineralized showing, outcrops in a narrow stream valley consist of "augite porphyry" and basalt breccia in faulted contact with a coarse conglomerate and interbedded calcite-cemented arkosic sandstone. The conglomerate and sandstone are cut by basaltic dikes; above is basalt-clast sandstone that grades upward into sandstone with plant fossils. It is suggested that the fault juxtaposes Triassic and Eocene Kamloops Group rocks.

The Top showing was first discovered by prospector D.J. Campbell of Peachland, in October 1980. Craigmont optioned the property shortly after, and during 1981 carried out 1094 metres of diamond drilling in 12 holes, 741 metres of percussion drilling in 17 holes and conducted a soil geochemical survey. In 1982, a 2-kilometre induced polarization survey was conducted and 575 metres of diamond drilling in 6 holes. Canamax optioned the property in 1983 and conducted a geochemical survey, geological mapping and hand trenching. In 1984, Canamax drilled 4 diamond-drill holes. Brican optioned the property in the fall of 1984 and completed 11 backhoe trenches totalling 556 metres.

BIBLIOGRAPHY

- EMPR ASS RPT 9457, 11344, 12277, 13867
EMPR FIELDWORK *1981, pp. 54,55
EMPR OF 1999-2
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1985/07/24
DATE REVISED: 1995/05/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW086**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRINDROD LIMESTONE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 37 33 N
LONGITUDE: 119 09 01 W
ELEVATION: 512 Metres

NORTHING: 5610424
EASTING: 347913

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centred on site of Sample 2 (Minister of Mines Annual Report 1960, page 143).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Mica Graphite Silica

MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

DIMENSION: 6400 x 2500 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Limestone mass trends northwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic
Cretaceous

GROUP

Mount Ida

FORMATION

Sicamous

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY:

Limestone
Siliceous Limestone
Granitic Dike
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1960

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

47.5300

Per cent

COMMENTS: Taken along 12 metres of limestone. Grade given for calcium oxide.

REFERENCE: Minister of Mines Annual Report 1960, page 144, sample 2.

CAPSULE GEOLOGY

A mass of limestone of the lower Paleozoic Sicamous Formation (Mount Ida Group) extends northwest from the community of Grindrod for 6.4 kilometres. The mass varies up to 2.5 kilometres in width. The body is truncated by a fault along its northeast margin and intruded by a Cretaceous? granitic stock along its southwest flank. Outcrops along the Grindrod-Mara road reveal siliceous limestone with quartz veins and granitic dikes. A cut along a side road on a hill, 1.6 kilometres west of Grindrod, exposes platy, orange and black limestone with mica and graphite along partings. A sample taken along 12 metres of this exposure analysed 47.53 per cent CaO, 0.57 per cent MgO, 11.80 per cent insolubles, 1.28 per cent R2O3, 1.22 per cent Fe2O3, 0.04 per cent MnO, 0.03 per cent P2O5, 0.09 per cent sulphur, 38.72 per cent ignition loss and 0.24 per cent water. (Minister of Mines Annual Report 1960, page 144, sample 2).

BIBLIOGRAPHY

EMPR AR 1960-143,144
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 181
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 296, pp. 21-22
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CANMET RPT 811, Part 5, p. 205
CJES Vol.13, pp. 44-53; Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1989/09/20
DATE REVISED: 1995/05/30

CODED BY: PSF
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW087**

NATIONAL MINERAL INVENTORY:

NAME(S): **SALMON ARM LIMESTONE**, LARCH HILLS

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 42 19 N
LONGITUDE: 119 12 06 W
ELEVATION: 671 Metres

NORTHING: 5619364
EASTING: 344541

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centred on a limestone outcrop on the west side of Larch Hills, about 6 kilometres east of the community of Salmon Arm (CANMET Report 811, page 187).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Quartz
MINERALIZATION AGE: Proterozoic-Paleoz.

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 250 x 76 Metres
COMMENTS: Limestone dips eastward.

STRIKE/DIP: TREND/PLUNGE: 110/

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Mount Ida	Silver Creek	

LITHOLOGY: Limestone
Dolomite
Quartzite
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: OUTCROP

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Limestone
GRADE: 54.8300 Per cent

YEAR: 1944

COMMENTS: Taken across northwest end of outcrop. Grade given for calcium oxide.

REFERENCE: CANMET Report 811, page 191, sample 51.

CAPSULE GEOLOGY

The Salmon Arm Limestone deposit is situated on the west side of Larch Hills, 245 metres above Highway 97B, approximately 6 kilometres east of the town of Salmon Arm.

A band of limestone of the Hadrynian and/or Paleozoic Silver Creek Formation (Mount Ida Group) forms a small ridge trending 110 degrees along the west side of Larch Hills. The ridge is 250 metres long and 76 metres wide. The limestone appears to dip eastward into the hillside.

The ridge consists of white to bluish white, medium grained, fractured limestone with a few thin seams of brown weathering, blue dolomite along some of the fractures. The limestone also contains some quartz veins and a few inclusions of quartzite and shale. A sample taken across the northwest end of the ridge analysed 54.83 per cent CaO, 0.35 per cent MgO, 1.32 per cent SiO₂, 0.21 per cent Al₂O₃, 0.14 per cent Fe₂O₃ and nil sulphur (Canada Bureau of Mines Report 811, page 191, sample 51).

BIBLIOGRAPHY

EMPR AR 1960-143

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 183
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap
Sheet)
GSC MAP 1059A
GSC MEM 296, pp. 21-22
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CANMET RPT *811, Part 5, p. 187
CJES Vol.13, pp. 44-53; Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1989/09/19
DATE REVISED: 1995/05/31

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW088**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHUSWAP LIMESTONE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L14E
BC MAP:

Open Pit

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 55 58 N
LONGITUDE: 119 04 09 W

NORTHING: 5644388
EASTING: 354604

ELEVATION: 427 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centred on a limestone bluff, about 30 kilometres north-northeast of the community of Salmon Arm (GSC Open File 637).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone

Massive
Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

A bluff of crystalline limestone of the Hadrynian? to Paleozoic Eagle Bay assemblage is situated on the west shore of Shuswap Lake (Salmon Arm), across from Quartzite Point. The limestone mass continues southwest for 7.5 kilometres.

Limestone was quarried and burnt to produce lime sometime during the early 1900s.

BIBLIOGRAPHY

EMPR AR 1913-204
EMPR FIELDWORK 1988, pp. 49-54
EMPR PF (General File - Dawson, G.M. (1898): Geology map of Shuswap Sheet)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 637
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60
CJES Vol.21 (Oct.1984), pp. 1171-1193

DATE CODED: 1990/04/19
DATE REVISED: 1995/06/26

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LNW089**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHAW HILL**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 49 20 N
LONGITUDE: 119 59 30 W
ELEVATION: 1400 Metres

NORTHING: 5634320
EASTING: 289285

LOCATION ACCURACY: Within 500M

COMMENTS: Showing along new roadcut east of Heffley Lake, about 29 kilometres northeast of the community of Kamloops (Open File 2000-10).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Malachite
ASSOCIATED: Quartz Calcite
ALTERATION: Malachite K-Feldspar
ALTERATION TYPE: Oxidation
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic			Heffley Creek Pluton

LITHOLOGY: Diorite
Mafic Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: ROADCUT

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1999

COMMODITY	GRADE	
Silver	14.4000	Grams per tonne
Copper	0.8200	Per cent

REFERENCE: Fieldwork 1999, page 282.

CAPSULE GEOLOGY

The immediate Heffley Lake area is extensively covered with superficial glacio-fluvial deposits and is estimated to have less than 1 per cent rock exposure. Stratified rocks mainly comprise steeply dipping, northwest striking argillites and calcareous siltstones with lesser andesitic ash and lapilli tuff and some limestone belonging to the Devonian to Permian Harper Ranch and/or Upper Triassic Nicola groups. These rocks were intruded by the possible Late Triassic to Early Jurassic mafic-ultramafic Heffley Creek pluton and then folded and overprinted by lower to sub-greenschist metamorphism producing slaty and phyllitic fabrics. Bleached marbles and calcsilicate-rich metasediments are developed where hydrothermal or thermal alteration has occurred.

South of Heffley Lake are units of blue-grey crinoidal limestone and black argillite while north of the lake are coarsely clastic to conglomeratic limestone in the vicinity of the Heff skarn (092INE096) which lack crinoids and the argillites are less organic-rich. This and other lithological differences suggest that these rocks may be separated into northern and southern packages; these are tentatively believed to represent the Nicola and Harper Ranch groups respectively. The northwest trending contact between these packages is thought to pass under the Heffley lakes and continue southeastwards along Armour Creek. This original stratigraphic contact has been intruded by the Heffley Creek pluton and has subsequently been the locus of brittle movement along the Armour

CAPSULE GEOLOGY

Creek fault (Fieldwork 1999).

Disseminated cumulate magnetite is common throughout the main Heffley Creek pluton but locally some pyrite +/- chalcopyrite +/- secondary copper oxides are also seen. Many of these sulphide-rich zones are characterized by silicification and plagioclase veining and they appear to be fault related. A new discovery, Shaw Hill, is a chalcopyrite-malachite-potassium feldspar occurrence found in a new roadcut and was discovered during the 1999 field season by the Geological Survey Branch. Hostrocks are mafic gabbro to diorite of the Heffley Creek pluton. Quartz-calcite veins occur nearby. A grab sample analysed 0.82 per cent copper and 14.4 grams per tonne silver (Fieldwork 1999).

BIBLIOGRAPHY

EMPR FIELDWORK *1999, pp. 273-286
EMPR OF *2000-10
GSC MAP 1059A
GSC MEM 296
GSC OF 481
GSC P 48-4; 74-1A, pp. 25-30; 86-1A, pp. 81-88; 89-1E, pp. 51-60

DATE CODED: 2000/06/26
DATE REVISED: 2000/06/26

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE001**

NATIONAL MINERAL INVENTORY: 082L2 Au1

NAME(S): **MONASHEE**, RISKE (L.192), VERNON (L.193),
 MCINTYRE (L.194), RISKE (L.195), WITHROW (L.306),
 MOONBEAM KETTLE 2, MORNING SUN,
 FIELD

STATUS: Past Producer	Underground	MINING DIVISION: Vernon
REGIONS: British Columbia		
NTS MAP: 082L02E 082L01W		UTM ZONE: 11 (NAD 83)
BC MAP:		
LATITUDE: 50 06 30 N		NORTHING: 5551766
LONGITUDE: 118 30 31 W		EASTING: 392128
ELEVATION: 1265 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Upper adit (No.1) on the Withrow claim (Lot 306) near stamp mill site (Assessment Report 11789).		

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena	Gold	Pyrite	Sphalerite	Chalcopyrite
Magnetite				
ASSOCIATED: Quartz				
ALTERATION: Silica	Clay	Chlorite		
ALTERATION TYPE: Silicific'n		Argillic	Chloritic	
MINERALIZATION AGE: Unknown				

DEPOSIT

CHARACTER: Vein	Shear		
CLASSIFICATION: Hydrothermal	Epigenetic		
TYPE: I05	Polymetallic veins	Ag-Pb-Zn±Au	
DIMENSION: 760 x 1	Metres	STRIKE/DIP: 045/34E	TREND/PLUNGE:
COMMENTS: The vein in the adit on the Withrow claim strikes northeast and dips 34 degrees southeast. The vein pinches and swells up to 1.5 metres in width and has reportedly been traced on surface for 760 metres.			

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Nelson Intrusions
Jurassic			

LITHOLOGY: Meta Volcanic
 Argillite
 Marble
 Limestone
 Hornblende Biotite Granodiorite
 Andesite Sill

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Okanagan Highland
 TERRANE: Quesnel

INVENTORY

ORE ZONE: VEIN	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1983
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	161.8000 Grams per tonne
Gold	24.9000 Grams per tonne
Copper	0.3150 Per cent
Lead	0.7100 Per cent

COMMENTS: Selected grab sample of quartz vein material from Withrow adit dump.
 REFERENCE: Assessment Report 11789.

CAPSULE GEOLOGY

The Monashee deposit is located 20 kilometres south of Cherryville, just north of McIntyre Lake on the east side of Monashee Pass. Work was initially reported in 1886 but it may have begun earlier. Underground development and stockpiling of ore were carried out each year. The Riske (Lot 192), Vernon (Lot 193), McIntyre (Lot 194) and Riske (Lot 195) claims were Crown granted in 1887; the

CAPSULE GEOLOGY

Withrow (Lot 306) claim was Crown granted in 1890. The stamp mill was completed in and the workings comprised 3 adits: an upper adit at 1265 metres, driven 91 metres; a middle adit driven 10.7 metres; and a lower adit near the bottom of the hill driven 82.3 metres.

In 1900, the Cherry Creek Gold Mining Co. Ltd. acquired the property and the adjoining McPhail (082LSE009) property. Drifting and crosscutting were done in the old adits. A 5-stamp mill operated for a short time in 1903. In 1907, the Fire Valley Gold Mining Co. Ltd. acquired the two properties. The old adits were reopened but no work was reported and the company ceased work in 1915. The Progressive Mining Co. Ltd. acquired the McIntyre, Morning Sun and Monashee claims in 1921. The adit and opencuts on the McIntyre were cleaned out. On the Morning Sun claim a crosscut adit was driven 12 metres. On the Monashee claim the old lower adit was reopened. In the 1920s, New Monashee Mines Ltd. acquired the Withrow, Field, Vernon and Riske claims but no work was reported.

In 1933, Monashee Mines Syndicate Ltd. acquired the Withrow, Vernon, Field and Riske Crown grants and the adjoining McPhail property. The old adits were reopened, a drift adit was extended 230 metres and two new drift adits were completed. A total of 1254 metres of drifting and raising was done by Vidette Gold before work ceased in 1935. In 1939, Monashee Development installed a 50 ton-per-day mill which began operation in October. The mill operated for 55 days before work ceased; all equipment was removed. In 1940, the property was leased to G.M.F. and F.H. Paterson, S. Flodstrom and William McLaren who mined remnants of ore by hand steel methods.

In 1983, reconnaissance geochemical sampling and geological mapping surveys were done on the Monashee and McPhail properties and the Moonbeam claims by I.M. Watson and Associates Ltd. for Nakusp Resources Ltd. In 1989, reconnaissance mapping and geochemical sampling was completed on the Monashee and McPhail properties, which were staked as the Kettle 2 and 1 claims. In 1992, Cameco Corp. conducted geochemical and geological surveys in the area.

The claims are underlain by Devonian to Triassic metavolcanics and metasediments of the Harper Ranch Group, a short distance north of the contact with Jurassic granitic rocks of the Nelson Intrusions. These consist of interdigitating lenses of fine grained, altered volcanics and metasediments. The volcanics are possibly meta-andesites and the metasediments consist of argillites and marbles. The sediments strike west to northwest and dip steeply to moderately north. On the northern part of the property the Monashee Pass marble showing (082LSE049) forms 50 metre cliffs along the crest of the ridge overlooking Highway 6.

The intrusive rocks consist of leucocratic medium to coarse-grained hornblende biotite granodiorite. The generally fractured granitic rocks are locally heavily sheared and altered. The degree of kaolinization and chloritization is relative to the degree of deformation. The contact with the metamorphic rocks trends northwest.

Disseminated pyrite is common along or near the contact with the granites and is associated with fracturing in silicified and rusty metavolcanics and sediments. Pyritized rusty skarn zones, lensoid and less than 10 metres in extent, occur at volcanic/marble contacts exposed in roadside cuts.

Three adits have been driven on the Withrow claim. The upper adit has been driven on a quartz vein which pinches and swells from 30 to 150 centimetres in width, with the widest sections near faults. The vein, traced on surface for 760 metres, strikes northeast and dips 34 degrees southeast. Mineralization consists of pyrite, galena, chalcopyrite, sphalerite, magnetite and native gold. A faulted outcrop containing a 1.8 metre wide quartz vein has been explored by adit but was not described. Just north of the vein outcrop, another adit has been driven on a quartz vein. This vein is 2 to 10 centimetres wide, strikes southeast and may be a stringer in the hangingwall of the main vein. The veins occur in argillites and metamorphosed volcanics. The workings at 1265 metres elevation were sampled in 1983. A selected grab sample of quartz vein material containing disseminated pyrite, galena and chalcopyrite assayed 0.315 per cent copper, 0.71 per cent lead, 161.8 grams per tonne silver and 24.9 grams per tonne gold (Assessment Report 11789). Samples taken in 1989 from this same dump material assayed similar values (Assessment Report 19209). Samples of dump material from the other adits assayed insignificant values. Geochemical sampling indicated a gold anomaly in the area of the old dumps and workings on the Withrow claim.

On the Vernon claim, pyritic, rusty andesite sills occur in marble. Grab samples assayed low gold and silver values (Assessment Report 11789).

Adits on the Moonbeam 5 and 6 claims, about 425 metres south of

CAPSULE GEOLOGY

the Vernon claim, were driven on a strong northwest trending shear. The shear cuts highly silicified and carbonatized volcanics and contains irregular quartz veins and pods. These are weakly to moderately pyritized and contain rare chalcopyrite and galena. Chip and grab samples assayed up to 132 grams per tonne silver and 0.27 gram per tonne gold (Assessment Report 11789). Samples taken in 1989 assayed low values (Assessment Report 19209).

During 1939-1940, 2193 tonnes of ore were milled producing 11,415 grams of gold, 50,916 grams of silver, 706 kilograms of lead and 190 kilograms of zinc.

BIBLIOGRAPHY

EMPR AR 1886-213; 1887-277; 1889-292; 1890-378; 1891-576; 1892-543; 1893-1073; 1897-609; 1900-857,1128; 1901-1128,1155; 1902-188; 1903-178; 1904-228; 1905-193; 1907-128; 1909-278; 1913-171; 1914-359,511; 1915-252,446; 1916-263; 1921-191; 1933-155; 1934-D11; 1935-D13; 1939-37,42; 1940-23,71
EMPR ASS RPT 4771, 11537, *11789, 19209, 22827, 22575, *23110
EMPR BC METAL MM00433
EMPR BULL 1, p. 79; 20, pp. 3-24
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514; 1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323; 1992, pp. 255-257
EMPR GEM 1973-23,98
EMPR INDEX 3-206
EMPR OF 1991-18; 1994-8
EMPR PF (Workings Plans 1915, 1932)
EMPR RGS 082L, 1976; 32, 1991
EMR CORPFILE (Monashee Gold Mines Ltd., Monashee Mines Syndicate Ltd., Vidette Gold Mines Ltd.)
EMR MINES BRANCH 1934 Report 748-171(#604)
GSC ANN RPT 1890, Vol. 5
GSC MAP 1059A; 7216G; 8491G; 8501G
GSC MEM 296, p. 147
GSC OF 637 (#327); 658
GSC P 91-2, pp. 115-135
GSC SUM RPT 1930A, p. 116
CJES Vol. 26, No. 2
GCNL #17, 1983

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/17

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE002**

NATIONAL MINERAL INVENTORY:

NAME(S): **PARADISE** INTERNATIONAL, BELLVIEW,
LAKEVIEW, GOLDEN MARTEN II, AU 2

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:
LATITUDE: 50 04 24 N
LONGITUDE: 118 25 05 W
ELEVATION: 1524 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate location of the No. 1 tunnel (Minister of Mines Annual Report 1930, page 263).

Underground
MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5547747
EASTING: 398529

COMMODITIES: Silver Gold

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Jurassic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY: Granite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel
COMMODITY: Silver
GRADE: 34.2800 Grams per tonne

YEAR: 1930

COMMENTS: Channel sample across 80 centimetres of quartz in opencut. Nil gold.
REFERENCE: Minister of Mines Annual Report 1930, page 263.

CAPSULE GEOLOGY

The Paradise showing is located 26 kilometres east of Edgewood, north of Inonoaklin Creek near Coates Creek. The Paradise is about 450 metres south of the Renown showing (082LSE004).

Three opencuts and 2 tunnels were reported in 1930. In 1983, prospecting and geochemical sampling were conducted on the Au 1 and 2 claims, which were staked over the Paladora (082LSE008), Ballarat (082LSE024), Paradise and Renown showings. An unsuccessful attempt was made to locate the old workings. In 1985, prospecting was conducted on the Golden Marten I and II claims, which were staked over the Paladora, Ballarat, Paradise and Renown showings.

The area is underlain by granitic rocks of the Jurassic Nelson Intrusions which intrude volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group.

The No. 1 tunnel, at 1524 metres elevation, was driven on a 35 centimetre quartz vein in granite. A sample across 30 centimetres at the face assayed nil gold and silver (Minister of Mines Annual Report 1930, page 263).

The 3 opencuts, just east of the No. 1 tunnel, expose this same vein. A channel sample across 80 centimetres of quartz assayed nil gold and 34.28 grams per tonne silver (Minister of Mines Annual Report 1930, page 263).

The No. 2 tunnel is 183 metres east of the No. 1 tunnel at 1539 metres elevation. The 9-metre tunnel was driven northwest along a 1.2 to 1.5 metre wide quartz vein. A sample across 1.3 metres

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 191
REPORT: RGEN0100

CAPSULE GEOLOGY

assayed nil gold and silver (Minister of Mines Annual Report 1930, page 263).

BIBLIOGRAPHY

EMPR AR *1930-263
EMPR ASS RPT 12331, 14611
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8491G
GSC MEM 296, p. 148
GSC OF 637(#352); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/29

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE003**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUEBIRD**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 36 N
LONGITUDE: 118 55 55 W
ELEVATION: 960 Metres

NORTHING: 5561913
EASTING: 362104

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of opencuts (Minister of Mines Annual Report 1949, page 137).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Jurassic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY: Sediment/Sedimentary
Granite
Tuffaceous Mudstone
Sandstone
Limestone
Conglomerate
Chert

HOSTROCK COMMENTS: Quartz veins occur in both granitic and sedimentary rocks. The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1949

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

3.4300

Grams per tonne

Gold

34.9000

Grams per tonne

COMMENTS: Sample of rusty quartz across 15 centimetres.

REFERENCE: Minister of Mines Annual Report 1949, page 137.

CAPSULE GEOLOGY

The Bluebird showing is located on the northeast side of Harris Creek about 5.6 kilometres southeast of its confluence with Bessette Creek and about 6.5 kilometres south of Lumby.

A series of shallow exploratory opencuts, probably from 1949, expose small quartz veins.

The area is underlain by sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group which have been intruded by granitic rocks of the Jurassic Nelson Intrusions. The Harper Ranch Group comprises tuffaceous mudstone, chert, limestone, sandstone and conglomerate.

The veins occur in both sedimentary and plutonic rocks. Most of the veins are less than 15 centimetres wide but locally some are up to 60 centimetres wide. The veins, which contain wallrock inclusions, strike northeast and are vertically dipping. The wallrock is reportedly "much altered and decomposed".

A sample of rusty quartz across 15 centimetres assayed 34.97 grams per tonne gold and 3.43 grams per tonne silver (Minister of Mines Annual Report 1949, page 137). Other samples assayed trace to

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 193
REPORT: RGEN0100

CAPSULE GEOLOGY

14.06 grams per tonne gold (Minister of Mines Annual Report 1949, page 137).

BIBLIOGRAPHY

EMPR AR *1949-137
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296, p. 141
GSC OF 637(#308)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/07/06

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE004**

NATIONAL MINERAL INVENTORY:

NAME(S): **RENOWN**, REPULSE, HOOD,
BLUEBELL, BLUEBIRD, GOLDEN MARTEN II,
AU 1-2

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5548210
EASTING: 398557

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:
LATITUDE: 50 04 39 N
LONGITUDE: 118 25 04 W
ELEVATION: 1760 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate location (Minister of Mines Annual Report 1930, page 263).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 131 x 1 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Vein strikes east, dips vertically, is 40 to 83 centimetres wide
and has been traced 131 metres.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Nelson Intrusions
Jurassic			

LITHOLOGY: Granite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: OPENCUT REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 48.0000 Grams per tonne
Gold 10.3000 Grams per tonne
COMMENTS: Sample from opencut across 40 centimetres.
REFERENCE: Minister of Mines Annual Report 1930, page 263.

CAPSULE GEOLOGY

The Renown showing is located 26 kilometres east of Edgewood, north of Inonoaklin Creek near Coates Creek. The Renown is about 450 metres north of the Paradise showing (082LSE002).

Four opencuts were reported in 1930. In 1983, prospecting and geochemical sampling were conducted on the Au 1 and 2 claims, which were staked over the Paladora(082LSE008), Ballarat(082LSE024), Paradise and Renown showings. An unsuccessful attempt was made to locate the old workings. In 1985, prospecting was conducted on the Golden Marten I and II claims, which were staked over the Paladora, Ballarat, Paradise and Renown showings.

The area is underlain by granitic rocks of the Jurassic Nelson Intrusions which intrude volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group.

A narrow east striking, vertically dipping quartz vein, 40 to 83 centimetres wide, has been traced for 131 metres. The vein, hosted in granite, contains pyrite and has been exposed by 4 opencuts. A sample from the No. 2 opencut across 40 centimetres assayed 10.3 grams per tonne gold and 48 grams per tonne silver (Minister of Mines Annual Report 1930, page 263).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 195
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1930-263
EMPR ASS RPT 12331, 14611
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296, p. 148
GSC OF 637; 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/29

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE005**

NATIONAL MINERAL INVENTORY:

NAME(S): **VAL, VADLER, VIDLER,
ARKOSE, VIDLER-ARKOSE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 55 N
LONGITUDE: 118 53 34 W
ELEVATION: 1070 Metres

NORTHING: 5562428
EASTING: 364914

LOCATION ACCURACY: Within 500M

COMMENTS: Radioactive anomaly, base map (Assessment Report 6341).

COMMODITIES: Uranium Zinc

MINERALS

SIGNIFICANT: Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Sedimentary
TYPE: D04 Basal U

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Conglomerate
Sandstone
Tuffaceous Arkose
Rhyolite
Tuff

HOSTROCK COMMENTS: Includes fragmental rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Val deposit is located 8 kilometres southeast of Lumby and 27 kilometres southeast of Vernon.

The property was staked as the Val Claims in 1968 by Silver Standard Mines. They carried out detailed mapping, radiometric surveys and drilled 3 percussion holes totalling 274 metres. The claims were staked as the Arkose and Vidler claims in 1976. In 1976, Chatham Resources carried out soil sampling, scintillometer and induced polarization surveys and drilling. In 1977, 181 metres of rotary drilling was done by Kerr Addison Mines Ltd. In 1978, the property was optioned to Charter Oil Co. Ltd. who assigned their interest to Banqwest Resources Ltd. Soil sampling, a spectrometer survey, silt and water sampling and geological mapping were completed.

The area is underlain by Eocene volcanics and sediments of the Kamloops Group. Rocks include rhyolites, tuffs, fragmentals, sandstones and conglomerates. Radioactivity is associated with sediments along a north trending valley for about 2.5 kilometres.

Uranium is found in a sequence of sandstone, conglomerate and tuffaceous arkose of Eocene age.

Drilling in the north part of the zone failed to intersect significant radioactivity. However, a nearby soil geochemical sample assayed 31 parts per million uranium. At the south end of the zone, radioactivity up to 21,000 counts per second registered on a TV-1A scintillometer (background is 55 counts per second) (Assessment Report 7276). Small amounts of sphalerite were intersected in the drillholes on the Arkose claims. Mapping and drilling in 1977 suggested that radioactivity was due to a high content of uranium in primary resistate minerals in the rhyolites and tuffs.

BIBLIOGRAPHY

EMPR AR *1968-222
EMPR ASS RPT *6341, 6376, 6396, 6560, *7276
EMPR EXPL 1976-53; 1977-74; 1978-88

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 197
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 22
EMPR OF *1990-32
EMPR PF (082LSE General - Report on the Clier Claims and Report on
the Tai claims, J. Lund, 1978)
GSC MAP 1059A
GSC MEM 296
GSC OF 551; 637(#309)
GCNL #122,#138, 1976

DATE CODED: 1985/07/24
DATE REVISED: 1987/03/31

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE006**

NATIONAL MINERAL INVENTORY: 082L7 Au1

NAME(S): **LUMBY, LUMBY (CHAPUT), BS 2,
B.S. 2, CHAPUT, CHAPUT MINE,
LUM, P.S., B.S.,
M.M., QUIN, TEACHER,
MINE, PLATEAU, SADDLE MOUNTAIN**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L07W
BC MAP:

Underground

MINING DIVISION: Vernon

LATITUDE: 50 15 53 N
LONGITUDE: 118 56 28 W
ELEVATION: 722 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5569867
EASTING: 361656

LOCATION ACCURACY: Within 500M

COMMENTS: Plateau zone is 2.25 kilometres north-northeast of the community of Lumby, east of Bessette Creek, 4.25 kilometres west of Rawlings Lake (Assessment Report 14469).

COMMODITIES: Mica Graphite Gold Silver Lead
Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Graphite Galena Sphalerite Tetrahedrite
Chalcopyrite Argentite Pyrrhotite Mica Sericite

ASSOCIATED: Quartz
ALTERATION: Graphite Muscovite Sericite Chlorite Clay

COMMENTS: Biotite hornfels.
ALTERATION TYPE: Argillic Propylitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Breccia Shear
CLASSIFICATION: Hydrothermal Mesothermal Epigenetic Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 101 Au-quartz veins
SHAPE: Bladed
MODIFIER: Fractured Sheared
DIMENSION: 150 x 46 Metres STRIKE/DIP: 110/40 TREND/PLUNGE:
COMMENTS: Plateau zone mineralization.

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	Nelson Intrusions
Jurassic			

LITHOLOGY: Argillite
Lapilli Ash Tuff
Feldspar Crystal Tuff
Phyllite
Siltstone
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: PLATEAU

REPORT ON: Y

CATEGORY: Indicated YEAR: 1993
QUANTITY: 507920 Tonnes

COMMODITY GRADE
Gold 4.5000 Grams per tonne

COMMENTS: Estimated reserves by Quinto Mining Corp at a 2 grams per tonne cut-off.

REFERENCE: Information Circular 1994-1, page 15.

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Inferred YEAR: 1996
QUANTITY: 27213000 Tonnes
COMMODITY GRADE
Graphite 100.0000 Per cent
COMMENTS: Possible mineral resources from the 808 metre level down to the valley floor along the dip slope; grade of graphite is unknown.
REFERENCE: George Cross News Letter No.44 (March 4), 1997.

ORE ZONE: TOTAL REPORT ON: Y
CATEGORY: Measured YEAR: 1996
QUANTITY: 340162 Tonnes
COMMODITY GRADE
Graphite 100.0000 Per cent
COMMENTS: Mineral resources at the 808 metre level; grade of graphite is unknown.
REFERENCE: George Cross News Letter No.44 (March 4), 1997.

CAPSULE GEOLOGY

The Lumby (Chaput) deposit is located immediately to the north of Lumby.
Mineralization was noted and prospected in the early 1900s by a local teacher (called the Teacher showing). Mineralized veins were exposed in the 1960s by a logging company (the Mine showing). In 1968, underground development began and a mill was constructed. In 1971, Alberta Gypsum acquired the property and mill and undertook underground and surface exploration in an attempt to establish mineable reserves. Coast Interior Ventures acquired the property in 1974 and worked it sporadically until 1979. The mill was expanded to 150 tons capacity in 1980, but the plant was closed in 1981. In 1983, Quinto Mining Corporation purchased the property and increased the size. Geochemical and geophysical surveys were conducted and a trenching program exposed the Plateau shear zone which was sampled. In 1985, 10 reverse circulation holes were drilled and 13 holes were diamond drilled. In 1986, the Saddle Mountain portion of the property was mapped and geophysical surveys were conducted; 2700 metres of diamond drilling was completed on the Plateau shear zone. In 1987, 32 reverse circulation and 7 diamond drillholes were completed along with additional geophysical and geochemical surveys. An initial metallurgical test was completed. In 1988, a computer model was generated of the Plateau shear zone and 2 crosscuts and an exploratory drift were completed in the hangingwall. A preliminary feasibility study was conducted. In 1990, the Plateau shear zone workings were mapped and sampled. In 1992, the underground workings were re-sampled, assayed and mineralogical and metallurgical tests were done. In 1993, metallurgical testing was completed.
The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. At the Lumby occurrence, the rocks include argillite, siltstone, sericitic lapilli ash tuff, chloritic feldspar crystal tuff and minor phyllite. This sequence is well-bedded, gently folded about a west-northwest trending antiformal axis and crosscut by minor high-angle normal faults. A small granodiorite stock of Jurassic age intrudes the package and biotite hornfels is weakly developed in the wallrocks. The Plateau shear zone is a major west trending fault which dips about 48 degrees to the south and transects the central part of the property. A narrow north trending shear is also evident containing barren to weakly pyritic bull quartz.
Mineralization is known in two areas, the Chaput mine and the Plateau zone. Both are spatially related to the same structure, the Plateau shear zone.
The Chaput mine, at the western end of the Plateau shear zone, contains silver-lead-zinc mineralization associated with a system of quartz-sulphide veins arranged in a step-like pattern. The quartz veins occur in z-shaped dragfolds on the south limb of the west-northwest trending anticline. The veins are hosted in argillites that are bounded by felsic to intermediate lapilli and ash tuff. The veins, 0.3 to 1.5 metres wide, occur in a zone which strikes 110 to 120 degrees and dips south. The veins pinch and swell along strike and downdip. The best grades occur near the flat portions of the flexures. The sulphides are fine to medium grained and are intergrown with milky white and grey quartz. Sulphides comprise galena, sphalerite, pyrite, tetrahedrite, pyrrotite, chalcopyrite and argentite. Chlorite, sericite and clay minerals are typical wallrock alteration minerals. Most mineralization in the

CAPSULE GEOLOGY

Chaput mine is reported to occur below 600 metres (ASL) elevation. A diamond-drill hole intersection across a 1.0 metre (true width) quartz vein assayed 2296.76 grams per tonne silver and 2.33 grams per tonne gold (George Cross Newsletter 15, 1987). Between 1968 and 1976, 1991 tonnes of ore was mined producing 1,697,290 grams of silver, 1214 grams of gold, 654 kilograms of copper, 72,217 kilograms of lead and 50,847 kilograms of zinc.

The Plateau shear zone is located 600 metres to the east above 700 metres (ASL) elevation and is apparently along strike with the Chaput mine. The Plateau shear zone is 5 to 31 metres in width, averaging 24 metres, and occurs in argillite on the footwall contact with felsic to intermediate lapilli and ash tuffs. The zone strikes 110 to 120 degrees, dips 40 to 80 degrees south and has been traced for about 1000 metres east-west.

The mineralization has been confirmed downdip in excess of 150 metres. The enclosed quartz veins are up to 5 metres in aggregate width. In most areas within the zone, quartz veins are intensely sheared and brecciated. Gold is associated with fine to coarse-grained disseminated to locally massive pyrite, minor pyrrhotite and chalcopyrite. Sphalerite and galena are generally rare, but carry sporadic silver values. In many parts of the zone the breccia matrix contains a significant amount of carbonaceous (graphitic) material, where many of the highest gold values have been reported. Two mineralized sub-zones (Hangingwall, Footwall) within the Plateau zone have been outlined.

Estimated reserves of the Plateau shear zone are 507,920 tonnes grading 4.5 grams per tonne gold (Information Circular 1994-1, page 15).

The deposit is currently receiving attention as a graphite/sericite/gold project by Quinto Mining Corporation. Four crosscuts have been completed across the mineralized zone which has widths up to 46 metres. The main drift, which follows the hangingwall, is now over 304 metres long, 3.6 metres wide and 3 metres high. In stope No. 3, a 22-metre high cave stope is being extracted over a 18-metre width in preparation for milling. Quinto bought a mechanical laboratory from Bacon Donaldson which is being reassembled in Lumby. A special flotation system was designed to handle the unique sericite/graphite/silica mineralization (George Cross Newsletter No.115 (June 15), 1994).

Metallurgical testing indicates that the graphite is too fine grained and too tightly bound to the muscovite to be a viable byproduct. The graphite occurs as ultra-fine grains interleaved in very fine grained muscovite/sericite. The graphite enables the muscovite/sericite to be readily floatable which may have value as a byproduct (Assessment Report 22837).

Metallurgical testing in 1993 concluded that 3 products could be extracted from the Plateau shear zone material. These are a very fine grained muscovite-graphite mix which has been termed "Schillerite No. 1", a pyrite-gold concentrate from which gold can be recovered and a very fine-grained muscovite product termed "Schillerite No. 2" (Assessment Report 23029). Unclassified reserves are 27 million tonnes of graphite (Information Circular 1994-19, page 16).

Quinto was reported to be actively sampling and evaluating the property in 1996. In May 2000, the company began processing of its graphite and sericite products.

BIBLIOGRAPHY

- EMPR AR 1968-222
- EMPR ASS RPT *6954, *14469, 15340, 16429, 17816, 19506, 20339, 20385, 20363, 20727, 21953, 21561, 21954, 22837, *23029
- EMPR BC METAL MM00428
- EMPR EXPL 1975-E53; 1978-E96; 1986-C97; *1987-B23-B27; 1996-A24
- EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
- EMPR GEM 1969-298,299; 1974-90
- EMPR INF CIRC 1993-13, pp. 11,15; 1994-1, pp. 11,15; 1994-19, p. 17; 1995-1, p. 17; 1996-1, p. 20; 1997-1, p. 23
- EMPR MAP 65 (1989)
- EMPR MINING 1975-1980 Vol. I, pp. 40,61; 1981-1985
- EMPR OF 1990-30; 1992-1; 1994-1
- EMPR PF (*Property Summary Report, March 25, 1987 by R.E. Meyers, District Geologist (Kamloops))
- EMPR RGS 082L, 1976; 32, 1991
- EMR MP CORPFILE (Alberta Gypsum Ltd.)
- GSC MAP 1059A; 7216G; 8502G
- GSC MEM 296
- GSC OF 637 (#285)
- GSC SUM RPT 1898 (Map 604)
- CANMET IR 72-5

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 201
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL #140, July 18, 1977; #72,#115, 1984; #1,#165,#177,#187, 1985;
#33,#57, 1986; #3,#15, 1987; #152,#208, 1992; #82,#145,#149,#201,
1993; #115,#193,#201, 1994; #44(Mar.4), 1997; #91(May 11), 2000
IPDM November, 1985
N MINER Mar.10, 1986; Feb.1, 1988; Aug.17, 1992
WIN May, 1987
WWW <http://www.quintomining.com>; <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1997/04/15

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE007**

NATIONAL MINERAL INVENTORY:

NAME(S): **BISSON LAKE**, BISSON, LUCKY,
MOLLY, XL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 02 48 N
LONGITUDE: 118 36 28 W
ELEVATION: 1600 Metres

NORTHING: 5545058
EASTING: 384889

LOCATION ACCURACY: Within 500M
COMMENTS: Showing (EM anomaly) on the east side of Bisson Lake (Assessment Report 1022)

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite
COMMENTS: Molybdenite and chalcopyrite are not specifically identified but are inferred from the geophysical signature.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic			Nelson Intrusions

LITHOLOGY: Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Bisson Lake showing is located 40 kilometres southeast of Vernon, on the east side of Bisson Lake.
In 1967, geophysical surveys were completed on the Bisson Lake property. In 1971, a geophysical survey was conducted on the XL claims.
The area is underlain by granitic rocks of the Jurassic Nelson Intrusions.
The claims were originally staked when mineralization was encountered on a logging road. This mineralization is not located or described. The nature of this showing has been inferred from the geophysical response. The response indicates that copper and molybdenum comprise the original mineralization. The showing is noted on Geological Survey of Canada Open File 637 as a copper-molybdenum showing of unknown type.
No other information is available.

BIBLIOGRAPHY

EMPR AR 1967-222, 280
EMPR ASS RPT *1022, 3114
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR GEM *1971-431
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8501G
GSC MEM 296
GSC OF 637(#345)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/13

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE008**

NATIONAL MINERAL INVENTORY:

NAME(S): **PALADORA (L.2153)**, MEADOWVIEW (L.2152), SUMMERSSET (L.2154),
REWARD, CORNWALL, GOLDEN MARTEN 1,
AU 1-2

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:
LATITUDE: 50 04 48 N
LONGITUDE: 118 26 40 W
ELEVATION: 1737 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of old workings (Minister of Mines Annual Report 1927, page 232).

Underground
MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5548525
EASTING: 396655

COMMODITIES: Gold Silver Lead Zinc

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	
Jurassic			Nelson Intrusions

LITHOLOGY: Granite
Granodiorite
Quartzite
Basalt

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: SHAFT
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
YEAR: 1927
COMMODITY GRADE
Silver 54.8000 Grams per tonne
Gold 11.0000 Grams per tonne

COMMENTS: A sample, 1.8 metres wide, from the third shaft on the Paladora.
REFERENCE: Minister of Mines Annual Report 1927, page 232.

CAPSULE GEOLOGY

The Paladora deposit is located 48 kilometres west of Edgewood near the headwaters of Fire Valley Creek. The Ballarat showing (082LSE024), the extension of the Paladora, is located about 150 metres to the east.

Surface work and shafts are first reported on the claims in 1899. In 1900, 2 veins were stripped and 4 shafts, 6 to 8 metres deep, had been sunk. "Several hundred tons of ore" were treated containing \$15 to \$30 in gold and "several ounces" silver per ton. The claims were worked in 1902 and 1903. The Paladora (Lot 2153) and Meadowview (Lot 2152) claims were Crown granted in 1905. In 1916, assays of "\$30 gold per ton" were reported. Numerous opencuts, a shaft 8.5 metres deep, an opencut on the Meadowview close to the boundary line and 3 shafts, 6.1, 1.2 and 4.5 metres respectively, were reported on the Paladora. A crosscut tunnel was driven 15 metres below the upper working for 12 metres without hitting the vein.

In 1983, prospecting and geochemical sampling were conducted on the Au 1 and 2 claims which were staked over the Paladora, Ballarat, Paradise (082LSE002) and Renown (082LSE004) showings. An

CAPSULE GEOLOGY

unsuccessful attempt was made to locate the old workings. In 1985, prospecting was conducted on the Golden Marten I and II claims, which were staked over the Paladora, Ballarat, Paradise and Renown showings.

The area is underlain by granite and granodiorite of the Jurassic Nelson Intrusions. Quartzite and basalt of the Devonian to Triassic Harper Ranch Group is occasionally present.

Four parallel quartz veins have been traced for over 3.2 kilometres. The veins average 90 centimetres in width with local swells up to 180 centimetres wide. The veins carry pyrite, small amounts of native gold, galena and sphalerite in a granitic host. The veins strike 082 degrees and dip 70 degrees north. Several opencuts and 3 shafts occur along 400 metres of outcrop exposing a quartz vein in granite. The vein has been faulted up the hill between the No. 2 and No. 4 shafts. By 1927, the shafts were already dilapidated and access limited.

A sample of sorted ore from the Meadowview shaft assayed 52.8 grams per tonne gold and 274 grams per tonne silver (Minister of Mines Annual Report 1927, page 232). A sample from a 2 metre wide vein in an opencut 21 metres east of this shaft assayed 4.8 grams per tonne gold and 34.28 grams per tonne silver (Minister of Mines Annual Report 1927, page 232). A sample 1.8 metres wide from the third shaft on the Paladora assayed 11 grams per tonne gold and 54.8 grams per tonne silver (Minister of Mines Annual Report 1927, page 232).

Production for 1935 to 1938 totalled 99 tonnes yielding 10,295 grams of silver and 2022 grams of gold.

BIBLIOGRAPHY

- EMPR AR 1899-748; 1900-856; 1902-165; 1903-150; 1905-252; 1916-207;
*1927-232; *1930-263; 1935-E31; 1938-A35,E40
EMPR ASS RPT 12331, 14611
EMPR BC METAL MM01352
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR INDEX 3-208
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296, p. 148
GSC OF 637(#350); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/25

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE009**

NATIONAL MINERAL INVENTORY: 082L2 Au2

NAME(S): **MCPHAIL**, ROSSLAND (L.3766), MASCOT (L.3767),
 EVENING STAR (L.3768), KETTLE 1

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 082L02E
 BC MAP:

Underground

MINING DIVISION: Vernon

LATITUDE: 50 06 36 N
 LONGITUDE: 118 30 40 W
 ELEVATION: 1333 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5551954
 EASTING: 391953

LOCATION ACCURACY: Within 500M

COMMENTS: The Fire Valley tunnel on the Rossland (Lot 3766) claim (Minister of
 Mines Annual Report 1914, page 359 and Assessment Report 19209).

COMMODITIES: Gold Silver Lead Copper Zinc

MINERALS

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

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 DIMENSION: 76 x 2 Metres
 COMMENTS: McPhail vein.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Nelson Intrusions
Jurassic			

LITHOLOGY: Limestone
 Argillite
 Siltstone
 Quartzite
 Tuffaceous Volcanic
 Granodiorite
 Quartz Diorite
 Lamprophyre Dike
 Skarn

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Chip

YEAR: 1973

COMMODITY	GRADE	
Silver	99.0000	Grams per tonne
Gold	26.0000	Grams per tonne

COMMENTS: Across 91 centimetres of the Evening Star vein near the portal.
 REFERENCE: Assessment Report 4771.

CAPSULE GEOLOGY

The McPhail deposit is located 10.5 kilometres east-southeast of Vernon and adjoins the Monashee mine area (082LSE001).
 In 1900, the property, comprising the Rossland, Mascot and Evening Star claims, was optioned by the Cherry Creek Gold Mining Co. Ltd. During 1902-1904, drifts, raises and adits were developed. The McPhail tunnel was 52 metres long with 2 raises of 7.6 and 15 metres respectively, the Evening Star was 70 metres long and an unnamed tunnel was about 91 metres long with a raise 23 to 30 metres long. In 1903, a 5-stamp mill operated for a short period. The company also held the Monashee property at this time so the source of the mill feed is questionable. A new crosscut was started on the Rossland in 1914. By 1915, all work was suspended. At this time the crosscut on the Rossland claim, which did not intersect the vein, was 240 metres long.

CAPSULE GEOLOGY

The Monashee Mines Syndicate Ltd. acquired the property in 1933. In 1989, a geochemical survey and rock sampling were completed.

The area is underlain by metamorphosed limestone and subordinate argillite, siltstone, quartzite and green tuffaceous volcanics of the Devonian to Triassic Harper Ranch Group. A lobe of granodiorite or quartz diorite of the Jurassic Nelson Intrusions extends onto the Evening Star No. 2 and No. 4 claims. A lamprophyre dike is present near the north boundary of the No. 4 claim. Some skarn is present near the granite contact with the limestones. Bedding indicates that the sedimentary sequence strikes northwest and dips northeast.

Seven quartz veins occur over a 122-metre interval, of these 4 veins are narrow and relatively unmineralized. Three subparallel veins, explored by tunnels, are 30 to 91 centimetres wide, trend 310 degrees and dip 40 to 70 degrees southwest. The veins are hosted in sediments and are mineralized with fine-grained pyrite, galena, sphalerite and minor chalcopyrite.

The McPhail vein can be traced on surface for 76 metres. The vein is 60 to 91 centimetres wide on surface but underground is up to 2.4 metres wide. Mineralization consists of scattered bunches of very fine grained pyrite, galena and sphalerite and minor chalcopyrite and tetrahedrite.

A second vein, 30 metres north of the McPhail vein, is explored by a 91-metre tunnel. The vein is at least 60 centimetres wide locally and is explored by a vertical raise about 24 metres from the face. In 1973, a sample across 60 centimetres of this vein, taken about 9 metres from the portal, assayed 4.46 grams per tonne gold and 27 grams per tonne silver (Assessment Report 4771). Selected samples have higher grades.

On the Evening Star claim, which adjoins the Rossland claim on the northwest, the 70-metre adit was driven on a quartz vein which strikes southwest and dips near vertical. The vein averages 60 centimetres in width and is mineralized with pyrite, galena and chalcopyrite. A chip sample taken in 1973 across 91 centimetres near the portal assayed 26 grams per tonne gold and 99 grams per tonne silver (Assessment Report 4771).

Reconnaissance soil sampling in 1973 indicated the possibility of silver-bearing veins near the north boundary of the claims which may represent extensions of the veins explored by the adits.

BIBLIOGRAPHY

- EMPR AR 1902-188; 1903-178; 1904-228; 1905-193; 1909-278; 1913-179;
*1914-359; 1915-252; 1921-191,196; 1933-155; 1934-D32; 1935-D15
EMPR ASS RPT *4771, 11789, *19209
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR GEM 1973-99
EMPR OF 1990-30; 1991-18; 1994-8
EMPR PF (Sketch of McPhail mine, c. 1930)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8501G
GSC MEM 296
GSC OF 637 (#326)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/07/06

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Development work began on the Toughnut claim in 1913. In 1914, a tramline was constructed and a mill was installed on the Sheppard claim. The mill operated for short periods in 1914 and 1915, milling 200 tonnes. Four claims, the Black Bess, Minerva, Zilpah and Toughnut (Lots 4186 to 4189), were Crown granted in 1915.

Development work, mainly on the Toughnut claim during the period 1914-1916, included 2 adits, 6.1 metres and 106.7 metres in length.

In 1927, St. Paul Mines Ltd. acquired the 4 Crown grants and 3 claims (which included the Morgan (082LSE022)). Intermittent development work continued into 1933. The workings in 1930 included 5 adits from 10.7 to 106.7 metres in length, 2 winzes and a number of trenches. The company reportedly carried out some work in 1949.

In 1962, a new adit begun in 1961 was extended to a total length of 61 metres. A shipment of 7.3 tonnes was reported in 1966. The property in 1971 included the 4 Crown grants and the Snow, Snowshoe and SKB claims. Work done during the period 1971-1973 included trenching and stripping. Some crude ore was shipped in 1971 and 1973 and 4.5 tonnes of concentrate were shipped in 1973. In 1973, Coast Interior Ventures Ltd. leased the properties and in 1974 carried out extensive road improvements, reopening and deepening of old trenches, opening and draining adits 4 and 5 at the St. Paul workings and a metallurgical study on a bulk sample from the St. Paul workings.

In 1982, Brican Resources conducted geochemical surveys and magnetometer survey on the St. Paul and Morgan deposits. In 1983, Brican Resources Ltd. conducted a geochemical survey and geological mapping on the two deposits. In 1990, Commonwealth Gold conducted a geochemical survey over this area. In 1992, Cameco Corp. conducted geochemical and geological surveys in this area.

The area is underlain by sedimentary rocks and greenish volcanics of the Devonian to Triassic Harper Ranch Group and the Upper Triassic to Lower Jurassic Nicola Group. These are intruded by a Jurassic diorite sill of the Nelson Intrusions near the St. Paul workings. The sediments consist of black slate and argillite with lesser grey to black limestone, intermediate volcanic tuffs and quartzite. Minor greenstone or andesite tuff occurs near the St. Paul workings. The volcanics and sediments generally strike east and dip south. The intrusion is medium grained, dark grey and carries disseminated pyrite, locally in heavy concentrations. The diorite exhibits chlorite and carbonate alteration and has hornfelsed the surrounding rocks.

Mineralization at the St. Paul workings occurs as scattered to sub-massive sulphides in quartz veins within or adjacent to the diorite sill. Varying amounts of disseminated sulphides also occur in the diorite body and in certain of the surrounding hostrocks. There are 2 large quartz veins (61 to 182 centimetres wide), 10 to 15 narrower ones (1 to 15 centimetres wide) and one mineralized "silicified zone". Most of the veins strike northwest and dip moderately to shallowly southwest.

Mineralization in the large quartz veins consists of stringers, bunches and massive to sub-massive lenses of arsenopyrite with occasional massive lenses of jamesonite and stibnite. Minor amounts of the antimony minerals are found as small stringers and disseminated grains. Minor amounts of pyrite, tetrahedrite, sphalerite and chalcopyrite sometimes accompany the arsenopyrite. High silver values indicate the presence of some other sulphosalt, possibly freibergite. At the face of the No. 3 adit, the vein was 91 centimetres to 1.2 metres wide and composed of heavily mineralized diorite. The vein contains about 0.5 to 60 centimetres of nearly solid sulphides, principally a mixture of arsenical iron with streaks and small kidneys of antimony sulphides, mostly jamesonite.

The narrow quartz veins are mineralized with smaller quantities of the above minerals usually as small stringers or disseminated grains.

Other small quartz veins with northeast strikes and southeast dips may represent faulted segments of one vein. These veins are mainly quartz containing sulphides as disseminations or as streaks, bunches or small kidneys of nearly solid mineral. The sulphides are principally arsenopyrite, antimony sulphides, pyrite and pyrrotite. Very small amounts of galena, sphalerite and copper pyrites are present and native silver occurs in microscopic specks.

A diffuse "silicified zone" occurs adjacent to the footwall or northern contact of the diorite sill. The zone is about 1.2 to 1.5 metres wide and contains scattered to sub-massive pyrite and arsenopyrite. The zone is exposed in a small creek above the portal of adit 4. A representative grab sample of this material assayed 66 grams per tonne silver and 5 grams per tonne gold (Property File - Report on the St. Paul Property, 1974).

The diorite sill commonly contains disseminated pyrite and arsenopyrite and locally these minerals may constitute 5 to 10 per

CAPSULE GEOLOGY

cent of the intrusive rock. Disseminated pyrite and arsenopyrite were also noted in blue-grey limestone and in a feldspar porphyry dike (dacite porphyry) adjacent to the south contact of the diorite body.

A 1-metre chip sample from adit 1 across one of the massive sulphide lenses in a quartz vein assayed 1371 grams per tonne silver, 6.5 grams per tonne gold, 4.39 per cent lead, 0.03 per cent zinc and 3.8 per cent antimony (Property File - Report on the St. Paul Property, 1974). A grab sample, taken from a 1.2 metre quartz vein carrying scattered arsenopyrite, jamesonite and pyrite 12 metres from the portal of adit 1, assayed 381 grams per tonne silver and 3 grams per tonne gold (Property File - Report on the St. Paul Property, 1974).

Recorded production for the period 1914-1973 totals 392 tonnes producing 5630 grams of gold, 112,406 grams of silver, 3720 kilograms of lead and 1258 kilograms of zinc. These figures include production from the Morgan deposit.

BIBLIOGRAPHY

- EMPR AR 1913-179; 1914-360,511; 1915-252,446,450; 1916-263;
1923-160; 1927-185,213; 1928-220; 1930-208; 1931-116; 1932-144;
1933-197; 1934-D34; 1949-138; 1962-66
EMPR ASS RPT 10967, 12050, 21592, 22575, 22827, 23110
EMPR BC METAL MM00442
EMPR BULL 1, p. 79; 20, pp. 3-24
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1971-431; 1972-79; 1973-98; 1974-88
EMPR INDEX 3-211
EMPR OF 1991-18; 1994-8
EMPR PF (Plan of St. Paul (lower) workings, copy of 1952 map; *Report on the St. Paul Property, Coast Interior Ventures, 1974)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296, p. 147
GSC OF 637(#331); 658
GSC P 91-2, pp. 115-135
GSC SUM RPT 1930A, p. 116
CJES Vol. 26, No. 2
GCNL #17, 1983

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/16

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE011**

NATIONAL MINERAL INVENTORY: 082L1 Au2

NAME(S): **SILVER BELL (L.4329)**, SILVER HORDE (L.4328), SILVER MOON,
KP 4, STULT, JOE CHAMBERLAIN,
MONA 2

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:
LATITUDE: 50 12 04 N
LONGITUDE: 118 25 39 W
ELEVATION: 1524 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: The common boundary of Lot 4329 and Lot 4328 (Assessment Report 16935).

Underground
MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5561967
EASTING: 398125

COMMODITIES: Silver Gold Lead Copper Zinc

MINERALS

SIGNIFICANT: Silver Tetrahedrite Bornite Pyrite Galena
Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Azurite Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 150 x 4 Metres
COMMENTS: Quartz veins are reportedly up to 4.5 metres wide and up to 150 metres in length.

STRIKE/DIP:
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Argillite
Phyllite
Shale
Siltstone
Limestone
Basalt
Tuff
Porphyry Sill
Dacite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1994
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 297.6000 Grams per tonne
Gold 34.0000 Grams per tonne

REFERENCE: Assessment Report 23401.

CAPSULE GEOLOGY

The Silver Bell deposit is located on the north side of Monashee Creek, about 61 kilometres east of Vernon.
The deposit was discovered in 1903 by S. Hill and J. Chamberlain of Revelstoke and they completed trenching and about 24 metres of drift adit. The ground was restaked in 1914 by W.J. Bell and associates as the Silver Bell, Silver Horde and Silver Moon claims. The adit was extended to 43 metres. Several surface crosscuts and stripping along veins, for 122 metres length, were completed, primarily on the Silver Horde claim. The property was acquired by Cheyenne Mines Ltd. in 1977 and 14 tonnes of ore was shipped in 1978. In 1987, Azimuth Geological Inc. staked the Crown grants as the KP

CAPSULE GEOLOGY

claims and conducted a geochemical and prospecting program. In 1994, a geochemical program was conducted on the Mona claims.

The area is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise shale, siltstone, argillite, limestone, basalt and tuff.

Quartz veins up to 4.5 metres wide and up to about 150 metres in length are traced by workings on these 2 Crown grants. The veins appear to conform to the strike and dip of the host argillite and trend to the northwest with an approximate dip of 45 degrees northeast. The veins appear to be associated with quartz eye porphyry sills of possible dacitic composition.

One vein is several centimetres to 1.8 metres wide and carries lead, silver and gold values. The pay streak is up to 30 centimetres wide and samples have assayed as high as 20,568 grams per tonne silver and 69 grams per tonne gold (Minister of Mines Annual Report 1914, page 360). Native silver was found in the pay streak.

In 1994, the Silver Bell veins were described as irregular and discontinuous phyllite hosted bull white quartz veins, ranging from 5 centimetres to 1.5 metres in width. Mineralization consists of up to 10 per cent sulphides comprising pyrite, chalcopyrite, galena, bornite and tetrahedrite and malachite and azurite staining. A grab sample taken in assayed 297.6 grams per tonne silver and 34.0 grams per tonne gold (Assessment Report 23401).

In 1978, 14 tonnes of ore produced 311 grams of gold, 43,171 grams of silver, 700 kilograms of lead and 252 kilograms of zinc.

BIBLIOGRAPHY

EMPR AR 1904-228; *1914-360; 1920-351; 1921-348
EMPR ASS RPT *16935, *23401
EMPR BC METAL MM00439
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR MINING 1975-1980, p. 67
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
EMR CORPFILE (Templar Mining Corp., Statement of Material Facts 6/84)
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637(#319); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/21

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE012**

NATIONAL MINERAL INVENTORY: 082L8 Zn1

NAME(S): **BIG LEDGE**, MONARCH, ADVENTURER (L.1067),
BL, SUNSHINE (L.2477), SKYLINE

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082L08E
BC MAP:
LATITUDE: 50 28 30 N
LONGITUDE: 118 03 04 W
ELEVATION: 1700 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of mineralized horizon on the north-central B.L. #27
(Old Bonanza) claim (Assessment Report 12).

Underground
MINING DIVISION: Slocan
UTM ZONE: 11 (NAD 83)
NORTHING: 5591973
EASTING: 425416

COMMODITIES: Zinc Lead Copper

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Sphalerite Galena Chalcopyrite
Marcasite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Layered Disseminated
CLASSIFICATION: Sedimentary Exhalative
TYPE: S01 Broken Hill-type Pb-Zn-Ag±Cu E14 Sedimentary exhalative Zn-Pb-Ag
E13 Irish-type carbonate-hosted Zn-Pb
COMMENTS: The deposit strikes 240 degrees.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic Proterozoic-Paleoz.			Monashee Complex Kootenay Assemblage

LITHOLOGY: Graphitic Schist
Quartzitic/Quartzose Schist
Calcareous Quartzite
Calc-silicate Gneiss
Siliceous Marble
Amphibolite
Granite
Pegmatite

HOSTROCK COMMENTS: The rocks belong to the Thor-Odin gneiss dome.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee Kootenay
PHYSIOGRAPHIC AREA: Monashee Mountains

INVENTORY

ORE ZONE: BIG LEDGE REPORT ON: Y
CATEGORY: Indicated YEAR: 1982
QUANTITY: 6500000 Tonnes
COMMODITY GRADE
Lead 3.0000 Per cent
Zinc 3.0000 Per cent
COMMENTS: Grade less than 6 per cent combined lead-zinc.
REFERENCE: CIM Bulletin Vol. 75, No. 840, page 119.

CAPSULE GEOLOGY

The Big Ledge deposit is located 60 kilometres south of Revelstoke and approximately 8 kilometres west of Upper Arrow Lake between North Fork Creek and Ledge Creek.

The deposit was originally staked as a gossan in 1892. Subsequent staking occurred in two main groups, the Monarch and Adventurer. By 1925, 210 metres of underground work in 4 adits had been completed on the Bonanza, Sunshine (Lot 2477), Skyline and Adventurer (Lot 1067) claims. In 1927, 16 holes were drilled on the property. Between 1947 and 1953, Consolidated Mining and Smelting company of Canada Ltd. drilled 6100 metres on the property. In 1960, the ground was restaked as the BL group (Lots 16071-16114). From 1964 to 1966, approximately 3960 metres of drilling, geological

CAPSULE GEOLOGY

mapping and geochemical and magnetometer surveys were carried out.

The area is underlain by rocks of the Thor-Odin gneiss dome of the Proterozoic Monashee Complex and metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. The Thor-Odin is one of a series of gneiss domes spaced approximately 80 kilometres apart along the eastern edge of the Shuswap Complex. A central core zone in the dome consists of gneissic and migmatitic rocks. This zone is surrounded by a heterogeneous assemblage of metasedimentary rocks of the Mantling zone and Fringe zone, the latter containing abundant pegmatite and lineated quartz monzonite. The Supracrustal zone, consisting of quartzite, marble, phyllite, schist and metavolcanic rocks, forms a cover to the gneisses.

The Big Ledge deposit is located south of the Core zone in an east-west trending succession of metasedimentary rocks of the Mantling zone. The rusty weathering succession consists of a heterogeneous mixture of schist and gneiss, calcareous quartzite, calcsilicate gneiss, marble and amphibolite. The structure is dominated by a series of east-west trending, open to tight folds. These are inclined to the south, overturned to the north and plunge variably to the east and west. The mineralized horizon is in the core of a fold which is a tight antiform, inclined to the south and overturned to the north.

Showings of pyrrhotite, pyrite, sphalerite, galena, chalcopyrite and marcasite occur along a layer known as the Ledge for a distance of over 10 kilometres. The Ledge consists of fine grained, dark graphitic-sericitic schist, dark quartz-rich schist, calcsilicate gneiss and minor siliceous marble layers. Pyrite and pyrrhotite are disseminated throughout these units resulting in a characteristic rusty weathering. Drilling indicates that there are at least four massive sulphide layers within the Ledge. It is not known if these are individual layers or fold repetitions of one or more layers. The massive sulphide layers consist of medium to coarse-grained pyrrhotite or pyrite with varying amounts of dark sphalerite. Quartz-eyes are common in the massive sulphide layers and sphalerite is commonly aligned parallel to layering in the adjacent schists.

The Ledge averages 30 metres in thickness and is conformable to bedding. Pyrrhotite is the most abundant sulphide and pyrite, usually in nodular masses, is locally abundant. Sphalerite is erratically distributed with the pyrrhotite. Galena is occasionally present in minor amounts along with the other sulphides but the only notable concentrations are small occurrences in calcareous beds adjacent to the main mineralized sections. In general, the sulphides are coarsely crystallized; a small amount of the ore minerals are intergrown with pyrrhotite. Iron sulphides are usually accompanied by scattered graphite flakes.

A zone of heavier mineralization occurs in the upper portion of the rock series. This zone ranges from 61 centimetres to over 6 metres in thickness (old drill records indicate up to 18 metres). This zone is conformable with bedding but the sulphides are erratically distributed in irregular massive and disseminated bodies. There is a large amount of granitic and pegmatitic material in this zone. Sphalerite appears to be most abundant in disseminated sulphide sections but small irregular high-grade patches occur with both the massive and disseminated sulphides.

Indicated ore reserves are 6.5 million tonnes grading less than 6 per cent combined lead and zinc (CIM Bulletin Vol. 75, No. 840, page 119).

BIBLIOGRAPHY

- EMPR AR 1901-1036; 1902-164; 1903-150; 1904-146; 1905-170; 1906-151; 1907-105,219; 1908-111; 1909-127; 1910-114; 1911-171; 1912-160; 1916-207; 1917-197; 1918-199; 1922-218; 1923-235; 1926-288; 1927-330; 1928-357; 1947-174; 1948-149; 1949-193; 1950-151; 1952-181; 1958-66; 1964-130; 1965-196; 1966-218
EMPR ASS RPT *12, 66
EMPR FIELDWORK 1975, pp. 12-17; 1977, pp. 80-82; 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEOLOGY *1975, p. G12
EMPR MAP 16
EMPR OF 1990-30
EMPR PF (Photos, 1975)
EMPR RGS 082L, 1976; 32, 1991
EMR MRD METALS FILE 167-Z1-2-27
EMR MR 181; 223 (BC-66)
EMR Report of Zinc Commission 1906, p. 330
GSC BULL 195, p. 19
GSC MAP 7216G; 8492G
GSC MEM 296, p. 152
GSC OF 637; 658

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 214
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 64-1; 65-1; 91-2, pp. 115-135
GSC SUM RPT 1928A, p. 109
CIM BULL *Vol. 75, No. 840, p. 119
CJES Vol. 26, No. 2
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/30

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE013**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHERRY CREEK PLACER**, NORTH FORK, MONASHEE CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 47 N
LONGITUDE: 118 32 56 W
ELEVATION: 667 Metres

NORTHING: 5565321
EASTING: 389528

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location of the junction of Cherry Creek and Monashee Creek where most of the production came from (Bulletin 28, pages 62-67).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel
Slate
Shale
Clay

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Cherry Creek Placer deposit is located at the confluence of Cherry Creek and Monashee Creek (082LSE059). Placer activity centred on the north fork or main stream of Cherry Creek 25 to 32 kilometres east of Lumby. Monashee Creek (082LSE059) was previously known as the south fork of Cherry Creek and because of this there is some confusion between the placer activity on the two creeks.

Placer deposits on this creek have been worked since 1876 when it was discovered, until 1945 when the last production was recorded. The deposits have been worked by hand, by an elaborate system of flumes, by hydraulics and later by gasoline shovels. Benches 30 metres above the creek were mined in 1876. From 1890 to 1896, 15 people were working on the creek taking out about \$2.00 per day. There was little or no activity between 1905 and 1922, but activity was renewed in 1925.

The valleys were filled with gravel after the retreat of ice and remnants of these gravels have been left in benches up to 91.4 metres high, by the recent stream. Lenticular, irregular gravel beds occur in 12 to 15 metres of a sandy unit. This unit rests on water-worn black slates and shales cut by quartz veins. Boulder clay overlies the sandy unit. Placer gold occurs in the preglacial gravels over several kilometres.

The gold has a low average fineness of 700. Nuggets up to 264 grams (8.5 ounces) have been found. The gold is of 2 types: light, flat, scaly particles, and less commonly, coarse gold pieces.

Most production came from the confluence of Cherry Creek and Monashee Creek, upstream to 5.6 kilometres above the confluence. Production totals 155,158 grams of gold (4989 ounces) (Bulletin 28, page 63).

BIBLIOGRAPHY

EMPR AR 1876-410,423; 1877-404; 1878-378; 1879-241; 1881-398;
1882-362; 1886-213; 1887-277; 1888-316,325; 1889-291; 1890-378;
1891-575; 1892-543; 1893-1073; 1894-753; 1896-706; 1901-1127;
1905-192; 1920-187; 1922-145; 1923-160; 1925-184; 1926-200;

BIBLIOGRAPHY

1927-213; 1930-208; 1931-116; 1933-198; 1934-D34
EMPR BULL *28, pp. 62,67
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1990-30; 1991-18; 1994-8
EMPR PF (Report on Monashee Creek Placers, C.E. Cairnes, 1932)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8501G
GSC MEM 296, p. 138
GSC OF 637(#314)
GSC P 91-2, pp. 115-135
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/12

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE014**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRED**, FRED 1-16

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 40 N
LONGITUDE: 118 14 19 W
ELEVATION: 1425 Metres

NORTHING: 5546160
EASTING: 411346

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrop on the road from which the sample with the highest assay value was taken (Assessment Report 3074).

COMMODITIES: Zinc Silver

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite
ALTERATION: Limonite Hydrozincite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Concordant
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Unknown
Cretaceous

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Whatshan Intrusion

LITHOLOGY: Micaceous Quartzite
Quartz Feldspar Biotite Schist
Amphibolite
Feldspar Biotite Hornblende Gneiss
Pegmatitic Quartzofeldspathic Sill
Granodiorite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1971

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

1.7000

Grams per tonne

Zinc

0.6800

Per cent

COMMENTS: Highest assay values. Also 0.17 gram per tonne gold.

REFERENCE: Assessment Report 3074.

CAPSULE GEOLOGY

The Fred showing is located on the north side of the Barnes Creek road, about 10 kilometres northwest of Needles ferry on Upper Arrow Lake.

The Fred claims were staked in 1970. In 1971, soil sampling and geological mapping were conducted in 1971 by Versatile Mining Services for United Bata Resources.

The area is underlain by metasediments of unknown affinity intruded by granitic rocks of the Cretaceous Whatshan batholith. The metasediments comprise micaceous quartzite, quartz-feldspar-biotite schist, minor amphibolite and quartz-feldspar-biotite-hornblende gneiss intruded locally by pegmatitic quartzofeldspathic sills. Granitic rocks comprise granodiorite to quartz diorite and are generally porphyritic.

Sphalerite occurs in outcrops along the Barnes Creek road in heavily limonite-stained metasediments containing significant amounts of pyrrhotite. The sphalerite occurs as discrete grains and as small stringers which parallel schistosity. Hydrozincite coatings have been noted on the exterior of sphalerite-bearing rocks. Geochemistry

CAPSULE GEOLOGY

indicates a series of lens-like anomalous zones which parallel the general trend of the schistosity in bedrock. The schistosity in the metasediments trends east and dip steeply north and south.

The highest assay from a grab sample was 0.68 per cent zinc, 1.7 grams per tonne silver and 0.17 gram per tonne gold (Assessment Report 3074).

BIBLIOGRAPHY

EMPR ASS RPT *3074
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1971-430
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8491G
GSC MEM 296
GSC OF 637(#356); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE015**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEARCUB**, LUMBY FELDSPAR, LUMBY (BEARCUB),
SPAR, LUMBY, WALT 4

STATUS: Developed Prospect

MINING DIVISION: Vernon

REGIONS: British Columbia

NTS MAP: 082L02W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 50 14 46 N

LONGITUDE: 118 48 37 W

ELEVATION: 854 Metres

NORTHING: 5567563

EASTING: 370930

LOCATION ACCURACY: Within 500M

COMMENTS: Blasted pit, 11.25 kilometres east of the community of Lumby, 225 metres north of Blue Springs Creek, 2.5 kilometres northwest of Camels Hump (Exploration in British Columbia 1987, page B118).

COMMODITIES: Feldspar

Uranium

Thorium

Rare Earths

MINERALS

SIGNIFICANT: Feldspar Monazite

COMMENTS: Also uranium secondary minerals.

ASSOCIATED: Quartz Muscovite Biotite Garnet Tourmaline

COMMENTS: Rare tourmaline.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Pegmatite Industrial Min.

TYPE: O04 Feldspar-quartz pegmatite

DIMENSION: 1500 x 750 Metres

COMMENTS: Principal pegmatite body outcrop area.

O02 Rare element pegmatite - NYF family

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Unknown

Kootenay Assemblage

Unnamed/Unknown Informal

LITHOLOGY: Pegmatite

Pegmatite Dike

Quartz Mica Schist

Quartz Diorite

Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: BEARCUB

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1991

QUANTITY: 100000000 Tonnes

COMMODITY

GRADE

Feldspar 50.0000 Per cent

COMMENTS: Probable reserves; material also grades 18 per cent SiO2 and 3 per cent mica.

REFERENCE: Open File 1992-1.

CAPSULE GEOLOGY

The Lumby deposit is located about 13 kilometres east of Lumby, north of Blue Springs Creek.

In 1970-1971, two trenches, two pits, a radiometric survey and a ultraviolet lamp survey were completed on the property by Able Explorations Ltd. In 1987, geological mapping and sampling were completed by Brenda Mines Ltd. In 1988, rock sampling and geochemical surveys were done and in 1989, geological and geochemical surveys, diamond drilling, roadwork and metallurgical testing were completed.

A 1.35 by 2.65 kilometre stock of pegmatite intrudes quartz mica schist of the Proterozoic-Paleozoic Kootenay Assemblage and is bounded on the south and west by Eocene Kamloops Group volcanic rocks. Four distinct rock types are recognized in the area and these are: pegmatite, quartz diorite, quartz mica schist and limestone.

CAPSULE GEOLOGY

The principal pegmatite body of the deposit outcrops in an area 0.75 by 1.5 kilometres. The pegmatite crops out as topographic highs, appears fresh, massive and most often white, but ranges from cream through yellow to reddish orange where stained by iron leached from mica. The pegmatite is frequently in contact with quartz diorite. Typically, the pegmatite consists of 70 to 75 per cent feldspar, 20 to 25 per cent quartz (locally up to 50 per cent), 5 to 7 per cent muscovite and 5 to 15 per cent mafic minerals, commonly biotite, garnet and rarely tourmaline. Locally, regular intergrowths of quartz and feldspar give the pegmatite a graphic texture. Books of biotite and/or muscovite, up to 5 centimetres across, occur sporadically in clusters throughout the pegmatite or as individual flakes. The two micas form 5 per cent of total volume, but are seldom found together. Red to purple garnet (1 to 3 millimetres) occurs in pockets and constitutes 5 to 15 per cent of the rock. In one location only, small (1 to 2 millimetre) crystals of tourmaline were identified. In thin section, iron oxides occur in biotite and along fractures between grains of feldspar and quartz. Feldspar content varies inversely with quartz in distinct zones. A feldspar-rich core zone is flanked by feldspar-poor zones rich in quartz.

Radioactive mineralization occurs in small irregular patches within a large mass of pegmatite enclosed in metamorphic rocks. The local radioactive areas contain erratically dispersed monazite in irregular lensoid masses of fine grained dark, glassy, smoky quartz.

A 5.5 metre long trench in pegmatite exposed a bright yellowish brown glassy mineral, identified as monazite, erratically dispersed along a 0.6 metre wide lens of fine grained, granular, dark, smoky quartz. A chip sample along the length of the trench gave the following chemical compositions: 0.069 per cent thorium oxide, 0.037 per cent uranium, 0.25 per cent yttrium, 0.03 per cent ytterbium, 0.044 per cent lanthanum, 0.07 per cent cerium, 0.046 per cent neodymium, 0.027 per cent erbium, 0.021 per cent gadolinium and 0.003 per cent thulium (Geology, Exploration and Mining in British Columbia 1971). Grab samples analyzed up to 0.20 per cent uranium and a 0.8 metre chip sample assayed 0.13 per cent uranium (Assessment Report 3434). The ratio of thorium to uranium ranged from 6:1 to 12:1. Fluorescent secondary uranium minerals occur within the radioactive zones.

Massive, grey, fine to medium-grained, weakly foliated quartz diorite crops out as a prominent topographic high immediately north of the pegmatite stock. The diorite is cut by thin pegmatite dikes and contains small (less than 1 millimetre) red garnets. South of the intrusion, xenoliths of quartz diorite are incorporated in the pegmatite. These are often tens of metres across and similar in appearance to the more massive diorite to the north, but appear partially digested.

Large (tens of metres across) xenoliths of fine-grained, medium to dark grey quartz mica schist are incorporated in the main pegmatite stock. The schist is foliated, several metres thick, locally intruded by lenses of quartz or pegmatite and often sheared. Small (1 to 3 millimetres) red to purple garnets are common.

Medium to dark grey, fine-grained crystalline limestone occurs as inclusions in the pegmatite stock. The limestone is also found within beds of quartz mica schist and contains stringers of quartz or pegmatite. Small scale isoclinal folds and boudinage structures are prominent features in the limestone.

One representative sample of the pegmatite was sent to CANMET for processing. The non-magnetic feldspar concentrate was analyzed with the following results:

Major Oxides	Feldspar Concentrate (weight %)
Fe2O	0.06
MnO	<0.01
Cr2O3	<0.01
TiO2	<0.01
CaO	0.25
Na2O	2.60
K2O	12.9
P2O5	0.02
SiO2	62.2
Al2O3	17.5
MgO	<0.05
LOI	0.19

Low iron content and acceptable potassium and alumina content indicate that the Lumby pegmatite has good potential to produce a

CAPSULE GEOLOGY

high-quality potash feldspar with liberation of 20 mesh (Exploration in British Columbia 1987).

Indicated (probable) reserves are 100 million tonnes of material grading 50 per cent feldspar, 18 per cent SiO₂ and 3 per cent mica (Open File 1992-1).

BIBLIOGRAPHY

EMPR ASS RPT *3434, *16536, 17695, 18994
EMPR EXPL *1987-B23-27,B117-125,C86-87
EMPR FIELDWORK 1982, Figure 11
EMPR GEM *1971-431,432
EMPR MAP 22; 65 (1989)
EMPR OF 1990-32; 1991-10; 1992-1; 1992-9
EMPR PF (082LSE General, Cann, R.M. (1978): Geological, Geochemical, Radiometric and Drilling Report, Lumby Area; Geological, Geochemical and Radiometric Report, Lumby Area)
GSC MAP 1059A
GSC MEM 296
GSC OF 481; 551; 637(#310)
GSC P 89-1E, pp. 51-60
GSC SUM RPT 1898 (Map 604)
GCNL #44,#58, 1994
McVey, H. (1988) A Study of Markets for British Columbia's Nepheline Syenite and Feldspathic Minerals, MDA Report 4, B.C. Ministry of Energy, Mines and Petroleum Resources p.47
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1990/04/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE016**

NATIONAL MINERAL INVENTORY:

NAME(S): **DONA, DONA 1-11, DONNA,
DNA, IRENE**

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 07 57 N
LONGITUDE: 118 24 27 W
ELEVATION: 1585 Metres

NORTHING: 5554311
EASTING: 399408

LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Donna 3 claim (Assessment Report 22931).

COMMODITIES: Silver Gold Lead Zinc Copper
 Antimony

MINERALS

SIGNIFICANT: Arsenopyrite Pyrite Stibnite Galena Chalcopyrite
 Tetrahedrite Sphalerite Tennantite

ASSOCIATED: Quartz

ALTERATION: Hematite Silica Ankerite

ALTERATION TYPE: Oxidation Propylitic Silicific'n Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Jurassic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY:

Diorite
Siliceous Phyllite
Felsic Volcanic
Argillite
Quartzite
Tuff
Quartz Diorite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1990

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	207.8000	Grams per tonne
Gold	0.5110	Grams per tonne
Copper	0.0160	Per cent
Lead	0.1350	Per cent
Zinc	0.0680	Per cent

COMMENTS: Chip sample, across 2 metres, from Trench 6 on the Donna claims.

REFERENCE: Assessment Report 22931.

CAPSULE GEOLOGY

The Dona showing is located 4.8 kilometres west-northwest of Keefer Lake at the headwaters of Kettle River, 63 kilometres southeast of Vernon.

In 1973, the Dona 1-11 claims were staked and geochemical and VLF surveys were completed. In 1974, trenching and percussion drilling were undertaken. In 1982, the Irene and Dona claims were staked. In 1984, trenching was done and in 1988 geochemical surveys and geological mapping were completed. In 1992, claims were staked and soil sampling, trenching, bedrock sampling and geological mapping were completed. In 1993, geophysical surveys were completed in the area.

CAPSULE GEOLOGY

The area is underlain by a metamorphosed poly-deformed sequence of metasediments and tuffaceous rocks of the Devonian to Triassic Harper Ranch Group. These predominantly comprise varieties of black, intensely cleaved argillite and dark grey to grey siliceous phyllite and intermixed felsic volcanics. These are intruded by small stocks and plugs of diorite and quartz diorite of the Jurassic Nelson Intrusions.

The diorite is the main host of the mineralization and shallow dipping shears control gold distribution. Boudinaged quartz veins commonly fill the shear zones and contain pods and irregular masses of arsenopyrite, pyrite, stibnite, galena and minor chalcopyrite, tetrahedrite-tennantite and possibly sphalerite. The mineralized pods and masses vary from a few millimetres to a maximum of about 10 centimetres thick and do not exceed a few metres in length. Adjacent to the shears are irregularly distributed zones of silicification which contain up to about 2 per cent pyrite. Quartz veins generally have hematite-rich selvages. Hematite also occurs as fracture fillings. The diorite host is commonly weakly propylitized and, near shears, is pyritic. Strong silicification and ankerite(?) alteration of diorite and adjacent argillaceous sedimentary rocks has been noted in outcrop.

In 1974, Sample P3 assayed 43.9 grams per tonne silver and 1.4 grams per tonne gold (Assessment Report 5220). Trenching and bedrock sampling yielded low values, generally less than 0.5 gram per tonne gold (Assessment Report 22931). A chip sample across 2 metres from Trench 6 on the Donna claims assayed 0.016 per cent copper, 0.135 per cent lead, 0.068 per cent zinc, 207.8 grams per tonne silver and 0.511 gram per tonne gold (Sample 35781, Assessment Report 22931).

BIBLIOGRAPHY

EMPR ASS RPT 4740, 5220, 10920, 14567, 17663, 18147, 21592, 22538, *22931, 23189
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1973-97; 1974-81
EMPR OF 1991-18; 1994-8
EMPR PF (Keefer Resources Prospectus, 1988; Dona Property description, 1974)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637(#333); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1994/03/21

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE017**

NATIONAL MINERAL INVENTORY: 082L2 Au3

NAME(S): **TOP**, TOP 1-2, GOLD 1-20,
BOTTOM

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:
LATITUDE: 50 04 19 N
LONGITUDE: 118 32 47 W
ELEVATION: 1257 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of 1990 decline (Assessment Report 21656).

Underground
MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5547775
EASTING: 389343

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite
ASSOCIATED: Carbonate Quartz
ALTERATION: Clay Chlorite Carbonate
ALTERATION TYPE: Argillic Chloritic Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Shear Vein Breccia
CLASSIFICATION: Hydrothermal Epithermal Epigenetic
TYPE: I01 Au-quartz veins
DIMENSION: 170 x 40 x 10 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic			Nelson Intrusions

LITHOLOGY: Granodiorite
Lamprophyre Dike
Andesite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Okanagan Highland
TERRANE: Quesnel

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Gold 15.0000 Grams per tonne
COMMENTS: Sample of sheared and altered dike, over 14 metres.
REFERENCE: Assessment Report 18426.

CAPSULE GEOLOGY

The Top showing is located 55 kilometres southeast of Vernon, south of Monashee Pass and adjacent to McIntyre Lake.

The showings were discovered in 1969 and limited surface work was completed. In 1973-1974, geological mapping, trenching and 4 drillholes were completed by New Cinch Uranium Ltd. on the Gold claims. In 1981, Brican Resources Ltd. conducted geological, geophysical and geochemical surveys and trenching. A magnetometer survey was completed in 1982. Drilling was conducted by Brican Resources in 1983. In 1984, the property was optioned by Kerr Addison Mines Ltd. who completed 11 diamond drillholes. In 1986, Brican Resources conducted surface exploration. In 1988, El Paraiso Resources Ltd. conducted geological mapping, rock and soil sampling, VLF-EM and IP surveys and 13 short drillholes. In 1990, soil sampling, mapping and a 3 by 3 metre decline 126.5 metres long was excavated.

The area is underlain by massive granodiorite of the Jurassic Nelson Intrusions intruded by a variety of volcanic feeder dikes. Mineralization occurs in north trending, west-dipping shear zones that cut granitic rocks and in sheared and altered dikes.

The granodiorite is medium-grained and fresh except in shear zones, where there is strong to intense argillic alteration. Where

CAPSULE GEOLOGY

shearing is most intense the alteration becomes whitish, pyritic, clay fault gouge. The granodiorite exhibits moderate to strong clay alteration and occasionally carbonate replacement near the margins of the dikes. The typically porphyritic dikes are generally very fine grained, dark grey to black in colour and locally contain up to 1 per cent disseminated pyrite. The dikes range in composition between lamprophyre and andesite. Interstitial carbonate replacement and small (1-5 millimetres) quartz, carbonate and quartz-carbonate stringers are common. The intensity of the carbonate replacement and number of carbonate stringers increases near dike margins and where the dikes occur within the shear zone. This appears to correspond to an increase in gold values. Clay and chlorite alteration is common and where present it gives the rock a greenish color.

The main shear zone is 10 metres wide at the base of the decline, strikes 010 to 015 degrees and dips 65 degrees northwest. The zone consists of intensely sheared and brecciated granodiorite and variable amounts of dike rock. The zone has been traced for 170 metres and is 30 centimetres to 10 metres wide. The zone has probably been offset by east-west faults. Gold and silver mineralization is associated with pyrite, arsenopyrite and quartz-carbonate veinlets. The best mineralization intersected in drilling was in a highly altered dike swarm.

Two holes in 1984 intersected a 15 metre zone of intense epithermal alteration and mineralization which assayed between 3.4 and 6.8 grams per tonne gold (Assessment Report 12749). Surface exploration discovered what appears to be the faulted extension, about 122 metres to the west. In 1988 drilling, the highest values came from a sample of sheared and altered dike swarm which assayed 15 grams per tonne gold over 14 metres (DDH 88-30, Assessment Report 18426). The dike was variably pyritic and cut by thin irregular quartz-carbonate veinlets.

BIBLIOGRAPHY

EMPR ASS RPT 4946, 9304, 10414, 11191, 12093, 12749, *18426, *21656
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR GEM 1973-98; 1974-88
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
EMR CORPFILE (New Cinch Uranium Ltd., Brican Resources Ltd.)
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637(#347)
GSC P 91-2, pp. 115-135
GCNL *#160,#242, 1983; #6, 1984
IPDM Jan/Feb 1984
NAGMIN Jan. 1984
N MINER Dec.15, 1983

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/13

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE018**

NATIONAL MINERAL INVENTORY:

NAME(S): **A 4, CUZIN, A 1-27,
 NEWF 1-13**

MINING DIVISION: Vernon

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082L07E
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 24 12 N
 LONGITUDE: 118 35 28 W
 ELEVATION: 1100 Metres

NORTHING: 5584687
 EASTING: 386929

LOCATION ACCURACY: Within 500M

COMMENTS: Showing at the old logging camp on the A 4 claim (Assessment Report 4609).

COMMODITIES: Copper Silver Zinc

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite
 ALTERATION: Hydrozincite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive Concordant
 CLASSIFICATION: Sedimentary
 TYPE: E04 Sediment-hosted Cu

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Kootenay Assemblage

LITHOLOGY: Biotite Schist
 Quartz Biotite Schist
 Biotite Gneiss
 Calc Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1973
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	5.5000 Grams per tonne
Copper	0.1700 Per cent
Zinc	0.0100 Per cent

COMMENTS: Sample from the camp showing.
 REFERENCE: Assessment Report 4609.

CAPSULE GEOLOGY

The A 4 showing is located about 80 kilometres east-northeast of Vernon, 4 kilometres west of Sugar lake.

The A claims were staked in 1972 and the Newf claims were staked in 1973. In 1973, geological and geochemical surveys were completed. In 1977, the claims were staked as the Cuzin claims by Brican Resources and optioned to Rio Tinto. Geological mapping, geophysical and geochemical surveys, trenching and drilling were completed.

The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. These comprise biotite schist, quartz-biotite schist, calc-sericite schist and biotite gneiss, striking northwest and dipping gently to moderately northeast.

An extensive rusty, fine-grained biotite schist contains traces of pyrrhotite, pyrite and chalcopyrite. At the camp showing on the A4 claim, this unit contains lenses of massive pyrrhotite with appreciable chalcopyrite and some hydrozincite stain. Trenching in 1977 exposed graphitic and pyrrhotite-bearing sediments but drilling failed to encounter any mineralization of significance. It is believed that massive sulphides found in float on this property came from elsewhere.

A sample from the camp showing assayed 0.17 per cent copper,

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 227
REPORT: RGEN0100

CAPSULE GEOLOGY

0.01 per cent zinc and 5.5 grams per tonne silver (Assessment Report 4609).

BIBLIOGRAPHY

EMPR ASS RPT *4609, *6677
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1973-101; 1977-E81
EMPR OF 1990-30
EMPR PF (082LSE General - Geology Maps of the Trinity Lake Area, C.E. Cairns, 1929-1930)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM 296
GSC OF 637(#257)
GCNL #133, 1977

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE019**

NATIONAL MINERAL INVENTORY:

NAME(S): **SH 1-15**, AS 1-20

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 19 00 N
LONGITUDE: 118 50 14 W
ELEVATION: 760 Metres

NORTHING: 5575454
EASTING: 369203

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description (Geology, Exploration and Mining 1972, page 80).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Uraninite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Pegmatite Epigenetic
TYPE: O02 Rare element pegmatite - NYF family

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY: Pegmatite
Basic Lava
Pyroclastic
Argillite
Limestone
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The SH 1-15 showing is located about 13 kilometres northeast of Lumby.

There is no assessment work recorded but it is reported that trenching and stripping were done in 1972 on the AS claims and trenching was done in 1973 on the SH claims (Geology, Exploration and Mining 1972, page 80 and 1973, page 101).

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group which have been intruded by granitic rocks of the Jurassic Nelson Intrusions. Nicola Group rocks comprise basic lavas, pyroclastics, argillites and limestones.

Uranium mineralization, likely uraninite, is associated with pegmatite. No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM *1972-80; 1973-101
EMPR MAP 22
EMPR OF 1990-30; *1990-32
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296
GSC OF 551; 637 (#286)
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/14

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE020**

NATIONAL MINERAL INVENTORY:

NAME(S): **FOX, VERNA, NUGGET, KELLY**

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082L01W
 BC MAP:

MINING DIVISION: Vernon
 UTM ZONE: 11 (NAD 83)

LATITUDE: 50 09 35 N
 LONGITUDE: 118 23 08 W
 ELEVATION: 1966 Metres

NORTHING: 5557309
 EASTING: 401032

LOCATION ACCURACY: Within 500M
 COMMENTS: Largest mineralized area on the Fox 16 claim (Assessment Report 5066)

COMMODITIES: Silver Lead Gold Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein Disseminated
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
 DIMENSION: 1 Metres STRIKE/DIP: TREND/PLUNGE:
 COMMENTS: Quartz vein at largest mineralized area is about 1.2 metres wide and dips about 30 degrees to the southeast.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Argillite
 Limy Quartzitic/Quartzose Schist
 Tuff
 Andesite
 Quartzite
 Limestone
 Tuffaceous Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Okanagan Highland
 TERRANE: Quesnel

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1978
 SAMPLE TYPE: Grab
 COMMODITY GRADE
 Silver 129.6000 Grams per tonne
 Gold 0.2000 Grams per tonne
 Lead 3.3500 Per cent

COMMENTS: Highest assay; sample from the old shaft area.
 REFERENCE: Assessment Report 7005.

CAPSULE GEOLOGY

The Fox showing is located on the southwestern slope of Yeoward Mountain, about 90 kilometres east of Vernon.
 The Fox showings were discovered and investigated in 1974 by David King. There is an older shaft on the northwest corner of the claims from previous unrecorded work. Also in 1974, a geochemical program was completed by Nielsen Geophysics. In 1978, a geochemical sampling program was conducted on these showings now covered by the Verna and Nugget claims for Murray Ranking Developments Ltd. In 1983, a heavy mineral study was completed on the Kelly claims, just to the west of the Fox showings by C.F. Mineral Research Ltd. for David King. In 1993, geophysical surveys were conducted in this area by James McLeod for Harold Arnold.
 The area is underlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. In the area of the showings

CAPSULE GEOLOGY

these consist of argillite, tuff, andesite, quartzite and limestone.

The largest mineralized area is on the Fox 16 claim. This area contains chalcopyrite and pyrite in argillites near the exposure of limy quartzose schists. A quartz vein, dipping 30 degrees southeast and about 1.2 metres wide, contains galena and pyrite.

Just to the west of this area, tuffaceous andesite containing minor disseminated pyrite and chalcopyrite is exposed for 61 metres. About 100 metres to the west, an area with small quartz veins contains heavy arsenopyrite and pyrite in "tuff" rock.

The old shaft is about 150 metres to the north of the largest mineralized area on the Fox 16. The shaft is driven 3.6 metres in a large 1.2 to 2.4 metre wide quartz vein containing blobs of galena. Smaller cross veins carry pyrite, pyrrhotite, arsenopyrite, galena and chalcopyrite. The silicified hostrocks contain disseminated sulphides. A sample taken from this area in 1978 assayed 0.2 gram per tonne gold, 129.6 grams per tonne silver and 3.35 per cent lead (Assessment Report 7005).

BIBLIOGRAPHY

EMPR ASS RPT *5066, 5099, 7005, 11759, 23189
EMPR EXPL 1978-E87; 1979-96
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1974-87
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637(#334); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/18

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE021**

NATIONAL MINERAL INVENTORY:

NAME(S): **KL**, KL 1-12, SNOW 1-4,
SNOW I-III, KEEFER, CRYSTAL 2,
KEEFER LAKE, KEE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:
LATITUDE: 50 07 56 N
LONGITUDE: 118 19 34 W
ELEVATION: 1448 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Sampled quartz vein (Assessment Report 5279).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5554174
EASTING: 405224

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite Gold
ASSOCIATED: Quartz Gypsum
ALTERATION: Silica
ALTERATION TYPE: Silicific'n Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

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

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	Nelson Intrusions
Jurassic			

LITHOLOGY: Argillite
Hornfels
Quartz Diorite Dike
Quartz Diorite
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1973
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 0.7000 Grams per tonne
Gold 0.2000 Grams per tonne
COMMENTS: Sample of silicified hornfels containing 30 per cent quartz veining
and 2 per cent disseminated pyrite.
REFERENCE: Assessment Report 5279.

CAPSULE GEOLOGY

The KL showing is located 1.6 kilometres north of the east end of Keefer Lake, about 72 kilometres east of Vernon.
The claims were staked in 1973 and a preliminary geochemical soil survey was conducted by Ducanex Resources Ltd. In 1982, the claims were staked as the Keefer claim and a geochemical soil survey was completed by John McGoran for F. Marehard. In 1983, Demus Petro Corp. through Burton Consulting conducted a geochemical and heavy sediment sampling program. In 1984, soil and sediment sampling was completed for Demus Petro Corp. by Andreas Schildhorn. In 1985, the area was restaked as the Snow 1-4 claims and again in 1988 as the Snow I-III claims. In 1988, Ocean Crystal Resources conducted geological mapping, soil geochemistry and lithogeochemistry on the Snow claims.
The area is underlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These have been intruded by quartz diorite dikes of the Jurassic Nelson Intrusions.
The claims are predominantly underlain by argillites. The

CAPSULE GEOLOGY

argillites are hornfelsed near the intrusive dikes. Silica and pyrite content increase and the rock is increasingly bleached near the dikes. Near fault zones the argillite contains up to 3 per cent gypsum on fracture surfaces and some serpentinization is evident. At the southeastern corner, the claims are underlain by andesite.

Small, narrow, irregular quartz veins containing pyrite and small amounts of gold are hosted in the argillites. A sample of silicified hornfels with 30 per cent quartz veining and 2 per cent disseminated pyrite assayed 0.2 gram per tonne gold and 0.7 gram per tonne silver (Assessment Report 5279).

BIBLIOGRAPHY

EMPR ASS RPT *5279, 10871, 11817, 11645, 13545, 18079
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1973-98; 1974-86
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637(#336); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2
GCNL #16,#33, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/21

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE022**

NATIONAL MINERAL INVENTORY: 082L1 Au1

NAME(S): **MORGAN, MINERVA (L.4187), BLACK BESS (L.4186),
SKB, MORNING, GUYSBOROUGH,
DAWN, YEOWARD, YEOWARD 6-7,
YEOWARD 9-10**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

Underground

MINING DIVISION: Vernon

LATITUDE: 50 08 29 N
LONGITUDE: 118 27 10 W
ELEVATION: 1737 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5555362
EASTING: 396191

LOCATION ACCURACY: Within 500M

COMMENTS: Morgan workings located on the Minerva claim (Lot 4187) (Property File - Report on the St. Paul Property, 1974).

COMMODITIES: Gold Silver Lead Zinc

MINERALS

SIGNIFICANT: Gold Pyrite Sphalerite Tetrahedrite Galena

Arsenopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Jurassic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY: Slate
Quartzite
Calcareous Tuff
Tuff
Dacite Porphyry Dike
Dacite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1974

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

13.7000

Grams per tonne

Gold

3.8000

Grams per tonne

COMMENTS: Sample from 15 centimetre wide vein.

REFERENCE: Property File - Report on the St. Paul Property, 1974.

CAPSULE GEOLOGY

The Morgan deposit is located on top of Monashee Mountain, 60 kilometres east-southeast of Vernon and about 800 metres southeast of the St. Paul (082LSE010) deposit. A few hundred tons of high-grade gold ore have been produced to date.

The showings were discovered in 1899 and staked as the Morgan, Guysborough, Dawn and Morning claims. The Morgan workings, on what later became the Minerva Crown grant (Lot 4187), were the initial development. Later development was mainly on the Toughnut claim (Lot 4189) (St. Paul deposit) about 800 metres northwest of the Morgan workings. The Cherry Creek Gold Mining Co. Ltd. optioned the Morgan group in 1902 and by 1904 had driven a 10.7-metre adit on the Morning claim. The workings by 1905 consisted of the 10.7 metre adit and two shafts, 24.4 and 10.7 metres deep. The 10.7-metre shaft and the drift from it provided most of the production. After 1907, the property was restaked as the Minerva group of 4 claims.

CAPSULE GEOLOGY

The Black Bess, Minerva, Zilpah and Toughnut (Lots 4186 to 4189) were Crown granted in 1915. Development work, mainly on the Toughnut claim, during the period 1914-1916 consisted of 2 adits, 6.1 and 106.7 metres in length. In 1927, St. Paul Mines Ltd. acquired the 4 Crown grants and 3 claims. Intermittent development work continued into 1933. The workings in 1930 consisted of 5 adits from 10.7 to 106.7 metres in length, 2 winzes and a number of trenches. The company reportedly carried out some work in 1949. A new adit begun in 1961 was extended to a total length of 61 metres in 1962. A shipment of 7.3 tonnes was reported in 1966. The property in 1971 included the 4 Crown grants and the Snow, Snowshoe and SKB claims. Work during the period 1971-1973 included trenching and stripping. Some crude ore was shipped in 1971 and 1973, and 4.5 tonnes of concentrate were shipped in 1973. In 1973, Coast Interior Ventures Ltd. leased the properties and in 1974 carried out extensive road improvements, reopening and deepening of old trenches, opening and draining adits 4 and 5 at the St. Paul workings, and a metallurgical study on a bulk sample from the St. Paul workings. In 1982, Brican Resources conducted a soil survey, a geochemical survey and a magnetometer survey on the St. Paul and Minerva deposits. In 1983, Brican Resources Ltd. conducted a geochemical survey and geological mapping on the two deposits. In 1990, Commonwealth Gold conducted a geochemical survey over this area. In 1992, Cameco Corp. conducted geochemical and geological surveys in this area.

The area is underlain by sedimentary rocks and greenish volcanics of the Devonian to Triassic Harper Ranch Group intruded by several Jurassic or Cretaceous dikes or small hypabyssal bodies of dacite porphyry. The sediments, striking west to northwest and dipping moderately to steeply south, consist of quartzite, calcareous tuffs and slates.

The Morgan showings consist of 2 or more narrow, north striking quartz veins dipping about 45 degrees southwest and are 36 to 61 centimetres wide. At least one important cross vein is normal to the main veins. The veins occur in quartzite, calcareous tuff and slate which has been intruded by dacite porphyry dikes.

The vein quartz contains, in addition to occasional specks of native gold, disseminated pyrite with some arsenopyrite and locally small amounts of galena, sphalerite and tetrahedrite.

Old reports refer to a vein which is up to 3 metres wide but this vein was not found in 1974. Two veins were noted in the large cleared area south of the caved adit.

A shipment of 10 tonnes of selected material from the veins was sent to Trail in 1973. The shipment graded 44.9 grams per tonne gold, 48 grams per tonne silver, 0.6 per cent lead, 0.4 per cent zinc and 0.02 per cent copper (Property File - Report on the St. Paul Property, 1974). In the 1962 tunnel, one 15-centimetre vein was noted about 46 metres from the portal; one other vein is reported from this tunnel. A grab sample taken from the 15-centimetre vein assayed 3.8 grams per tonne gold and 13.7 grams per tonne silver (Property File - Report on the St. Paul Property, 1974).

Production for the period 1914-1973 totalled 392 tonnes producing 5630 grams of gold, 112,406 grams of silver, 3720 kilograms of lead and 1258 kilograms of zinc for the Morgan and St. Paul deposits. Refer to the St. Paul deposit (082LSE010) for production figures.

BIBLIOGRAPHY

- EMPR AR 1900-857; 1902-189; 1904-228; 1905-193; 1907-128; 1913-179; 1914-360,511; 1915-252,446,450; 1916-263; 1923-160; 1927-185, 213; 1928-220; 1930-208; 1931-116; 1932-144; 1933-197; 1934-D34; 1949-138; 1962-66
EMPR ASS RPT 12050, 21592, 22575, 22827, 23110
EMPR BULL 1, p. 79; 20, pp. 3-24
EMPR EXPL 1975-E50
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1971-431; 1972-79; 1973-98; 1974-88
EMPR OF 1991-18; 1994-8
EMPR PF (Sketch of Morgan Mine, c. 1930; Map of the Upper Workings on the Minerva, c. 1952; See also 082LSE010)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637(#332); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2
GCNL #17,1983

MINFILE NUMBER: **082LSE023**

NATIONAL MINERAL INVENTORY:

NAME(S): **EF**, EF4, PEACHER

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 29 48 N
LONGITUDE: 118 58 10 W
ELEVATION: 850 Metres

NORTHING: 5595707
EASTING: 360320

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of the diamond-drill hole on the EF4 claim (Assessment Report 14573).

COMMODITIES: Silver Lead Copper

MINERALS

SIGNIFICANT: Galena
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.			Kootenay Assemblage

LITHOLOGY: Mica Schist
Shale
Phyllite
Quartzite
Limestone
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1985
SAMPLE TYPE: Drill Core	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	182.0000 Grams per tonne
Lead	2.9500 Per cent

COMMENTS: Core sample of galena in altered mica schist and green shale.
REFERENCE: Assessment Report 14537.

CAPSULE GEOLOGY

The EF showing is located southeast of Enderby, near Oleen Creek.
In 1979, a geochemical survey was completed. In 1981-1982, a magnetometer survey was completed in the area. In 1985, one diamond-drill hole was completed.
The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. These comprise primarily phyllites, quartzites, limestones and conglomerate.
Samples taken from a roadcut in the claim area contained "interesting" amounts of copper.
The drillhole in 1985 intersected galena in altered mica schist and green shale. A sample from the core assayed 182 grams per tonne silver and 2.95 per cent lead (Assessment Report 14537).

BIBLIOGRAPHY

EMPR ASS RPT *7791, *14573
EMPR EXPL 1979-104
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR GEM 1970-407
EMPR OF 1990-30
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 236
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637 (#244)

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE024**

NATIONAL MINERAL INVENTORY:

NAME(S): **BALLARAT**, GOLDEN MARTEN I, AU 1-2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 04 48 N
LONGITUDE: 118 26 34 W
ELEVATION: 1737 Metres

NORTHING: 5548522
EASTING: 396774

LOCATION ACCURACY: Within 500M

COMMENTS: Located about 150 metres east of the Paladora (082LSE008) showings (Minister of Mines Annual Report 1900, page 856).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Unknown
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>
Paleozoic-Mesozoic Jurassic	Harper Ranch	Undefined Formation	Nelson Intrusions

LITHOLOGY: Granite
Granodiorite
Quartzite
Basalt

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Ballarat showing is located 48 kilometres west of Edgewood near the headwaters of Fire Valley Creek. The Ballarat showing is the extension of the Paladora (082LSE008) showings, located about 150 metres to the west.

The first reference to this property is in 1900. By 1902, a 9-metre tunnel had been driven on the vein. The Paladora (Lot 2153) and Meadowview (Lot 2152) claims were Crown granted in 1905. In 1983, prospecting and geochemical sampling were conducted on the Au 1 and 2 claims, which were staked over the Paladora, Ballarat, Paradise (082LSE002) and Renown (082LSE004) showings. An unsuccessful attempt was made to locate the old workings. In 1985, prospecting was conducted on the Golden Marten I and II, claims which were staked over the Paladora, Ballarat, Paradise and Renown showings.

The area is underlain by granite and granodiorite of the Jurassic Nelson Intrusions. Occasional quartzite and basalt of the Devonian to Triassic Harper Ranch Group occurs in the area.

A tunnel was driven for 9 metres exposing a well-defined vein 1.2 to 1.8 metres wide. Samples assayed about 45 grams per tonne gold (\$30 gold per ton) and "fair values in silver and copper" (Minister of Mines Annual Report 1902). This showing is noted on Geological Survey of Canada Open File 637 as a gold-silver-copper vein. No other information is available.

BIBLIOGRAPHY

EMPR AR *1900-856; *1902-165
EMPR ASS RPT 12331, 14611
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8491G
GSC MEM 296
GSC OF *637(#349); 658
GSC P 91-2, pp. 115-135

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 238
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE025**

NATIONAL MINERAL INVENTORY:

NAME(S): **EXCELSIOR**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 30 N
LONGITUDE: 118 31 52 W
ELEVATION: 1000 Metres

NORTHING: 5562916
EASTING: 390747

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of claim (occurrence #318, Geological Survey of Canada Open File 637).

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Sediment/Sedimentary
Volcanic
Argillite
Pyroclastic
Basic Lava
Limestone

HOSTROCK COMMENTS: Hostrock is not known, assumed to be sedimentary.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Silver
GRADE: 4113.6000 Grams per tonne

YEAR: 1901

COMMENTS: Assumed highest value from samples of a 20 centimetre wide vein.
REFERENCE: Minister of Mines Annual Report 1901, page 1127.

CAPSULE GEOLOGY

The Excelsior showing is located on the right bank of Monashee Creek, previously known as the south fork of Cherry Creek, about 32 kilometres southeast of Lumby.

A tunnel was sunk 2.4 to 3 metres in 1901. No other reference has been found for this showing.

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise basic lavas, pyroclastics, argillites and some limestones.

A quartz vein about 20 centimetres wide contains argentiferous galena. The vein was found on surface and the tunnel attempted to follow it. Samples reportedly assayed 4113.6 grams per tonne silver (Minister of Mines Annual Report 1901, page 1127).

No other information is available.

BIBLIOGRAPHY

EMPR AR *1901-1127
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 240
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 1059A; 7216G; 8501G
GSC MEM 296
GSC OF 637 (#317,#318)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/13

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE026**

NATIONAL MINERAL INVENTORY:

NAME(S): **UNICORN**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 12 N
LONGITUDE: 118 39 28 W
ELEVATION: 1000 Metres

NORTHING: 5566260
EASTING: 381779

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of the Unicorn claims (Property File - Letter from Gordon White, Aug. 30, 1976).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena Marcasite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 15 x 3 Metres STRIKE/DIP:

COMMENTS: The vein is about 15 metres in length and 3 metres wide.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Calcareous Argillite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Unicorn showing is located about 1.6 kilometres above Ferry Creek, 27 kilometres east of Lumby.

The showing was examined by the District Geologist in 1976. No other work is recorded.

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise graphite-bearing calcareous argillite and limestone.

The flat-lying, white, quartz vein is about 15 metres in length, about 3 metres in width and is up to 20 centimetres thick. Fine grained, cubic galena and marcasite occur in a dendritic fashion in the centre of the vein. The quartz appears to have grown from the wall of the vein; no cavities were seen. Sulphides compose about 8 per cent of the quartz vein material.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;

1992, pp. 255-257

EMPR OF 1990-30; 1991-18; 1994-8

EMPR PF (*Letter from Gordon P. White, District Geologist, Aug. 30, 1976)

EMPR RGS 082L, 1976; 32, 1991

GSC MAP 1059A; 7216G; 8501G

GSC MEM 296

GSC OF 637(#311)

GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/15

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE027**

NATIONAL MINERAL INVENTORY:

NAME(S): **CASEY 7, CASEY 1-10, JUNE, LEDGE, B.L., LEDGE EXTENSION, ARROW, PING PONG**

MINING DIVISION: Slocan

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L08E 082K05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 28 12 N
LONGITUDE: 118 00 16 W
ELEVATION: 950 Metres

NORTHING: 5591372
EASTING: 428719

LOCATION ACCURACY: Within 1 KM
COMMENTS: Approximate location of the mineralized horizon on Casey 7 (Assessment Report 6307).

COMMODITIES: Silver Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Marcasite
Magnetite
ASSOCIATED: Graphite Diopside
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Exhalative Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Monashee Complex
Proterozoic-Paleoz.			Kootenay Assemblage

LITHOLOGY: Quartzite
Biotite Sillimanite Schist
Marble
Schist
Gneiss

HOSTROCK COMMENTS: The rocks belong to the Thor-Odin gneiss dome.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee Kootenay
PHYSIOGRAPHIC AREA: Monashee Mountains

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1993
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 2.0000 Grams per tonne
Zinc 0.9500 Per cent

COMMENTS: Average from drillhole samples, across 26.5 metres.
REFERENCE: Assessment Report 23120.

CAPSULE GEOLOGY

The Casey 7 showing is located near the confluence of Trout Creek and Pingston Creek, about 55 kilometres south of Revelstoke adjacent to the Big Ledge deposit (082LSE012).

The property was staked as part of the Big Ledge property, by Cominco in 1947-51. Cominco worked the area, including drilling, until 1966. In 1967, drilling was done by Northwest Zinc. In 1976, reconnaissance mapping was completed by Metallgesellschaft. In 1979, Esperanza conducted geological mapping and geochemical surveys. In 1981, geological, geochemical and geophysical surveys were completed by Esperanza. In 1988, Noranda conducted a soil survey and mapping. In 1992, Teck completed soil sampling, a magnetometer survey, geological mapping and trenching. In 1993, 9 diamond-drill holes tested the southwest portion of the Ledge horizon on this property.

The area is underlain by rocks of the Thor-Odin gneiss dome of the Proterozoic Monashee Complex and by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. The Thor-Odin dome is

CAPSULE GEOLOGY

one of a series of gneiss domes spaced approximately 80 kilometres apart. A central core zone in the dome consists of gneissic and migmatitic rocks. This zone is surrounded by a heterogeneous assemblage of metasedimentary rocks of the Mantling zone and Fringe zone, the latter containing abundant pegmatite and linedated quartz monzonite. The Supracrustal zone, consisting of quartzite, marble, phyllite, schist and metavolcanic rocks, forms a cover to the gneisses.

The mineralized horizon (the Ledge horizon) occurs in an east-west trending succession of metasedimentary rocks of the Mantling zone. The rusty weathering succession consists of a heterogeneous mixture of schist and gneiss, calcareous quartzite, calcsilicate gneiss, marble and amphibolite. The Ledge consists of fine-grained, dark graphitic-sericitic schist, dark quartz-rich schist, calc-silicate gneiss and minor siliceous marble layers. Pyrite and pyrrhotite are disseminated throughout these units resulting in a characteristic rusty weathering.

The structure is dominated by a series of east-west trending, open to tight folds. These are inclined to the south, overturned to the north and plunge variably to the east and west.

Within the Ledge conformable mineralization consisting of pyrrhotite, pyrite and sphalerite with minor galena has been traced by outcrop and diamond drillholes for about 12-14 kilometres from Mt. Symons to the west shore of Arrow Lake. The western 8-10 kilometres comprise the Big Ledge property.

Drilling indicates that there are at least four massive sulphide layers within the Ledge. It is not known if these are individual layers or fold repetitions of one or more layers. The massive sulphide layers consist of medium to coarse grained pyrrhotite or pyrite with varying amounts of dark sphalerite. Quartz-eyes are common in the massive sulphide layers and sphalerite is commonly aligned parallel to layering in the adjacent schists. The footwall and hangingwall of the Ledge is comprised of alternating beds of quartz-mica schist and hornblende and feldspar-garnet gneisses interspersed with pure white quartzite and marble members. The marble members provide good stratigraphic markers.

Four types of stratabound massive sulphide mineralization have been observed: 1) fine-grained homogeneous massive sulphides comprising mainly pyrrhotite with rare magnetite, pyrite, sphalerite and galena; 2) pyrrhotite, pyrite, sphalerite and galena as matrix in quartz-rich calcareous gneisses; 3) pyrrhotite, pyrite, sphalerite and galena in marble with graphite and hematite; 4) marcasite, pyrite, sphalerite, galena in pegmatite vugs between quartz crystals.

The southerly dipping Ledge horizon has been mapped at 2 places on the Casey property, in the southwest near the confluence of Trout Creek and Pingston Creek and to the northeast on mapsheet 082K05W near the west shore of Upper Arrow Lake. The Ledge averages 40 metres in true thickness and mineralized sections can attain greater than 30 metres true thickness.

The average grade of mineralization in the old drillholes is 2 to 2.5 per cent zinc over 3 to 4.5 metres (Assessment Report 9651). In the southwest, on the Ledge 2 or Ping Pong 3 claim, a chip sample across 1 metre was taken from a zone of weathered sulphides containing pyrite, arsenopyrite and 5 per cent galena. This sample assayed 0.4 per cent lead and 1.6 per cent zinc (Assessment Report 19243). The best values from trenching came from Trench 5C on the southwest portion of the Ledge horizon on the Arrow 3 claim. This trench, in biotite-sillimanite schist, intersected the main Ledge horizon consisting of quartzites with disseminated graphite and sulphides and varying amounts of diopside. Mineralization is disseminated and occurs in veinlets of sphalerite throughout the horizon but 2 main intervals of massive to semi-massive sulphides were exposed in the trench. The highest values came from the A zone (southernmost) which assayed 2.7 grams per tonne silver, 0.1 per cent lead and 2.4 per cent zinc (Assessment Report 22664).

In 1993, drilling on this trench to test the downdip extension intersected similar mineralization and lithology over the 24 metre apparent thickness of the Ledge horizon. Samples averaged 0.95 per cent zinc, nil lead and 2.0 grams per tonne silver over 26.5 metres, including 30 centimetres of 13.4 per cent zinc and 3.6 grams per tonne silver and 1.5 metres of 3.04 per cent zinc, 0.16 per cent lead and 3.5 grams per tonne silver (Assessment Report 23120). Drilling tested only the southwest portion of the Ledge horizon on the Casey property.

BIBLIOGRAPHY

- EMPR ASS RPT 66, *6307, *9651, 19243, 22664, *23120
EMPR EXPL 1976-E56
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 244
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8492G
GSC MEM 296
GSC OF 637; 658
GSC P 64-1; 65-1; 91-2, pp. 115-135
CJES Vol. 26, No. 2
Placer Dome File
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/30

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE028**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHUSWAP RIVER**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 19 02 N
LONGITUDE: 118 34 20 W
ELEVATION: 550 Metres

NORTHING: 5575084
EASTING: 388069

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #287 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Shuswap River placer deposit is located about 9.5 kilometres south of the Sugar Lake dam.

In 1931, leases were acquired on the Shuswap River below Sugar Lake and good values were reported.

The area is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group.

Placer activity, but no production, occurred on the Shuswap River. No other information is available.

BIBLIOGRAPHY

EMPR AR *1931-A116
EMPR BULL *28, p. 60, 62
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR PF (082LSE General - Geology Maps of the Trinity Lake Area, C.E. Cairns, 1929-1930)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM 296
GSC OF 637 (#287)

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE029**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHERRY**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 16 45 N
LONGITUDE: 118 25 49 W
ELEVATION: 850 Metres

NORTHING: 5570649
EASTING: 398093

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #288 (Geological Survey of Canada Open File 637).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Unknown
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>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Argillite
Basic Lava
Pyroclastic
Limestone

HOSTROCK COMMENTS: The hostrock is unknown.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Cherry occurrence is located south of Cherry Ridge about 76 kilometres east of Lumby.

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise basic lavas and pyroclastics and sedimentary rocks including argillite and some limestones.

A copper occurrence of unknown type is noted on Geological Survey of Canada Open File 637 (#288). No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8492G
GSC MEM 296
GSC OF *637(#288); 658
GSC P 64-1; 65-1; 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE030**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZINCOP (BUSTER)**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 19 36 N
LONGITUDE: 118 24 46 W
ELEVATION: 1341 Metres

NORTHING: 5575906
EASTING: 399440

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #289 (Geological Survey of Canada Open File 637).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Sedimentary
TYPE: E04 Sediment-hosted Cu

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Basic Lava
Pyroclastic
Limestone

HOSTROCK COMMENTS: The hostrock is unknown.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Zincop (Buster) showing is located just south of Outlet Creek about 80 kilometres northeast of Lumby.

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise basic lavas and pyroclastics and sedimentary rocks including argillite and some limestones.

A concordant sedimentary-hosted copper occurrence is noted on Geological Survey of Canada Open File 637 (#289). No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8492G
GSC MEM 296
GSC OF *637(#289); 658
GSC P 64-1; 65-1; 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE031**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARRIS CREEK**, BESSETTE CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L02W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 51 N
LONGITUDE: 118 59 09 W
ELEVATION: 1000 Metres

NORTHING: 5562477
EASTING: 358270

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of uppermost workings (Minister of Mines Annual Report 1936, page D43)

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel
Sand

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Harris Creek placer deposit is located about 6 kilometres southwest of Lumby. The Bluebird veins (082LSE003) are located nearby.

At the turn of the century, small quantities of gold were found in Harris Creek and its tributaries. In 1893, "a considerable amount (of) prospecting work" was done. In 1936, a former channel was discovered and worked. In 1936, leases covered the lower 13 kilometres of Harris Creek, the ground between Harris and Jones creeks and a considerable portion of the valley flat at the mouth of Harris Creek.

The bedrock in the area consists of sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group which have been intruded by granitic rocks of the Jurassic Nelson Intrusions. The creek gravels are resistant, gneissic and granitic with a high proportion of lava. The valley likely contains at least 6 metres of gravels.

The original discovery is on the east side of the creek at the head of the small canyon and just below the mouth of Nicklen Creek (Besette Creek). A recovery of 373 grams of gold is reported from amongst large boulders at and near irregular bedrock over a 4.6 by 15 metre area. A channel exposed in cross-section on the west side of Harris Creek produced 435 grams of gold. Gold was recovered in a pay streak 3 to 7.6 metres above the lowest gutter and to a lesser extent in the uppermost 4.6 metres of rather cleaner and smaller sized gravel.

Test-work was concentrated in the lower or northern section, but a small amount of testing has also been done for 8 kilometres up the creek. In the uppermost working on the southwest side, 7 kilometres from the mouth of Harris Creek, a drift has been driven 3 metres in weathered semi-angular gravels. Some gold is reported from 6 metres above the creek. Six or more pits were sunk at the mouth of Harris Creek on the valley flat, in some of which "interesting values" were reported.

About 1.2 kilometres downstream from this locality, similar gravels are present. The width and extent of this section of channel is not known and it is not known whether gold occurs in good quantities.

Other test holes are scattered along the margin of the creek bed,

CAPSULE GEOLOGY

none of which were conclusive. Testing in the bed proper has consisted of surface panning and no pits have been sunk deeper than a few feet.

The gold is primarily light colored and occurs as fine rough particles, frequently with quartz adhering and considerable black sand. In one or two localities the gold is coarser, darker and well-worn. The short section of pay gravel contained gold of high purity and coarse nuggets (fineness 870 to 878).

Production for the period 1936 to 1945 totalled 14,150 grams of gold (Bulletin 28, page 63).

BIBLIOGRAPHY

EMPR AR 1893-1076; 1901-1126; *1936-D43; 1949-137
EMPR BULL *28, pp. 62-63
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296, p. 138
GSC OF 637(#307,#306)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/12

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE032**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUE GROUSE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 54 N
LONGITUDE: 118 33 22 W
ELEVATION: 1100 Metres

NORTHING: 5567401
EASTING: 389056

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #312 (Geological Survey of Canada Open File 637).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Unknown
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>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Argillite
Basic Lava
Pyroclastic
Limestone

HOSTROCK COMMENTS: The hostrock is unknown.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Blue Grouse occurrence is located about 4.5 kilometres east of Cherryville and north of Cherry Creek.

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise basic lavas and pyroclastics and sedimentary rocks including argillite and some limestones.

A zinc-lead occurrence of unknown type is noted on Geological Survey of Canada Open File 637 (#312). No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1990-30; 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF *637 (#312)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE033**

NATIONAL MINERAL INVENTORY:

NAME(S): **HECKMAN CREEK**, FALL CREEK, CEDAR CREEK

STATUS: Past Producer Open Pit

MINING DIVISION: Vernon

REGIONS: British Columbia

NTS MAP: 082L02E

BC MAP:

LATITUDE: 50 11 30 N

LONGITUDE: 118 33 16 W

ELEVATION: 1000 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence #313 (Geological Survey of Canada Open File 637).

UTM ZONE: 11 (NAD 83)

NORTHING: 5561098

EASTING: 389043

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Recent

Glacial/Fluvial Gravels

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Heckman Creek deposit is located on Heckman Creek about 6 kilometres southeast of Cherryville.

The bedrock in the area comprises sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group and the Upper Triassic to Lower Jurassic Nicola Group. Glacial and/or fluvial gravels contain placer gold.

Production totalling 124 grams of gold is reported for the period 1936-1940 (Bulletin 28, page 63). No other information is available.

BIBLIOGRAPHY

EMPR AR 1877-404; 1901-1127

EMPR BULL *28, pp. 62-63

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;

1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;

1992, pp. 255-257

EMPR OF 1990-30; 1991-18; 1994-8

EMPR RGS 082L, 1976; 32, 1991

GSC MAP 7216G; 8501G

GSC MEM 296

GSC OF *637 (#313)

GSC P 91-2, pp. 115-135

WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24

DATE REVISED: 1994/12/19

CODED BY: GSB

REVISED BY: DEJ

FIELD CHECK: N

FIELD CHECK: N

MINFILE NUMBER: **082LSE034**

NATIONAL MINERAL INVENTORY:

NAME(S): **OLD JOE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 06 N
LONGITUDE: 118 32 52 W
ELEVATION: 770 Metres

NORTHING: 5560347
EASTING: 389504

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #315 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Mudstone
Chert
Limestone
Sandstone
Conglomerate

HOSTROCK COMMENTS: The hostrock is unknown. The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Old Joe showing is located near the confluence of Half Mile Creek with Monashee Creek, about 8.5 kilometres southeast of Cherryville.

The area is underlain by sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These comprise mudstone, chert, limestone, sandstone and conglomerate.

A gold-silver-lead occurrence of unknown type is noted on Geological Survey of Canada Open File 637 (#315). No other information is available.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1990-30; 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF *637(#315)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE035**

NATIONAL MINERAL INVENTORY:

NAME(S): **TRUE BLUE**, HIDDEN TREASURE, CHERRY CREEK SILVER,
 JJD 4, SILVER LEAD, ROYAL,
 BATOUCHE, GRAND TIMES

STATUS: Past Producer	Underground	MINING DIVISION: Vernon
REGIONS: British Columbia		UTM ZONE: 11 (NAD 83)
NTS MAP: 082L02E		NORTHING: 5563162
BC MAP:		EASTING: 389324
LATITUDE: 50 12 37 N		
LONGITUDE: 118 33 04 W		
ELEVATION: 650 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Old workings located on the northwest portion of the JJD 4 claim (Assessment Report 22223).		

COMMODITIES: Silver Zinc Gold Lead

MINERALS

SIGNIFICANT: Galena Sphalerite Tetrahedrite Freibergite
 ASSOCIATED: Quartz
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Hydrothermal Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Shale
 Slate
 Argillite
 Tuff
 Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Okanagan Highland
 TERRANE: Quesnel

INVENTORY

ORE ZONE: DUMP	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1992
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	306.9000 Grams per tonne
Gold	0.6250 Grams per tonne
Zinc	6.5200 Per cent

COMMENTS: A well-mineralized sample from the dump.
 REFERENCE: Assessment Report 22223.

CAPSULE GEOLOGY

The True Blue deposit is located on the west bank of Monashee Creek (previously known as the south fork of Cherry Creek) about 30 kilometres east of Lumby.

The small silver lode was discovered in 1863 and a small amount of ore was rawhided to the coast for processing in 1864 by Cherry Creek Silver Mining Co. In 1877, a "quartz ledge" was discovered on the opposite side of the creek from the original workings. The True Blue (Lot 254), Royal (Lot 255) and Batouche (Lot 256) claims were Crown granted to Hidden Treasure Mining Co. in 1889. By 1898, a tunnel 18 metres long was completed on the Hidden Treasure and Grand Times claims. In 1899, a 55-metre tunnel was located on the Grand Times claim. In 1905, a tunnel 15 metres long exposed "very rich" ore. In 1992, the workings were caved but mapping and sampling were conducted in the area of the old workings.

The area is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. The bedding strikes northwest and dips slightly south. Lithologies comprise volcanics, tuffs and argillite.

The old workings occur in argillite with quartz. The mineral-

CAPSULE GEOLOGY

ization comprises argentiferous galena, tetrahedrite or freibergite with galena and sphalerite. The mineralization occurs in quartz hosted in shale or slate. Assays were reportedly as high as 100,000 grams (\$2000/ton) per tonne silver with some gold (Minister of Mines Annual Report 1877, page 405). In 1992, a well-mineralized grab sample taken from the dump assayed 0.625 gram per tonne gold, 306.9 grams per tonne silver and 6.52 per cent zinc (Assessment Report 22223). Quartz at other localities in the area is not mineralized but the argillite in the footwall may host mineralization.

BIBLIOGRAPHY

EMPR AR 1874-15; 1889-317; 1896-563; 1898-1129; 1899-747; 1905-192
EMPR ASS RPT *22223
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637 (#316)
GSC P 91-2, pp. 115-135
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/12

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE036**

NATIONAL MINERAL INVENTORY:

NAME(S): **JGR**, JGR 1-4

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 19 N
LONGITUDE: 118 24 44 W
ELEVATION: 1707 Metres

NORTHING: 5562409
EASTING: 399224

LOCATION ACCURACY: Within 500M

COMMENTS: Southern vein area (Assessment Report 14726).

COMMODITIES: Silver Gold Copper

MINERALS

SIGNIFICANT: Pyrite Tetrahedrite
COMMENTS: Copper carbonates and possibly tetrahedrite.
ASSOCIATED: Quartz
ALTERATION: Azurite Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 9 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Northeast dipping quartz vein is 2.5 to 9 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Greywacke
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Okanagan Highland
TERRANE: Quesnel

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 2080.0000 Grams per tonne
Gold 3.1000 Grams per tonne
COMMENTS: Highest assay; sample of copper carbonates and rusty gouge. Other samples yielded substantially lower values.
REFERENCE: Assessment Report 14726.

CAPSULE GEOLOGY

The JGR showing is located about 63 kilometres east of Vernon, near the headwaters of Silver Bell Creek. The property contains a 10 metre drift and 4 trenches which have not been reported. In 1985, D.R. Morgan conducted mapping and sampling on the property. The claims are underlain by northeast dipping argillites and greywackes of the Upper Triassic to Lower Jurassic Nicola Group. Concordant quartz veins occur within the sediments in 2 areas; a northern and a southern. These contain malachite, azurite and possibly tetrahedrite. The veins are 3 to 9 metres wide and vary from white "bull" quartz to rusty weathering. The northern area contains a northeast dipping quartz vein, which is 2.5 to 9 metres wide. This vein has been exposed by 4 trenches and samples yielded low values (Assessment Report 14726). The southern area contains 2 northeast dipping quartz veins which are exposed by opencuts and a 10-metre drift. The highest values came from a sample of copper carbonates and rusty gouge exposed in a small pit. This sample assayed 2080 grams per tonne silver and 3.1 grams per tonne gold (Sample M1, Assessment Report 14726). Other samples yielded substantially lower values.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 256
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *14726
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637; 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1986/09/22
DATE REVISED: 1994/11/22

CODED BY: AFW
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE037**

NATIONAL MINERAL INVENTORY:

NAME(S): **YEOWARD CREEK**, PORCUPINE CREEK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 10 23 N
LONGITUDE: 118 30 04 W
ELEVATION: 800 Metres

NORTHING: 5558951
EASTING: 392809

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence #328 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel
Unconsolidated Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Yeoward Creek deposit is located on Yeoward Creek near its confluence with Monashee Creek, about 22 kilometres south of Cherryville.

A "little" placer mining was attempted in 1923. An old story states that placer miners in the 1870s found coarse gold at the confluence of Yeoward and Monashee creeks. A 180-metre tunnel was driven but abandoned before they reached their goal. By 1923, the old tunnel was caved in.

Bedrock in the area consists of sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group and the Devonian to Triassic Harper Ranch Group.

Placer activity is reported from Yeoward Creek (Porcupine Creek) but no production is recorded.

BIBLIOGRAPHY

EMPR AR *1923-160
EMPR BULL *28, p. 62; 79
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30; 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF *637 (#328); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE038**

NATIONAL MINERAL INVENTORY:

NAME(S): **NO NAME** OCCURRENCE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 05 06 N
LONGITUDE: 118 28 48 W
ELEVATION: 1000 Metres

NORTHING: 5549130
EASTING: 394122

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of occurrence #329 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Recent

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Glacial/Fluvial Gravels

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The No Name placer deposit is located on a tributary of the Kettle River (082LSE042), about 70 kilometres southeast of Vernon.

Bedrock in this area consists of granitic rocks of the Jurassic Nelson Intrusions.

This placer is classified as having produced according to Geological Survey of Canada Open File 637 but there are no records to support this. There is no other information available.

BIBLIOGRAPHY

EMPR BULL 28
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF *637(#329); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/29

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE039**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARSH CREEK**, PLACER LEASES 1291, 1310, 1358

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

Open Pit

MINING DIVISION: Vernon

LATITUDE: 50 06 28 N
LONGITUDE: 118 29 00 W
ELEVATION: 1380 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5551668
EASTING: 393934

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate center of Placer Lease 1291 (Assessment Report 7485).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Marsh Creek deposits are located about 100 kilometres east of Vernon.

These deposits were originally worked by A. Marsh beginning in 1883 until his death in 1925. Marsh developed an adit, 3 short drifts and sunk a shaft to 13.5 metres. In 1935, an opencut was started. In 1938, the old upper drift was cleaned out and several test pits were dug. In 1941, the shaft was dewatered and it promptly caved. In 1942, the upper section of the creek was worked with a dragline. In 1947, a 4.2-metre shaft was sunk before it caved and then a 6-metre shaft was sunk near it. There was work done in the 1960s and 1970s but little information is available. In 1979, geophysical surveys, hand trenching, sluicing and panning were completed. In 1990, Commonwealth Gold completed geochemical surveys in this area.

The area is underlain by volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group. The creek contains glacial and fluvial gravels which contain placer gold.

It is believed that the source of the placer gold in Marsh Creek is the quartz vein at the foot of the limestone cliffs above the south branch of Marsh Creek. This vein is described in the Monashee showings (082LSE001). The main catchment area for this gold is likely below the falls. The location of the main buried channel remains to be determined.

The amount of gold removed from this creek is unrecorded though A. Marsh was able to survive for at least 15 years on what he recovered.

BIBLIOGRAPHY

EMPR ASS RPT *7485, 21592
EMPR BULL 28
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637 (#330); 658
GSC P 91-2, pp. 115-135

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 260
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/07/11

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE040**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROSE** ROSE 1-6, KEEFER

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 07 48 N
LONGITUDE: 118 19 52 W
ELEVATION: 1000 Metres

NORTHING: 5553933
EASTING: 404862

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #335 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Argillite
Quartzite
Diorite Sill
Diorite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Rose showing is located north of Keefer Lake, about 56 kilometres east of Lumby. The KL showing (082LSE021) occurs to the east and it is possible this is the same showing. In 1973, El Paso Mining and Milling Company conducted soil sampling and a VLF-EM survey on the Rose claims. In 1982, the claims were staked as the Keefer claim and a geochemical soil survey was completed by John McGoran for F. Marehard. In 1983, Demus Petro Corp. through Burton Consulting conducted a geochemical and heavy mineral sampling program. In 1984, soil and sediment sampling was completed for Demus Petro Corp. by Andreas Schildhorn. The area is underlain by sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group and the Upper Triassic to Lower Jurassic Nicola Group. The gold-silver showing is hosted in quartzites and argillites near a north trending diorite dike or sill. The showing is noted as #335 on Geological Survey of Canada Open File 637. No other information is available.

BIBLIOGRAPHY

EMPR ASS RPT *4761, 10871, 11645, 13545
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF *637(#335); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/12

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE041**

NATIONAL MINERAL INVENTORY:

NAME(S): **MCINTYRE CREEK**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 02 30 N
LONGITUDE: 118 33 16 W
ELEVATION: 1170 Metres

NORTHING: 5544421
EASTING: 388696

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #346 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The McIntyre Creek showing is located on McIntyre Creek above the confluence with the Kettle River, about 46 kilometres south of Cherryville.

The bedrock in the area consists of granitic rocks of the Jurassic Nelson Intrusions.

A gold placer showing is noted on Geological Survey of Canada Open File 637 (#346). No other information is available.

BIBLIOGRAPHY

EMPR BULL 28
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1990-30; 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF *637(#346)
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE042**

NATIONAL MINERAL INVENTORY:

NAME(S): **KETTLE RIVER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 04 36 N
LONGITUDE: 118 29 22 W
ELEVATION: 1200 Metres

NORTHING: 5548217
EASTING: 393428

LOCATION ACCURACY: Within 1 KM

COMMENTS: Approximate location of occurrence #348 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Glacial/Fluvial Gravels

Recent

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Kettle River placer deposit is located on the Kettle River just north of the Vernon-Edgewood highway, about 1.2 kilometres below the bridge and about 70 kilometres southeast of Vernon.

In 1877, gold was discovered at the headwaters of the Kettle River. In 1886, Hollingsworth and McMillan recorded a discovery claim on the Kettle River about 25 kilometres from Monashee Mountain. In 1931, "attractive values" came from the riverbank about 1.2 kilometres below the bridge. In 1933, 2 leases were staked by C.H. Martin, Frank Layman and associates. They conducted small hydraulic operations along the benches.

Bedrock in the area consists of granitic rocks of the Jurassic Nelson Intrusions.

A cut 38 metres long by 7.6 metres high uncovered some well-layered slightly cemented gravel for about 60 centimetres above the granite bedrock. This section was predicted to average 45 cents a cubic yard and contained nuggets up to \$1.50. The gravel on and above the bedrock had all the appearances of an old channel.

Other test pits outlined an area 1.6 kilometres long and 800 metres wide on the east side. Above the road "encouraging prospects" were reported. About 3.2 kilometres below, in and at the mouth of the canyon, coarse gold values were mined.

The origin of most of this gold has been traced to the quartz veins found in the argillites on Monashee Mountain (082LSE010,022).

There is no record of how much placer gold was removed from the Kettle River.

BIBLIOGRAPHY

- EMPR AR 1877-404; 1886-213; *1931-129; *1933-162
- EMPR BULL *28, p. 36
- EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
- EMPR OF 1991-18; 1994-8
- EMPR RGS 082L, 1976; 32, 1991
- GSC MAP 7216G; 8491G
- GSC MEM 296
- GSC OF *637(#348); 658
- GSC P 91-2, pp. 115-135

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 264
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE043**

NATIONAL MINERAL INVENTORY:

NAME(S): **INONOAKLIN CREEK**, FIRE VALLEY CREEK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 21 N
LONGITUDE: 118 24 46 W
ELEVATION: 1200 Metres

NORTHING: 5545795
EASTING: 398869

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #351 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Inonoaklin placer showing is located on Inonoaklin Creek near Wauchope Creek. In 1899, a nugget weighing 280-310 grams (9-10 ounces) from Fire Valley Creek was purchased by the government for the 1900 Paris Exposition. Bedrock in the area consists of granitic rocks of the Jurassic Nelson Intrusions. Placer activity was noted on this creek, but no production is recorded. Geological Survey of Canada Open File 637 indicates a placer showing at this location (#351). No other information is available.

BIBLIOGRAPHY

EMPR AR *1899-611
EMPR BULL *28, p. 62
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF *637(351); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/11/22

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE044**

NATIONAL MINERAL INVENTORY:

NAME(S): **EUREKA**

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 04 00 N
LONGITUDE: 118 19 28 W
ELEVATION: 1630 Metres

NORTHING: 5546883
EASTING: 405214

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #353 (Geological Survey of Canada Open File 637).
The location is uncertain.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite

COMMENTS: Iron sulphides.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Cretaceous

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Whatshan Intrusion

LITHOLOGY:

Dike
Granodiorite
Sediment/Sedimentary
Volcanic

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Eureka workings are located north of Inonoaklin Creek and south of Eureka Creek.

The workings consist of 2 tunnels dating from around 1900. The lower tunnel is about 6 metres above the creek bottom and has been driven 30 metres to the north. The second tunnel is about 12 metres above this tunnel.

The area is underlain by sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group which have been intruded by granodiorite of the Cretaceous Whatshan batholith.

The tunnels appear to have followed a mineralized dike containing iron sulphides (pyrite) and gold values. A rough average sample yielded \$1.20 in gold per ton (about 2 grams per tonne at \$20.50 per ounce) and a trace of silver (Minister of Mines Annual Report 1901, page 1130-1131).

BIBLIOGRAPHY

EMPR AR *1901-1130,1131
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF *637(#353); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/03/21

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE045**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOLDING CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

Open Pit

MINING DIVISION: Slocan

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 05 00 N
LONGITUDE: 118 19 16 W
ELEVATION: 1400 Metres

NORTHING: 5548732
EASTING: 405485

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #354 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Holding Creek occurrence is located on Holding Creek, a tributary of Barnes Creek (082LSE053), about 48 kilometres southeast of Lumby.

Bedrock in the area consists of sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group.

Stream gravels which lie on both sides of the creek comprise benches up to 9 metres high, although the parts that were being worked are only 1.5 to 1.8 metres high.

A small amount of placer gold production is believed to have come from Holding Creek. This is possibly included in the production reported for Barnes Creek.

No other information is available.

BIBLIOGRAPHY

EMPR BULL 28
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296, p. 138
GSC OF *637(#354); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/19

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE046**

NATIONAL MINERAL INVENTORY:

NAME(S): **EUREKA CREEK, ZAG**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

Open Pit

MINING DIVISION: Slocan

LATITUDE: 50 04 35 N
LONGITUDE: 118 19 18 W
ELEVATION: 1430 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5547961
EASTING: 405432

LOCATION ACCURACY: Within 5 KM

COMMENTS: Occurrence #355 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Quaternary

Glacial/Fluvial Gravels

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Eureka Creek deposit is located on Eureka Creek, a tributary of Barnes Creek, about 50 kilometres southeast of Lumby.

The bedrock in the area consists of sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group.

This placer deposit is indicated as #355 on Geological Survey of Canada Open File Map 637. From 1931-1945, a total of 870 grams of gold is recorded as production from Eureka Creek (Bulletin 28, page 14).

In 1983, heavy sediment sampling on the Zag claims resulted in several anomalous gold samples from tributaries of Eureka Creek. No anomalous samples came from Eureka Creek. No other information is available.

BIBLIOGRAPHY

EMPR AR 1935-E36
EMPR ASS RPT 12338
EMPR BULL *28, p. 14
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296, p. 138
GSC OF *637(#355); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1993/10/29

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE047**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRED WEST**

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 04 00 N
LONGITUDE: 118 15 40 W
ELEVATION: 1000 Metres

NORTHING: 5546805
EASTING: 409746

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #356 (Geological Survey of Canada Open File 637).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite

COMMENTS: Sphalerite assumed from the Fred occurrence (082LSE014) to the east.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant

CLASSIFICATION: Sedimentary

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.
Cretaceous

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Kootenay Assemblage
Whatshan Intrusion

LITHOLOGY: Chloritic Schist
Quartz Mica Schist
Phyllite
Amphibolite
Limestone
Granodiorite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Fred West showing is located to the west of the Fred showing (082LSE014) on Barnes Creek, about 10 kilometres northwest of Needles ferry on Upper Arrow Lake.

The Fred claims were staked in 1970. In 1971, soil sampling and geological mapping were conducted by Versatile Mining Services for United Bata Resources.

The area is underlain by metasediments of unknown affinity intruded by granitic rocks of the Cretaceous Whatshan batholith. The metasediments comprise quartz mica schist, chloritic schist, phyllite, amphibolite and limestone. Granitic rocks comprise granodiorite to quartz diorite and are generally porphyritic.

The showing is indicated as #356 on Geological Survey of Canada Open File Map 637. The showing is a concordant, sedimentary zinc occurrence hosted in metasediments which dip 45 degrees south and strike northwesterly.

No other information is available, but this showing is believed to be similar to the Fred occurrence.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637(#356); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1993/10/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE047**

MINFILE NUMBER: **082LSE048**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHERRYVILLE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 16 10 N
LONGITUDE: 118 37 46 W
ELEVATION: 800 Metres

NORTHING: 5569859
EASTING: 383879

LOCATION ACCURACY: Within 5 KM

COMMENTS: Approximate location of an "interesting" mica showing (Minister of Mines Annual Report 1932, page A144).

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Kootenay Assemblage

LITHOLOGY: Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Cherryville occurrence is located about 2 kilometres northwest of Cherryville, west of the Shuswap River. The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. "Interesting occurrences" of mica occur in gneissic rocks near Cherryville. No other information is available.

BIBLIOGRAPHY

EMPR AR *1932-A144
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR PF (082LSE General - Geology Maps of the Trinity Lake Area, C.E. Cairns, 1929-1930)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM 296
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE049**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONASHEE PASS**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 06 29 N
LONGITUDE: 118 30 37 W
ELEVATION: 1219 Metres

NORTHING: 5551737
EASTING: 392008

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrop on west side of Highway 6, 17 kilometres southeast of Cherryville, as plotted on Map 82LSE (Energy, Mines and Petroleum Resources - Industrial Mineral File).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Silica
COMMENTS: As chert bands and stringers.

MINERALIZATION AGE: Permian

ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Brachiopods/Fusulinids

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone

Massive
Industrial Min.

SHAPE: Irregular
MODIFIER: Fractured

DIMENSION: 300

Metres

STRIKE/DIP: 108/65S

TREND/PLUNGE:

COMMENTS: Dimensions of limestone ridge; bedding attitude.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Permian

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

MATERIAL DATED: Brachiopods/Fusulinids

Jurassic

Nelson Intrusions

LITHOLOGY: Limestone
Greywacke
Hornblende Biotite Granodiorite
Chert

HOSTROCK COMMENTS: Harper Ranch limestones in the Vernon map area are approximately Permian. The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1961

SAMPLE TYPE: Chip

COMMODITY

GRADE

Limestone

49.5500

Per cent

COMMENTS: Across 60 metres on the south end of the deposit. Grade given for calcium oxide.

REFERENCE: Minister of Mines Annual Report 1961, page 148, Sample 12.

CAPSULE GEOLOGY

A mass of Permian limestone of the Devonian to Triassic Harper Ranch Group outcrops in 50 metre high cliffs along the crest of a ridge for 300 metres on the west side of Highway 6, 17 kilometres south-southeast of Cherryville. The limestone occurs on the historic Monashee property (082LSE001); refer to it for further information.

The limestone is bounded to the south by medium to coarse grained hornblende biotite granite of the Jurassic Nelson Intrusions and to the north by greywacke. Bedding strikes 108 degrees and dips 65 degrees south.

The limestone is medium to fine grained, medium grey to white, massive to bedded and highly jointed. Chert is quite common,

CAPSULE GEOLOGY

occurring as rusty stringers and as 15 to 20 centimetre thick, contorted bands.

A sample of chips taken in 3-metre intervals across 60 metres at the south end of the bluffs analyzed 49.55 per cent CaO, 1.99 per cent MgO, 5.79 per cent insolubles, 1.84 per cent R2O3, 0.83 per cent Fe2O3, 0.04 per cent MnO, 0.01 per cent P2O5, 40.37 per cent ignition loss and 0.20 per cent water (Minister of Mines Annual Report 1961, page 148, Sample 12).

BIBLIOGRAPHY

EMPR AR *1961-148
EMPR ASS RPT 11789
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; *1992-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296, pp. 42,46,47
GSC OF 481; 637
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1989/09/16

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE050**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAMEL'S HUMP**, CREIGHTON VALLEY, LUMBY

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 47 N
LONGITUDE: 118 52 45 W
ELEVATION: 914 Metres

NORTHING: 5565862
EASTING: 365973

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of surface trace of limestone band, 3.8 to 9.0 kilometres southeast of Lumby (Minister of Mines Annual Report 1961, page 145).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Silica
COMMENTS: As chert inclusions.
MINERALIZATION AGE: Permian

DEPOSIT

CHARACTER: Stratiform Massive Breccia
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 4800 x 800 Metres STRIKE/DIP: 102/70 TREND/PLUNGE:
COMMENTS: Bedding attitude near west end of band (Geological Survey of Canada Map 1059A).

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Permian	Harper Ranch	Undefined Formation	
DATING METHOD:	Fossil		
MATERIAL DATED:	Fossils		

LITHOLOGY: Limestone
Volcanic Flow
Sandstone
Argillite
Chert

HOSTROCK COMMENTS: Harper Ranch limestones are Permian in the Vernon map area. The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Okanagan Highland
TERRANE: Quesnel

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1961
SAMPLE TYPE: Grab
COMMODITY GRADE
Limestone 52.1600 Per cent

COMMENTS: Grade given for calcium oxide.
REFERENCE: Minister of Mines Annual Report 1961, page 148, Sample 10.

CAPSULE GEOLOGY

A band of Permian limestone of the Devonian to Triassic Harper Ranch Group extends northwest for 4.8 kilometres along the southwest side of Camel's Hump, an elongate hill located 7.5 kilometres east-southeast of Lumby.

The band averages greater than 800 metres in width. The limestone is bounded by sandstone and argillite to the southwest and volcanic flows to the northeast. Bedding strikes 102 to 112 degrees and dips 45 to 70 degrees south (Geological Survey of Canada Map 1059A). The band consists of medium to fine grained, light to dark grey limestone containing some argillaceous streaks and inclusions of black chert. The rock is occasionally brecciated and healed with white calcite.

A sample of chips taken randomly over the band analyzed 52.16 per cent CaO, 0.48 per cent MgO, 3.84 per cent insolubles, 0.82 per cent R2O3, 0.50 per cent Fe2O3, 0.07 per cent MnO, 0.03 per cent

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 274
REPORT: RGEN0100

CAPSULE GEOLOGY

P205, 0.01 per cent sulphur 42.05 per cent ignition loss and 0.13 per cent water (Minister of Mines Annual Report 1961, page 148, Sample 10).

BIBLIOGRAPHY

EMPR AR *1961-145,147,148
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; *1992-8; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296, pp. 38,39,42
GSC OF 481; 637
GSC P 91-2, pp. 115-135

DATE CODED: 1985/07/24
DATE REVISED: 1989/09/16

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE051**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUGAR LAKE ONE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 21 00 N
LONGITUDE: 118 34 52 W
ELEVATION: 1100 Metres

NORTHING: 5578742
EASTING: 387514

LOCATION ACCURACY: Within 5 KM

COMMENTS: Kyanite locality about 3 kilometres southwest of Sugar Lake
(Geological Survey of Canada Memoir 296, page 161).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite Staurolite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Metamorphic Industrial Min. Pegmatite
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Kootenay Assemblage

LITHOLOGY: Gneiss
Schist
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Sugar Lake One showing is located about 3 kilometres southwest of Sugar Lake. The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. Gneiss is the most predominant lithology, except in local areas that have escaped intense metamorphism. The principal minerals in the gneiss are quartz, feldspars, biotite, muscovite, hornblende, pyroxene, sillimanite and garnet. Kyanite occurs as an accessory mineral. Kyanite occurs as a minor constituent in schist, pegmatite or vein quartz. Individual bladed blue crystals commonly attain lengths of 5 centimetres or more. Staurolite occurs in thick prisms, commonly 7 centimetres long. The mineral is reddish brown to black and commonly exhibits the cruciform twinning. The amount of kyanite and staurolite at this location is not enough to be of commercial value, but richer deposits may exist in the area.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1988-26; 1990-30
EMPR PF (082LSE General - Geology Maps of the Trinity Lake Area, C.E. Cairns, 1929-1930)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM *296, pp. 11,162
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE052**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUGAR LAKE TWO**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 21 01 N
LONGITUDE: 118 24 24 W
ELEVATION: 1800 Metres

NORTHING: 5578523
EASTING: 399925

LOCATION ACCURACY: Within 5 KM

COMMENTS: Kyanite locality about 8 kilometres southeast of Sugar Lake
(Geological Survey of Canada Memoir 296, page 161).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite Staurolite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Metamorphic Industrial Min. Pegmatite
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Kootenay Assemblage

LITHOLOGY: Gneiss
Schist
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Sugar Lake Two showing is located about 8 kilometres southeast of Sugar Lake.

The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. Gneiss is the most predominant lithology, except in local areas that have escaped intense metamorphism. The principal minerals in the gneiss are quartz, feldspars, biotite, muscovite, hornblende, pyroxene, sillimanite and garnet. Kyanite occurs as an accessory mineral.

Kyanite occurs as a minor constituent in schist, pegmatite or vein quartz. The individual bladed blue crystals commonly attain lengths of 5 centimetres or more.

Staurolite occurs in thick prisms, commonly 7 centimetres long. The mineral is reddish brown to black and commonly exhibits the cruciform twinning.

The amount of kyanite and staurolite at this location is not enough to be of commercial value, but richer deposits may exist in the area.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1988-26; 1990-30
EMPR PF (082LSE General - Geology Maps of the Trinity Lake Area, C.E. Cairns, 1929-1930)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM *296, pp. 11,162
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE053**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARNES CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

Open Pit

MINING DIVISION: Slocan

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 44 N
LONGITUDE: 118 15 23 W
ELEVATION: 1230 Metres

NORTHING: 5546305
EASTING: 410076

LOCATION ACCURACY: Within 5 KM

COMMENTS: At the confluence of Barnes Creek with Eureka Creek (Bulletin 28, #171).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Barnes Creek placer deposit is located on Barnes Creek about 11 kilometres west of Whatshan Lake. The exact location of the placer workings is unknown. Geological Survey of Canada Memoir 296 reports that these placer workings are on the tributaries of Barnes Creek which are Eureka Creek (082LSE046) and Holding Creek (082LSE45). B.C. Ministry of Energy, Mines and Petroleum Resources Bulletin 28 reports production for Barnes Creek and Eureka Creek.

Bedrock in the area consists of granitic rocks of the Cretaceous Whatshan batholith. Glacial and fluvial gravels in the creek contained placer gold.

During 1935 to 1945, reported production from Barnes Creek was 2581 grams of gold. This is probably production from Holding Creek or at least includes production from Holding Creek (Bulletin 28, page 14).

No other information is available.

BIBLIOGRAPHY

EMPR BULL *28, p. 14
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM *296, p. 138
GSC OF 637; 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1994/07/04
DATE REVISED: 1994/07/04

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE054**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEL**, BEL 1-2

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 20 N
LONGITUDE: 118 24 47 W
ELEVATION: 1680 Metres

NORTHING: 5562441
EASTING: 399165

LOCATION ACCURACY: Within 500M

COMMENTS: Workings on the No. 1 and 2 veins at the northwest corner of the Bel claim (Assessment Report 10493).

COMMODITIES: Silver Gold Lead Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Argillite
Phyllite
Black Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: NO. 1 VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1987

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

1744.8000

Grams per tonne

Gold

5.3000

Grams per tonne

COMMENTS: Highest values from 2 samples on the No. 1 vein.

REFERENCE: Assessment Report 16783.

CAPSULE GEOLOGY

The Bel showing is located about 65 kilometres east of Vernon, near the headwaters of Silver Bell Creek. The Silver Horde (082LSE011) showing, which contains similar mineralization, is located less than 1000 metres to the west.

Previous unrecorded work has resulted in a 12-metre adit and some trenches on the showing. About 1979, Mineta Resources upgraded the road access and conducted cursory prospecting including an inspection of the workings and a number of soil samples. In 1981, limited soil sampling was completed. In 1987, the northwestern part of the Bel 1 claim was mapped and sampled; a soil survey was also conducted.

The area is underlain by the Upper Triassic to Lower Jurassic Nicola Group consisting of metamorphosed sediments and volcanics. Gneiss of the Proterozoic to Paleozoic Kootenay Assemblage occurs to the northwest and granitic rocks of the Jurassic Intrusions occur to the south. Deformation is considerable and local folding is common. Generally barren, white quartz veins intrude argillite, phyllite, black schist and quartzite.

Mineralization consisting of argentiferous galena, pyrite and subordinate chalcopyrite occurs irregularly in fractures and shears in the quartz veins. Three veins occur in the northwest part of the

CAPSULE GEOLOGY

claim and have been partially exposed.

On the No. 1 vein, a 12-metre adit was driven along a 0.2 to 2 metre wide quartz vein and a shear zone on the north side of the vein. The shear zone and the vein are both mineralized. The shear trends 285 degrees and dips 65 degrees north and the vein strikes 120 degrees and dips near vertical. There are no records of ore shipped from the adit. Two samples assayed up to 1744.8 grams per tonne silver and up to 5.3 grams per tonne gold (Assessment Report 16783).

The No. 2 vein, located about 15 metres southwest of the No. 1, trends 290 degrees and dips 62 to 75 degrees. The vein contains patchy sulphides along late fractures near the northern margin of the vein. Three chip samples across this vein assayed up to 1984.8 grams per tonne silver and 3.5 grams per tonne gold (Assessment Report 16783).

The No. 3 vein is hosted in intensely folded phyllite and is up to 10 metres wide. The vein appears to pinch and swell along at least 150 metres of strike length. The vein strikes 040 to 060 degrees and dips about 50 degrees southeast. Only scattered traces of a black sulfide mineral are present. Limonitic alteration material is locally present. Three samples of quartz from the trench assayed up to 41.5 grams per tonne silver and 0.14 gram per tonne gold (Assessment Report 16783).

BIBLIOGRAPHY

EMPR ASS RPT 8063, *10493, *16783
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
EMPR PF (Highgrade Ventures Ltd., Prospectus 1988)
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637; 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2
GCNL #220, 1982

DATE CODED: 1985/07/24
DATE REVISED: 1994/07/11

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE055**

NATIONAL MINERAL INVENTORY:

NAME(S): **LYNX**, KISMET, MOUNTAIN VIEW,
IRON BALL, SNOWDROP, DEWDROP

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 06 24 N
LONGITUDE: 118 23 36 W
ELEVATION: 1531 Metres

NORTHING: 5551420
EASTING: 400367

LOCATION ACCURACY: Within 1 KM
COMMENTS: Area of 1981 drilling near the Kismet adit (Assessment Report 10530).

COMMODITIES: Gold Silver Copper Molybdenum Lead
Antimony

MINERALS

SIGNIFICANT: Gold Pyrite Molybdenite Chalcopyrite Stibnite
Arsenopyrite Galena Pyrrhotite Jamesonite
ASSOCIATED: Quartz
ALTERATION: Sericite
COMMENTS: Granite is locally sericitic.
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: The vein in the Kismet adit strikes northeast and dips steeply east.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Jurassic	Harper Ranch	Undefined Formation	Nelson Intrusions

LITHOLOGY: Granite
Argillite
Limestone
Volcanic

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: DRILLHOLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
YEAR: 1981

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	13.4000	Grams per tonne
Gold	28.5200	Grams per tonne
Copper	0.0100	Per cent

COMMENTS: Best sample across 1.07 metres, from drillhole H-4-81 about 80 metres north-northeast of the Kismet adit.
REFERENCE: Assessment Report 10530.

CAPSULE GEOLOGY

The Lynx showings are located 72 kilometres east of Lumby near Trapp Creek. The property consists of the Kismet, Mountain View, Iron Ball, Snowdrop and Dewdrop claims.
The area is underlain by volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group. These have been intruded by granitic rocks of the Jurassic Nelson Intrusions. The granite is locally sericitized.
In 1933, opencuts and a 22.5-metre adit was driven on the Kismet claim on a quartz vein in granite. Claim posts near the Kismet adit have tags dated 1965 and 1966. Bulldozer trenching was completed in 1980. In 1981, 8 diamond drillholes totalling 1608 metres were completed.

CAPSULE GEOLOGY

The known gold-bearing veins are fissure type, strike slightly east of north and dip steeply east. They are grey to bluish grey and commonly contain fine seams of pyrite with splashes of chalcopyrite and small amounts of stibnite. Molybdenite has also been observed.

The Kismet vein, hosted in granite, is 0.1 to 0.9 metre wide, strikes north and dips steeply east. The vein contains pyrite and arsenopyrite and lesser galena. A chip sample across the face of the drift assayed 35.65 grams per tonne gold and 2.06 grams per tonne silver (Assessment Report 10530).

At the Iron Ball claim, downhill from the Kismet adit and to the southwest, quartz veins contain pyrite and arsenopyrite and strike slightly east of north.

About 219 metres west of the Kismet and 62 metres lower, a 9-metre opencut has uncovered a shear zone 1.4 metres wide. This shear contains pyrite, pyrrhotite and lesser amounts of arsenopyrite in a gangue of quartz and disintegrated granite.

On the Dewdrop, west of the Iron Ball, opencuts have uncovered north-striking quartz fissure veins containing similar minerals in granite.

Several cuts to the east of the Kismet tunnel have uncovered other fissure veins in the granite.

On the Mountain View, adjoining the Kismet on the south and downhill, several cuts and a 9.4 metre tunnel have been driven on a quartz vein. This vein is extremely sheared and faulted and is hosted in altered limestone and argillite beds. Mineralization consists of pyrite, galena and jamesonite.

A new vein was discovered near drill hole H-7-81 hosting gold, pyrite and molybdenum. This vein assayed 5.83 grams per tonne gold and 55.19 grams per tonne silver from a selected surface grab sample. In a drill intersection the vein assayed 3.77 grams per tonne gold over 0.6 metres (Assessment Report 10530).

The best intersection was from hole H-4-81, about 80 metres north-northeast of the Kismet adit. The sample assayed 28.52 grams per tonne gold, 13.4 grams per tonne silver and 0.01 per cent copper across 1.07 metres (Assessment Report 10530). This hole probably intersected the extension of the Kismet vein.

BIBLIOGRAPHY

- EMPR AR *1933-156
- EMPR ASS RPT *10530
- EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
- EMPR OF 1991-18; 1994-8
- EMPR RGS 082L, 1976; 32, 1991
- EMPR PF (Report on the Lynx Claim, Donald W. Tully, 1979; Assessment Report on the Lynx Claim, Donald W. Tully, 1981; Golden Sky Resources Prospectus, 1987)
- GSC MAP 1059A; 7216G; 8502G
- GSC MEM 296
- GSC OF 637; 658
- GSC P 91-2, pp. 115-135
- CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/06/30

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE056**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAF**, LAF III, LAF IV,
SUGAR LAKE

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 36 N
LONGITUDE: 118 31 29 W
ELEVATION: 1350 Metres

NORTHING: 5590888
EASTING: 391776

LOCATION ACCURACY: Within 500M
COMMENTS: Upper showing (Assessment Report 16277).

COMMODITIES: Copper Zinc Gold

MINERALS

SIGNIFICANT:	Pyrrhotite	Chalcopyrite	Pyrite	Sphalerite	Magnetite
ASSOCIATED:	Pyrite	Quartz			
ALTERATION:	Silica	Limonite	Goethite		
ALTERATION TYPE:	Silicific'n		Oxidation		
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Podiform Massive
CLASSIFICATION: Igneous-contact Metamorphic

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Proterozoic-Paleoz.

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Kootenay Assemblage

LITHOLOGY: Gneiss
Diorite
Diorite Sill
Quartzite
Gossan

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1987

SAMPLE TYPE: Grab

COMMODITY

GRADE

Copper

2.0000

Per cent

Zinc

1.5000

Per cent

COMMENTS: Highest values from samples. One sample assayed 0.45 gram per tonne gold.

REFERENCE: Assessment Report 16277.

CAPSULE GEOLOGY

The Laf showing is located about 60 kilometres east-northeast of Vernon at the northwest end of Sugar Lake.

In 1986, 2 massive sulphide showings were discovered during reconnaissance exploration and the Laf and Laf III claims were staked. The Laf IV claim was staked in 1989. In 1990, a magnetometer and HLEM survey was completed on the claims.

The area is underlain by Proterozoic to Paleozoic Kootenay Assemblage metamorphic rocks. High grade metamorphic rocks consisting primarily of gneiss with minor quartzite are intruded by a fine to medium-grained diorite. There is evidence that the diorite is a sill capping the gneiss, with a thickness of 100 metres at the main showing. At a lesser showing at a lower elevation the sill is less than 1 metre thick.

Mineralized zones are marked by intense limonitic and goethitic gossans and occur at the gneiss-diorite contact. These zones vary from 3 to 9 metres in thickness and have a 310 metre length along a northwesterly strike. The gneiss within the mineralized zone is very siliceous with some minor secondary quartz veins.

Mineralization occurs as disseminated siliceous pods of up to 90 per cent massive sulphides. These pods are up to 1 by 2 metres in

CAPSULE GEOLOGY

size. Pyrrhotite is the dominant sulphide with lesser amounts of chalcopyrite, pyrite, sphalerite and magnetite.

The best sample assayed 2 per cent copper and 1.5 per cent zinc (Assessment Report 16277). Several samples contained anomalous gold values, the highest was 0.45 gram per tonne gold (Assessment Report 16277).

BIBLIOGRAPHY

EMPR ASS RPT *16277, 20471
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR PF (082LSE General - Geology Maps of the Trinity Lake Area, C.E. Cairns, 1929-1930)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296
GSC OF 637

DATE CODED: 1987/12/29
DATE REVISED: 1994/12/15

CODED BY: GJP
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE057**

NATIONAL MINERAL INVENTORY:

NAME(S): **THOR ODIN**, MOUNT FOSTHALL, MOUNT SYMONDS

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L08E 082L09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 28 46 N
LONGITUDE: 118 13 48 W
ELEVATION: 1980 Metres

NORTHING: 5592662
EASTING: 412731

LOCATION ACCURACY: Within 5 KM

COMMENTS: Approximate centre of Area 1 containing showings scattered over 5 kilometres (Map 2-Figure 3, Open File 1988-26).

COMMODITIES: Sillimanite Garnet

MINERALS

SIGNIFICANT: Sillimanite Garnet
ASSOCIATED: Cordierite Corundum
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Layered Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Monashee Complex
Proterozoic-Paleoz.			Kootenay Assemblage

LITHOLOGY: Sillimanite Garnet Biotite Schist
Schist
Gneiss
Para Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

Kootenay PHYSIOGRAPHIC AREA: Monashee Mountains
RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Thor Odin showing area is located just south of Peters Lake, about 70 kilometres northeast of Cherryville.

The area is underlain by metamorphic rocks of the Thor Odin gneiss dome of the Proterozoic Monashee Complex and the Proterozoic to Paleozoic Kootenay Assemblage. The rocks exposed in the Thor Odin dome are separated from other strata largely by faults. The Thor Odin dome consists of a core zone comprised of migmatized biotite-aluminosilicate-rich schists and amphibolite. Overlying the core gneisses of the Thor Odin dome is an autochthonous mantling succession which consists of paragneiss, schist, quartzite, marble, calc-silicate schist and amphibolite.

In this area a distinctive aluminosilicate-rich schist is exposed. The schist is characterized by coarse porphyroblastic garnets up to 3 centimetres in diameter and/or very coarse sillimanite aggregates, up to 10 centimetres long. Sillimanite in these schists can comprise up to at least 15 per cent of the rock and is commonly rimmed by cordierite and corundum. These mafic schist layers are relatively thin, generally in the order of a few metres, but may be traced for nearly 2 kilometres along strike.

In the Mount Odin-Mount Symonds-Mount Fosthall area paragneisses and schists are present which contain abundant coarse garnet and prismatic sillimanite. Typical exposures occur along the southern branch of Ledge Creek. These gneisses and schists may contain up to 15 per cent sillimanite which is present in the form of prismatic crystals up to 10 centimetres long, and abundant garnet porphyroblasts, up to 2.5 centimetres in size (Abraham, 1967; Geological Survey of Canada Bulletin 195). In the same area, coarse garnet, 1 to 2 centimetres in size can comprise up to 30 per cent of some amphibolite layers, but more commonly is present in quantities of 10 per cent or less (Geological Survey of Canada Bulletin 195).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 285
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF *1988-26
EMPR RGS 082L, 1976; 32, 1991
GSC BULL *195
GSC MAP 7216G; 8492G
GSC MEM 296
GSC OF 637; 658
GSC P 64-1; 65-1; 91-2, pp. 115-135
Abraham, B. (1967): Metamorphic Petrology of the Big Ledge Property,
near Upper Arrow Lake, British Columbia; BSc. thesis, University
of British Columbia, Vancouver, British Columbia, 60 pages
CJES Vol. 26, No. 2
Placer Dome File

DATE CODED: 1989/12/20
DATE REVISED: 1995/01/04

CODED BY: JP
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: 082LSE057

MINFILE NUMBER: **082LSE058**

NATIONAL MINERAL INVENTORY:

NAME(S): **CREIGHTON VALLEY, LUMBY**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 25 N
LONGITUDE: 118 54 06 W
ELEVATION: 1067 Metres

NORTHING: 5563371
EASTING: 364303

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of surface trace of limestone lens 6.4 kilometres southeast o Lumby (Minister of Mines Annual Report 1961, page 145).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz
MINERALIZATION AGE: Permian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 1600 x 180 Metres
COMMENTS: Limestone lens trends northeastward.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Permian	Harper Ranch	Undefined Formation	
DATING METHOD:	Fossil		

LITHOLOGY: Limestone

HOSTROCK COMMENTS: Harper Ranch limestones are Permian in the Vernon map area. The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: LENS

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1961
SAMPLE TYPE: Grab
COMMODITY: Limestone GRADE: 53.0700 Per cent

COMMENTS: Grade given for calcium oxide.
REFERENCE: Minister of Mines Annual Report 1961, page 148, Sample 11.

CAPSULE GEOLOGY

A lens of Permian limestone of the Devonian to Triassic Harper Ranch Group trends southwestward from Creighton Valley for 1.6 kilometres, 6.4 kilometres southeast of Lumby.

The lens, 180 metres wide, contains medium to fine-grained, light grey to white, highly fractured limestone with discontinuous lenses of white chert and veinlets of white quartz.

A sample of chips collected randomly from the top of the lens assayed 53.07 per cent CaO, 0.26 per cent MgO, 4.02 per cent insolubles, 0.30 per cent R2O3, 0.26 per cent Fe2O3, 0.04 per cent MnO, 0.02 per cent P2O5, trace of sulphur, 42.16 per cent ignition loss and 0.10 per cent water (Minister of Mines Annual Report 1961, page 148, Sample 11).

BIBLIOGRAPHY

EMPR AR *1961-145,147,148
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; *1992-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 1059A; 7216G; 8502G
GSC MEM 296, pp. 38,39,42

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 287
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481; 637
GSC P 91-2, pp. 115-135

DATE CODED: 1989/09/18
DATE REVISED: 1995/01/05

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE059**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONASHEE CREEK PLACER**, SOUTH FORK CHERRY CREEK, RAMBLER

STATUS: Past Producer Open Pit

MINING DIVISION: Vernon

REGIONS: British Columbia

NTS MAP: 082L02E 082L01W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 50 10 13 N

NORTHING: 5558649

LONGITUDE: 118 30 23 W

EASTING: 392426

ELEVATION: 800 Metres

LOCATION ACCURACY: Within 5 KM

COMMENTS: Location very approximate (Bulletin 28, symbol 168).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Recent

Glacial/Fluvial Gravels

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Monashee Creek Placer deposit is located on Monashee Creek, just south of Cherry Creek. Monashee Creek was previously known as the south fork of Cherry Creek (082LSE013) and there is possibly some confusion between the placer activity on these two creeks.

In 1932, several placer miners were working along Monashee Creek and they reported small recoveries. In 1940 and 1941, mining of gold-bearing gravel in an old channel below the creek bed took place.

Bedrock in this area comprises volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group.

Gravels from this creek are reported to have produced 6749 grams of gold (217 ounces) during the period from 1936 to 1945 (Bulletin 28, page 63). The gold from Monashee Creek and Cherry Creek has a low fineness (695.5 to 700.0).

BIBLIOGRAPHY

EMPR AR 1932-144; 1940-97; 1941-91
EMPR BULL *28, pp. 62-63
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G; 8501G
GSC MEM 296, p. 138
GSC OF 637; 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1994/11/14
DATE REVISED: 1994/12/15

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE060**

NATIONAL MINERAL INVENTORY:

NAME(S): **PITA 2**, PITA 9, PITA 1,
PITA 1-9, PITA, AIM

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 09 07 N
LONGITUDE: 118 32 57 W
ELEVATION: 1630 Metres

NORTHING: 5556674
EASTING: 389328

LOCATION ACCURACY: Within 500M

COMMENTS: Location of galena showing on Pita 2, trench C8 (Assessment Report 13353).

COMMODITIES: Lead Copper Magnetite

MINERALS

SIGNIFICANT: Galena Pyrite Magnetite Chalcopyrite
COMMENTS: Possibly sphalerite.
ASSOCIATED: Quartz
ALTERATION: Limonite Epidote Garnet Silica
ALTERATION TYPE: Oxidation Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn
TYPE: K02 Pb-Zn skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Jurassic	Harper Ranch	Undefined Formation	Nelson Intrusions

LITHOLOGY: Limestone
Diorite
Argillite
Sandstone
Conglomerate
Andesite
Tuff
Skarn

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Pita 2 showing is located about 50 kilometres southeast of Vernon in the Monashee mountains. Crown grants south and adjacent to the Pita 2 showing cover the Monashee mine (082LSE001). Minor placer workings are located on Heckman and Monashee creeks.

The Pita claims were staked in 1981 and purchased by Mohawk Oil Co. who conducted geological and geochemical surveys. In 1983, VLF-EM and magnetic surveys, geological mapping, prospecting and trenching were completed. In 1984, a program of prospecting and induced polarization was conducted. In 1986, a geochemical survey was conducted on the Aim property, which covered the Pita 9 claim, by Searchlight Resources Inc. In 1986, geochemical sampling, geological mapping, prospecting and magnetometer and VLF-EM surveys were completed. In 1987, prospecting and geochemical sampling was completed. In 1988, a drilling program consisting of 3 drillholes was conducted on the central gossan zone on the Pita 1 claim. In 1988, geological mapping and soil sampling were completed on the Pita 2 and 5 claims.

The area is underlain by Devonian to Triassic Harper Ranch Group sedimentary and volcanic rocks which have been intruded to the south by granitic rocks of the Jurassic Nelson Intrusions. These are overlain by Miocene Chilcotin Group basalts.

The local area is underlain primarily by locally folded black argillite, limestone, conglomerate, sandstone, andesite, tuffs and diorite. Skarn is locally developed at limestone-diorite contacts. Disseminated pyrite occurs along shears in altered andesite, in

CAPSULE GEOLOGY

argillite and in quartz veinlets in argillite.

Near the northeastern boundary of the Pita 2 claim, galena, pyrite, epidote, garnet, limonite and quartz occur in limestone near its contact with diorite. Magnetite occurs in the diorite. About 500 metres to the south, trench C7 exposed pyrite and chalcopyrite in andesite and diorite. Trench C7 is also plotted as being on the Pita 9 claim, so there is some confusion about where the trenches were. However, a program on the Pita 9 claim in 1986 makes no mention of a trench.

A gossan zone occurs near the centre of the boundary between the Pita 1 and 7 claims. This gossan gave anomalous geochemical and geophysical results and was drilled in 1988. Only disseminated pyrite was intersected and the results were disappointing. A grab sample taken from the L1 trench, just southeast of the gossan, assayed 0.195 gram per tonne gold and a 15 centimetre chip sample assayed 2.5 grams per tonne silver (Assessment Report 13353). These are some of the best results from the trenching program.

BIBLIOGRAPHY

EMPR ASS RPT 10200, *13353, 13500, 13701, 14451, 15461, 15878, 16660, 16668, 18030, 18071
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514; 1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR PF (Approach Resources Inc., Prospectus, 1987)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637
GSC P 91-2, pp. 115-135

DATE CODED: 1994/12/06
DATE REVISED: 1994/12/06

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE061**

NATIONAL MINERAL INVENTORY:

NAME(S): **PITA 29**, PITA

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 06 07 N
LONGITUDE: 118 30 58 W
ELEVATION: 1215 Metres

NORTHING: 5551066
EASTING: 391577

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sampled quartz vein (Assessment Report 16668).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 1 Metres
COMMENTS: The vein is 91 centimetres wide.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Nelson Intrusions
Jurassic			

LITHOLOGY: Diorite
Limestone
Argillite
Sandstone
Conglomerate
Andesite
Tuff

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic. The hostrock is not known, but the area has been mapped as Nelson Intrusions.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Gold
GRADE: 0.5900 Grams per tonne

YEAR: 1987

COMMENTS: Sample across 91 centimetres of a pyritic, rusty quartz vein.
REFERENCE: Assessment Report 16668.

CAPSULE GEOLOGY

The Pita 29 showing is located about 55 kilometres southeast of Vernon in the Monashee mountains. The Monashee mine (082LSE001) is located to the north and the Top deposit (082LSE017) adjoins it to the south. Minor placer workings are located on Heckman and Monashee creeks.

The Pita 29 claim was staked in 1987 by Approach Resources who completed initial prospecting and geochemical sampling.

The area is underlain by granitic rocks of the Jurassic Nelson Intrusions which have intruded Devonian to Triassic Harper Ranch Group sedimentary and volcanic rocks. These comprise limestone, argillite, sandstone, conglomerate, andesite and tuff.

A 91 centimetre wide pyritic, rusty quartz vein occurs near the centre of the claim. A 91-centimetre chip sample assayed 0.59 gram per tonne gold (Assessment Report 16668).

BIBLIOGRAPHY

EMPR ASS RPT 15878, 16660, *16668
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 292
REPORT: RGEN0100

BIBLIOGRAPHY

1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR PF (See 082LSE060 - Approach Resources Prospectus, 1987)
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637
GSC P 91-2, pp. 115-135

DATE CODED: 1994/12/06
DATE REVISED: 1994/12/06

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE062**

NATIONAL MINERAL INVENTORY:

NAME(S): **COAL 1**, COAL 1-3

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 05 51 N
LONGITUDE: 118 42 21 W
ELEVATION: 1667 Metres

NORTHING: 5550865
EASTING: 377999

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein on Coal 1 claim (Assessment Report 6983).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
DIMENSION: 1 Metres
COMMENTS: Vein is 1 metre wide.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Miocene
Jurassic

GROUP
Chilcotin

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY: Granodiorite
Basalt
Volcaniclastic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Coal 1 showing is located 26 kilometres southeast of Lumby and 45 kilometres east-southeast of Vernon.

The property was acquired in 1977 by Union Oil to explore for uranium. In 1977, radiometric and magnetic surveys were done. In 1978, geology, geochemistry and further radiometric and magnetic surveys were completed.

The area is underlain by granodiorite of the Jurassic Nelson Intrusions. These are overlain by plateau basalts with intercalated volcaniclastics of the Miocene Chilcotin Group.

A 1-metre quartz vein occurs in granodiorite near a shear zone. The vein contains traces of fine-grained molybdenite. About 500 metres to the southwest, an outcrop of chloritic, sheared and altered granodiorite contains disseminated pyrite.

BIBLIOGRAPHY

EMPR ASS RPT 6683, *6983
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637
GSC P 91-2, pp. 115-135

DATE CODED: 1994/12/09
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE063**

NATIONAL MINERAL INVENTORY:

NAME(S): **MIDNIGHT NAILS 1-2**, REB, HILTON,
SNAFU, CARRYON

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:
LATITUDE: 50 12 15 N
LONGITUDE: 118 34 01 W
ELEVATION: 754 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Quartz vein near centre of Midnight Nails 1-2 claims (Assessment Report 11892).

Underground
MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5562506
EASTING: 388180

COMMODITIES: Gold Silver Lead Zinc

MINERALS

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

DEPOSIT

CHARACTER: Vein Shear Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Argillite
Shale
Lamprophyre Dike
Felsite Dike
Volcanic Sill
Lamprophyre Sill
Lamprophyre
Greywacke
Andesite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: TRENCH
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY
YEAR: 1988

COMMODITY	GRADE	
Silver	76.1000	Grams per tonne
Gold	20.5000	Grams per tonne
Lead	1.0500	Per cent

COMMENTS: Highest values from samples of the Cherry shear zone, over 90 metres, where no quartz veins are present.
REFERENCE: Assessment Report 18706.

CAPSULE GEOLOGY

The Midnight Nails 1-2 showing is located 9.5 kilometres east of Cherryville, just south of Hilton on the east side of Highway 6 underneath the powerlines. The claims were previously staked as the Reb claims but no work was reported. In 1980, a soil sampling and prospecting program was conducted on the claims which were later staked as the Carryon and Snafu claims. In 1983, geological mapping, a VLF-EM survey and 1 trench were completed. In 1986, a geophysical survey was done on the claims. In 1987, geological prospecting and sampling was conducted on the claims, now called the Hilton property. In 1988, a program of geological mapping, soil sampling, geophysics and trenching was completed.

CAPSULE GEOLOGY

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise andesite lava and tuffs with minor argillite, greywacke, quartzite and limestone interbeds.

The Bulldozer Trench showing, discovered in 1980, was exposed by a trench in 1983 which was expanded in 1988. Discontinuous quartz veins occur in shears. There are 2 mineralized shear zones in the Bulldozer trench, the Cherry and Hilton shears. The veins are hosted in laminated shale and argillite which has been intruded by silicified volcanic sills and felsite dikes. The Cherry shear strikes 090 degrees and dips 40 degrees south. Mineralized pods occur near a lamprophyre dike and sill and contain small amounts of galena; samples assay up to 158 grams per tonne gold and 1251 grams per tonne silver (Assessment Report 11892). Samples from the vein in the Cherry shear assayed up to 2.16 grams per tonne gold and 0.9 gram per tonne silver over 1 metre (Assessment Report 18706). Samples from discontinuous quartz veins in the Hilton shear assayed up to 0.42 gram per tonne gold and 0.7 gram per tonne silver over 40 centimetres (Assessment Report 18706). Samples of the Cherry shear where no quartz veining is present assayed up to 20 grams per tonne gold, 1.05 per cent lead and 76 grams per tonne silver over 90 metres (Assessment Report 18706). Samples of the Hilton shear where no quartz veining is present assayed up to 0.77 gram per tonne gold and 1.9 grams per tonne silver over 1 metre (Assessment Report 18706). Disseminated pyrite occurs in the argillite-greywacke adjacent to the shears. Both shears are open along strike and downdip.

The dike and sill are highly altered, iron rich and contain 2 to 5 per cent biotite. A sample assayed 4.2 per cent lead, 1.86 per cent zinc, 42.2 grams per tonne gold and 212.5 grams per tonne silver (Assessment Report 11892). The dike is about 4 metres wide and trends 248 degrees.

The number 1 showing, called the second showing in 1988, is located about 300 metres northwest of the Bulldozer Trench vein. This showing comprises quartz veins, 5 to 10 centimetres wide, which are exposed in an outcrop of shale and argillite containing chert bands. The veins are discontinuous, often breaking up in the soft, sheared sediment host. A sample taken across rusty silicified shale and quartz vein material assayed 0.2 gram per tonne gold, 9.6 grams per tonne silver, 0.3 per cent lead and 0.04 per cent zinc (Assessment Report 17386). The wallrock contains high values in gold and silver. Small lenses of quartz occur within the shales and argillites. The lenses range up to 1.5 metres in length and 0.5 metre in width. The sediments are unaltered, strike northwesterly and dip 48 to 54 degrees south.

The number 2 showing is 300 metres northwest of the number 1 showing. An outcrop of sheared and altered shale contains disseminated pyrite. Silicified volcanic sills occur along bedding planes which strike 100 degrees and dip 60 degrees south. A 1.2 metre wide quartz vein containing 2 to 3 per cent pyrite assayed low in all metals.

The number 3 showing is 250 metres northwest of showing number 2. Exposed volcanic feldspar porphyry (lamprophyre) contains over 5 per cent biotite and is mineralized with disseminated pyrite. A sample across 60 centimetres of this zone assayed 0.14 gram per tonne gold and greater than 0.2 per cent arsenic (Assessment Report 17386).

BIBLIOGRAPHY

EMPR ASS RPT 8770, 8993, *11892, 14825, *17386, 18706
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637
GSC P 91-2, pp. 115-135

DATE CODED: 1994/12/09
DATE REVISED: 1995/01/06

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE064**

NATIONAL MINERAL INVENTORY:

NAME(S): **DIONNE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 26 04 N
LONGITUDE: 118 31 51 W
ELEVATION: 671 Metres

NORTHING: 5588056
EASTING: 391284

LOCATION ACCURACY: Within 500M

COMMENTS: Approximate location of rock chip sample containing sulphides
(Assessment Report 22524).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Pyrite

ASSOCIATED: Muscovite

ALTERATION: Silica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Kootenay Assemblage

LITHOLOGY: Siliceous Rock
Gneiss
Schist
Pegmatite
Quartzite
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Dionne showing is located near Sugar Lake on the south side of Sprockton Creek, about 37 kilometres northeast of Lumby.

In 1992, a prospecting and sampling program was conducted on the Dionne claim.

The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. These comprise gneiss, schist, pegmatite, quartzite and marble.

An outcrop contains pegmatite bands and a siliceous rock unit in gneiss. The siliceous material contains fine pyrrhotite and lesser amounts of pyrite or chalcopyrite. Assay values from a rock chip sample of this outcrop were low in base and precious metals (Assessment Report 22524). The pegmatite contains books of muscovite up to about 1 centimetre in size.

BIBLIOGRAPHY

EMPR ASS RPT *22524
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM 296
GSC OF 637

DATE CODED: 1994/12/14
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE065**

NATIONAL MINERAL INVENTORY:

NAME(S): **B.S. 3**, BS 3, SADDLE,
SADDLE MOUNTAIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07W 082L02W
BC MAP:
LATITUDE: 50 15 53 N
LONGITUDE: 118 56 12 W
ELEVATION: 610 Metres

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5569859
EASTING: 361973

LOCATION ACCURACY: Within 500M
COMMENTS: Approximate location of veins at the west-central boundary of the
B.S. 3 claim (Assessment Report 22556).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Chalcopyrite Bornite
Covellite Pyrrhotite
ASSOCIATED: Quartz Graphite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Calcareous Meta Sediment/Sedimentary
Granodiorite
Tuff
Argillite
Siltstone
Shale
Schist
Limestone
Conglomerate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1993
SAMPLE TYPE: Grab

COMMODITY	GRADE	
Silver	8.0000	Grams per tonne
Gold	14.0000	Grams per tonne

COMMENTS: Highest values from a sample of the veins. Another sample assayed
greater than 1 per cent lead and 1 per cent zinc.

REFERENCE: Assessment Report 22556.

CAPSULE GEOLOGY

The B.S. 3 showing is located adjacent to the Lumby (Chaput) deposit (082LSE006), about 1.7 kilometres east of Lumby.

In 1987, Zicton Gold acquired the claim and conducted geological and geophysical surveys. In 1988, a geophysical survey was conducted. In 1989, a diamond drillhole and sampling were completed. In 1991, geological and VLF-EM surveys and one diamond drillhole were completed. In 1990, a diamond drillhole at the northeastern corner of B.S. 3 was completed. In 1992, geological mapping and geophysical surveys were conducted on the B.S. 3 and Hol 1-4 claims. In 1993, geological mapping and rock and soil sampling were completed on these claims.

The area is underlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These comprise primarily

CAPSULE GEOLOGY

argillite and tuff but include siltstone, limestone, shale, conglomerate and schist.

Veins occur in metasedimentary rocks near the highly altered contact with granodiorite.

An outcrop, 200 metres long, is exposed in a roadcut. The eastern 100 metre portion of the outcrop is on the B.S. 3 claim. The outcrop consists of bleached, sericitized, calcareous metasediments cut by three pyritic, sulphide-bearing quartz veins (Samples D-92-10, 11, 12). Altered granodiorite occurs at the extreme east end of the outcrop.

The quartz veins contain 1 to 2 per cent cubic pyrite (locally up to 10 per cent) with up to 1 per cent galena, up to 1 per cent sphalerite, trace copper sulphides (chalcopyrite, bornite, covellite) and up to 1 or 2 per cent graphite. These discordant quartz veins trend east-northeast to west-northwest and are likely in a stockwork system. The best sample assayed 14.0 grams per tonne gold and 8.0 grams per tonne silver (Assessment Report 22556). Another sample assayed greater than 1 per cent lead and 1 per cent zinc (Assessment Report 22556).

Drilling in 1989 and 1990 intersected disseminated pyrite and pyrrhotite in fractures, stringers and veinlets in tuff and argillite. Samples taken in 1994 assayed 0.08 to 0.25 gram per tonne gold (George Cross Newsletter No. 61, 1994).

BIBLIOGRAPHY

EMPR ASS RPT 16349, 17816, 18978, 20385, 21560, *22556, 22937, 23337, 23591
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM 296
GSC OF 637
GCNL #61, 1994
Placer Dome File

DATE CODED: 1994/12/14
DATE REVISED: 1994/12/14

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE066**

NATIONAL MINERAL INVENTORY:

NAME(S): **ECHO II**, CREIGHTON CREEK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 10 26 N
LONGITUDE: 118 43 10 W
ELEVATION: 1372 Metres

NORTHING: 5559380
EASTING: 377221

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample LES-115 (Assessment Report 16413).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Pyrite
ALTERATION: Silica Limonite Clay
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Kootenay Assemblage

LITHOLOGY: Mica Schist
Phyllite
Amphibolite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1987
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		1.3000	Grams per tonne
Gold		1.0800	Grams per tonne

COMMENTS: Highest values from a sample of silicified and pyritic outcrop.
REFERENCE: Assessment Report 16413.

CAPSULE GEOLOGY

The Echo II showing is located on the north side of Bonneau Creek, about 40 kilometres east-southeast of Vernon. The claims were staked in 1982 and work in 1983, 1984 and 1987 identified geochemically anomalous areas and located zones of altered and silicified outcrop. In 1988, a silicified and pyritic outcrop was discovered during geological mapping, prospecting and geophysics. The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage. Locally, these comprise primarily schistose rock but include phyllite, amphibolite and limestone. A 40 centimetre wide zone of silicified mica schist occurs within an 18 metre wide outcrop of fractured clay-rich and limonitic schist. A sample taken from this zone assayed 1.3 grams per tonne silver and 1.08 grams per tonne gold (Sample LES-115, Assesment Report 16413). Other samples assayed between 0.001 and 0.009 gram per tonne gold (Assesment Report 16413).

BIBLIOGRAPHY

EMPR ASS RPT 11718, 11814, 13360, *16413, 17041, 17157, 18350, 18351
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1990-30; 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 300
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637
GSC P 91-2, pp. 115-135

DATE CODED: 1994/12/14
DATE REVISED: 1994/12/15

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE067**

NATIONAL MINERAL INVENTORY:

NAME(S): **OK**, HAZ 5, DEAFIES CREEK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07W 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 39 N
LONGITUDE: 118 59 21 W
ELEVATION: 1100 Metres

NORTHING: 5575084
EASTING: 358369

LOCATION ACCURACY: Within 500M

COMMENTS: Location of diamond-drill hole Z90-2 on the OK claim (Assessment Report 22954).

COMMODITIES: Copper Zinc Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Arsenopyrite Sphalerite

Bornite Covellite
ALTERATION: Malachite Limonite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein Shear

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic
Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY: Argillite
Slate
Greywacke
Granodiorite
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1989

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Copper

0.6500

Per cent

COMMENTS: Best drill hole intersection across 1.5 metres of black argillite with pyrite. Also 0.1 gram per tonne silver.

REFERENCE: Assessment Report 18932.

CAPSULE GEOLOGY

The OK showing is located about 6 kilometres north of Lumby and 4 kilometres north of the Lumby (Chaput) deposit (082LSE006).

The Haz 5 claim was staked in 1984 and the OK claim was staked in 1985. These were optioned to Zicton Gold Ltd. in 1989 and they explored the claims and stripped a mineralized shear zone on the OK claim. In 1989 and 1990, 2 diamond drillholes were completed on the OK claim. In 1991, mapping and prospecting were conducted on the claims. In 1992, mapping and geophysical surveys were completed around the main shear. In 1993, a soil survey was conducted over the area and the northern part of the property was mapped.

The area is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. Locally, these comprise argillite, slates and greywacke and intruded by granodiorite of the Jurassic Nelson Intrusions. The bedding strikes east-southeast and dips shallowly.

A shear was stripped for 26 metres along strike. A 1-metre wide zone of rusty gouge, vein quartz and massive sulphides was exposed. The shear strikes 255 degrees and is approximately vertical. Mineralization consists of pyrite, limonite, chalcopyrite,

CAPSULE GEOLOGY

arsenopyrite and sphalerite.

The 1989 drillhole on the shear zone intersected quartz veins with pyrite and disseminated sulphides in black argillite and, to a lesser degree, tuff. The best intersection, across 1.5 metres, assayed 0.65 gram per tonne gold and 0.1 gram per tonne silver from black argillite with pyrite (DDH OK89-1, Assessment Report 18932). The 1990 drillhole, about 49 metres from the 1989 hole, intersected traces of pyrite, pyrrhotite and chalcopyrite in quartz stringers and argillite (DDH Z90-2, Assessment Report 20363).

In 1991, a shallow trench followed the contact between argillite and granodiorite marked by shearing and quartz veining. This contact strikes 040 degrees, dips subvertically and is undulating. The veins are gossanous, weakly calcareous and contain trace fracture-related pyrite and chalcopyrite. These contain up to 0.0089 per cent copper, 0.0012 per cent lead and 0.0102 per cent zinc (Assessment Report 21561). The wallrock argillite is gossanous, calcareous, sheared, occasionally brecciated and weakly magnetic (due to pyrrhotite). The argillite contains 2 to 3 per cent pyrite, 1 to 2 per cent chalcopyrite, 1 per cent pyrrhotite, trace bornite, trace covellite, trace malachite and possibly trace native copper. Samples of the argillite assayed up to 0.035 gram per tonne gold, 0.0853 per cent copper, 0.0030 per cent lead, 0.0164 per cent zinc and more than 15 per cent iron (Assessment Report 22554).

Mapping in 1993 failed to find economic mineralization in the main trench (Assessment Report 22954).

BIBLIOGRAPHY

EMPR ASS RPT *18932, 20363, 21561, *22554, *22954, 23421
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1990-30
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8502G
GSC MEM 296
GSC OF 637

DATE CODED: 1994/12/14
DATE REVISED: 1994/12/15

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE068**

NATIONAL MINERAL INVENTORY:

NAME(S): **BONNE 1**, CREIGHTON CREEK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 09 35 N
LONGITUDE: 118 40 37 W
ELEVATION: 1450 Metres

NORTHING: 5557736
EASTING: 380220

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample LES-158 (Assessment Report 16413).

COMMODITIES: Gold Silver

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Nelson Intrusions
Jurassic			

LITHOLOGY: Limestone
Schist
Granite
Phyllite
Amphibolite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY

YEAR: 1988

COMMODITY	GRADE	
Silver	31.6000	Grams per tonne
Gold	0.5300	Grams per tonne

COMMENTS: Sample from quartz vein.
REFERENCE: Assessment Report 16413.

CAPSULE GEOLOGY

The Bonne 1 showing is located on the south side of Bonneau Creek, about 43 kilometres east-southeast of Vernon. The claims were staked in 1982 and work in 1983, 1984 and 1987 identified geochemically anomalous areas and located zones of altered and silicified outcrop. In 1988, a silicified and pyritic outcrop was discovered during geological mapping, prospecting and geophysics. The area is underlain by sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. In the area of the showing these comprise primarily schistose rock but include phyllite, amphibolite and limestone. These have been intruded by granitic rocks of the Jurassic Nelson intrusions. Quartz veins occur in limestone south of Bonneau Creek on the Bonne 1 claim, about 3.3 kilometres southeast of the Echo II showing (082LSE066). A sample assayed 31.6 grams per tonne silver and 0.53 gram per tonne gold (Sample LES-158, Assessment Report 16413); another sample yielded elevated arsenic values ((Sample LES-204, Assessment Report 16413). The veins occur near the contact with intrusive rocks.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 304
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 11718, 11814, 13360, *16413, 17041, 17157, 18350, 18351
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58, 401-404, 511-514;
1988, pp. 49-54; 1990, pp. 301-306; 1991, pp. 319-323;
1992, pp. 255-257
EMPR OF 1990-30; 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8501G
GSC MEM 296
GSC OF 637
GSC P 91-2, pp. 115-135

DATE CODED: 1994/12/14
DATE REVISED: 1994/12/15

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE069**

NATIONAL MINERAL INVENTORY:

NAME(S): **PUTNAM CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L07W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 23 30 N
LONGITUDE: 118 57 28 W
ELEVATION: 1000 Metres

NORTHING: 5584011
EASTING: 360840

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence #256 (Geological Survey of Canada Open File 637).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Gravel
Sand

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Putnam Creek deposit is located on Putnam Creek, about 8 kilometres north of Lumby.

Bedrock in the area comprises volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. These have been intruded by granitic rocks of the Jurassic Nelson Intrusions.

Gravels in the vicinity of this creek are extensive. Gold is sparse in the surface slaty gravels, but is reported to be more abundant in the underlying reddish gravels of schistose and gneissic materials. The gold is heavy, well-rounded and is associated with black sand. "Interesting" values were reported from several shallow pits.

In 1936, 155 grams of gold is recorded as production from Putnam Creek (Bulletin 28, page 63).

No other information is available.

BIBLIOGRAPHY

EMPR AR 1936-D48
EMPR BULL *28, pp. 62-63
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM *296, p. 138
GSC OF *637(#256); 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/20

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE070**

NATIONAL MINERAL INVENTORY:

NAME(S): **AMF**, AMF 3

MINING DIVISION: Slocan

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L08E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 26 33 N
LONGITUDE: 118 00 52 W
ELEVATION: 1128 Metres

NORTHING: 5588323
EASTING: 427968

LOCATION ACCURACY: Within 500M

COMMENTS: Location of sample 387-9 (Assessment Report 20539).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Bornite
ALTERATION: Silica Chlorite
ALTERATION TYPE: Silicific'n Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Kootenay Assemblage

LITHOLOGY: Amphibolite
Quartz Monzonite
Pegmatite
Schist
Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Monashee Mountains

CAPSULE GEOLOGY

The AMF showing is located on the northwest side of Upper Arrow Lake about 56 kilometres south of Revelstoke, southeast of and adjoining the Big Ledge property (082LSE012).

The claims were staked in 1989 and in 1990; geological mapping and geochemical and geophysical surveys were conducted.

The area is underlain by metamorphic rocks of the Proterozoic to Paleozoic Kootenay Assemblage near the southern contact of the Thor-Odin gneiss dome. Locally, the metamorphic rocks comprise rusty-weathering schists, gneisses and amphibolites.

The metamorphic rocks contain various concentrations of disseminated pyrrhotite and/or pyrite and often minor amounts of chalcopyrite and/or bornite. Mineralized zones commonly exhibit strong chloritization.

A silicified amphibolite overlain by pegmatites and leucocratic, lined quartz monzonite occurs along the eastern claim boundary. The dark green amphibolite hosts semi-massive chalcopyrite, bornite, pyrite and pyrrhotite. A sample of silicified amphibolite containing 10 to 15 per cent chalcopyrite, bornite, pyrite and pyrrhotite assayed 1 gram per tonne silver, 0.0991 per cent copper and 8.06 per cent iron (#387-9, Assessment Report 20539).

About 3 kilometres to the northwest another chalcopyrite showing was not assayed. It is believed that these showings indicate the downdip extension of the Big Ledge horizon.

BIBLIOGRAPHY

EMPR ASS RPT *20539
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1988-26; 1990-30
EMPR RGS 082L, 1976; 32, 1991
GSC BULL *195
GSC MAP 7216G; 8492G
GSC MEM 296
GSC OF 637; 658
GSC P 64-1; 65-1; 91-2, pp. 115-135

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 307
REPORT: RGEN0100

BIBLIOGRAPHY

Abraham, B. (1967): Metamorphic Petrology of the Big Ledge Property,
near Upper Arrow Lake, British Columbia; BSc. thesis, University
of British Columbia, Vancouver, British Columbia, 60 pages
CJES Vol. 26, No. 2

DATE CODED: 1994/12/28
DATE REVISED: 1994/12/28

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE071**

NATIONAL MINERAL INVENTORY:

NAME(S): **PUTNAM**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 22 40 N
LONGITUDE: 118 57 55 W
ELEVATION: 1036 Metres

NORTHING: 5582481
EASTING: 360266

LOCATION ACCURACY: Within 500M

COMMENTS: Location of quartz vein containing galena (Assessment Report 13311).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz Calcite
ALTERATION: Pyrite
ALTERATION TYPE: Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Gneiss
Argillite
Phyllite
Siltstone
Andesite
Greenstone
Granodiorite
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The Putnam showing is located south of Putnam Creek, about 15 kilometres north of Lumby.

In 1984, a regional reconnaissance geochemical survey was carried out by Brican Resources. In 1985, detailed geological and geochemical evaluations were conducted.

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise banded quartzite/gneiss, argillite, phyllite with interbedded siltstone and quartzite, augite andesite, greenstone which are intruded by granodiorite and aplite dikes.

A main fault zone trends northwest across the northeastern corner of the property. Augite andesite within the fault zone has been sheared, bleached and pyritized.

Quartz and quartz calcite veins are associated with other faults and fault zones on the property. A vein in the southwestern corner of the property contains minor amounts of galena. Rock samples from the property assayed low in gold and silver (Assessment Report 13311).

BIBLIOGRAPHY

EMPR ASS RPT *13311
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296
GSC OF 637; 658
GSC P 91-2, pp. 115-135

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 309
REPORT: RGEN0100

BIBLIOGRAPHY

CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSE072**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRIAN, LARRY**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 23 31 N
LONGITUDE: 118 56 07 W
ELEVATION: 790 Metres

NORTHING: 5584000
EASTING: 362440

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond drillhole TV 1 (Assessment Report 13660).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Pyrite Graphite Calcite
ALTERATION: Pyrite Graphite
ALTERATION TYPE: Oxidation Pyrite
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>
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Phyllite
Schist
Graphitic Phyllite
Pyritic Phyllite
Tuffaceous Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Gold

2.4900

Grams per tonne

COMMENTS: Drill intersection, 60 centimetres, of tuffaceous phyllite containing calcite veins.

REFERENCE: Assessment Report 13660.

CAPSULE GEOLOGY

The Brian showing is located south of Putnam Creek, just west of Trinity Valley and about 17 kilometres north of Lumby.

In 1985, mapping, sampling and 1 diamond drillhole were completed.

The area is underlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group. Locally, these comprise phyllite and schist.

Rusty weathering exposures of graphitic and pyritic phyllites and schists on the west side of Trinity Valley road were sampled. Several selected grab samples of the more gossanous material assayed up to 3 grams per tonne gold (Assessment Report 13660).

The diamond drillhole intersected black, tuffaceous phyllite containing calcite veins. One 60 centimetre intersection assayed 2.49 grams per tonne gold (Assessment Report 13660).

BIBLIOGRAPHY

EMPR ASS RPT *13660
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54; 1992, pp. 255-257
EMPR OF 1991-18; 1994-8
EMPR RGS 082L, 1976; 32, 1991
GSC MAP 7216G; 8491G
GSC MEM 296

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 311
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637; 658
GSC P 91-2, pp. 115-135
CJES Vol. 26, No. 2

DATE CODED: 1985/07/24
DATE REVISED: 1994/12/28

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW001**

NATIONAL MINERAL INVENTORY: 082L3 Fsp1

NAME(S): **GREEN GABLES MAIN**, WHITEMAN CREEK FLUORITE, BURSARY MOUNTAIN FLUORITE,
VIEW GROUP, LAKEVIEW, FLUORITE,
SPARITE, SPAR, JAC,
AH, QUARTZ REEF, REEF,
WHITE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:
LATITUDE: 50 12 44 N
LONGITUDE: 119 28 51 W
ELEVATION: 560 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: The main showings (Assessment Report 3393).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5565172
EASTING: 323000

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite
ASSOCIATED: Quartz
ALTERATION: Silica Kaolin Limonite
ALTERATION TYPE: Silicific'n Argillic Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I11 Barite-fluorite veins
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Quartz Monzonite
Feldspar Porphyry Dike

HOSTROCK COMMENTS: Quartz monzonite of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Green Gables Main showing is located 16 kilometres west-southwest of Vernon, between lower Whiteman Creek and Okanagan Lake.

In the area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Feldspar porphyry dikes, of possible Tertiary age, cut the granitic rocks. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Middle Jurassic quartz monzonite and, to a much lesser degree, later feldspar porphyry dikes host fluorite mineralization. Silica and clay alteration of the intrusive rocks, along with iron and manganese staining, has occurred in zones of fracturing. In the altered zones, fluorite occurs as: lenses and irregular masses in irregular, drusy quartz veins; thin veins; and as films on fracture planes. The fracture-fillings and veins generally range from 1 to 10 centimetres thick. The coarsely crystalline fluorite is usually pale green with occasional white, yellow or purple varieties. The showings seem to be associated with a general north-south fracture zone. Fluorite masses, up to 25 by 45 centimetres, are reported.

In 1963-64, trenching was carried out on the property. In 1966, Canex Aerial Exploration Ltd. carried out trenching and drilling. In 1968, Kelter Mines Ltd. conducted geological mapping, trenching and drilling and Cerro Mining Company of Canada Ltd. conducted geological mapping and a hydro-geochemical survey in 1971. The general area was explored for gold mineralization in the 1980s.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 313
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1947-212; 1954-65; *1966-265,266; *1967-303,304,305;
1968-299,300
EMPR ASS RPT *3393, *14308, 18736
EMPR EXPL 1985-C88,89
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363,
*479
EMPR GEM 1971-461
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30, *1992-16, p. 41
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GCNL #124, 1992

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW002**

NATIONAL MINERAL INVENTORY:

NAME(S): **NOVA**, NOVA 2

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 53 N
LONGITUDE: 119 24 32 W
ELEVATION: 390 Metres

NORTHING: 5548606
EASTING: 327603

LOCATION ACCURACY: Within 500M

COMMENTS: Showing on the Nova 2 claim (Assessment Report 1208).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
ALTERATION: Clay
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Shear Disseminated Vein
CLASSIFICATION: Hydrothermal Porphyry
SHAPE: Irregular
MODIFIER: Fractured Sheared STRIKE/DIP: 070/ TREND/PLUNGE:
DIMENSION:
COMMENTS: Mineralized zone, 75 metres wide, dips moderately to the south.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coryell Intrusions
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Rhyolitic K-Feldspar Porphyry
Rhyolite Porphyry
Rhyolite

HOSTROCK COMMENTS: Spherulitic and miarolitic sub-volcanic porphyry intrudes granitic rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Plutonic Rocks Undivided Metamorphic Assembl.
COMMENTS: Occurrence is at the Intermontane/Omineca boundary.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1967
SAMPLE TYPE: Chip
COMMODITY GRADE
Molybdenum 0.0230 Per cent
COMMENTS: Chip sample is across 12 metres.
REFERENCE: Assessment Report 8922.

CAPSULE GEOLOGY

The Nova showing is located 25 kilometres southwest of Vernon on the west shore of Wood Lake.

A rhyolitic porphyry of the Eocene Coryell Intrusions intrudes Middle Jurassic porphyritic quartz monzonite of the informally named Terrace Creek batholith. Spherulitic and miarolitic textures in the porphyry indicate a high level of intrusion. These cut metamorphic rocks of the Shuswap Terrane and are overlain with patches of Penticton Group volcanic rocks. The Okanagan Valley fault zone is centered along Wood Lake.

The fine-grained, moderately fractured K-feldspar porphyry hosts Tertiary, possibly Eocene, molybdenum mineralization. Molybdenite and pyrite occur in fractures, shears and sheared quartz veinlets in argillized rhyolite. This mineralized zone is at least 75 metres wide and strikes 070 degrees with a moderate southerly dip. Assay values range from 0.56 per cent molybdenite over 0.9 metres to 0.023 per cent molybdenum over 12 metres (Assessment Report 8922).

In 1968, Agricola Mines Ltd. carried out geological mapping and

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 315
REPORT: RGEN0100

CAPSULE GEOLOGY

soil sampling.

BIBLIOGRAPHY

EMPR AR 1968-278
EMPR ASS RPT *1208, 1209, 1694, 1817, *8922
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-357
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW003**

NATIONAL MINERAL INVENTORY:

NAME(S): **TICK**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 04 04 N
LONGITUDE: 119 25 57 W
ELEVATION: 480 Metres

NORTHING: 5549001
EASTING: 325924

LOCATION ACCURACY: Within 500M
COMMENTS: Chip sample (Assessment Report 1694).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
MINERALIZATION AGE: Tertiary

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>
Eocene			Coryell Intrusions
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: K-Feldspar Porphyry
Rhyolitic Porphyry
Quartz Monzonite

HOSTROCK COMMENTS: Porphyry reported to intrude granitic rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks
COMMENTS: Near the Intermontane/Omineca boundary.

PHYSIOGRAPHIC AREA: Thompson Plateau
Undivided Metamorphic Assembl.

INVENTORY

ORE ZONE: SAMPLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
YEAR: 1968
COMMODITY: Molybdenum
GRADE: 0.0200
Per cent
COMMENTS: Grade is for molybdenite in a 5-metre sample.
REFERENCE: Assessment Report 1694.

CAPSULE GEOLOGY

The Tick showing is located 25 kilometres southwest of Vernon, between Wood and Okanagan lakes. Rhyolitic porphyry of the Eocene Coryell Intrusions intrudes Middle Jurassic porphyritic quartz monzonite of the informally named Terrace Creek batholith. Spherulitic and miarolitic textures in the porphyry indicate a high intrusion level. The intrusions cut metamorphic rocks of the Shuswap Terrane and are overlain with patches of volcanic rocks of the Eocene Penticton Group. The K-feldspar porphyry hosts Tertiary, possibly Eocene, molybdenum mineralization. A 5-metre chip sample assayed 0.02 per cent molybdenite (Assessment Report 1694). In 1968, Agricola Mines Ltd. carried out geological mapping and soil sampling.

BIBLIOGRAPHY

EMPR ASS RPT *1694
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-278
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1712A

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 317
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW004**

NATIONAL MINERAL INVENTORY: 082L6 Cu1

NAME(S): **GOODENOUGH CENTRAL, PORTEOUS, GALE,
COPPER KEY, QUEEN, SUPER,
NOVA, GEM, WIN ART,
BR, HUGAL, PHOENIX,
ROSSLAND, VIOLET, IRON QUEEN,
COPPER QUEEN**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:
LATITUDE: 50 18 28 N
LONGITUDE: 119 28 07 W
ELEVATION: 870 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of the workings area (Assessment Report 6404).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5575766
EASTING: 324224

COMMODITIES: Copper Gold Iron Lead

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite Bornite Chalcocite Galena
ASSOCIATED: Quartz Calcite Pyrite Hematite
ALTERATION: Epidote Chlorite
COMMENTS: Calc-silicates are associated with the mineralization.
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Paleozoic-Mesozoic

DEPOSIT

CHARACTER: Stratabound Massive Podiform Disseminated
CLASSIFICATION: Skarn
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: The mineralized zone is 1 to 7 metres thick.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Calc-silicate Skarn
Andesite Tuff
Volcaniclastic
Skarn
Cherty Tuff
Diorite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic. The plutonic rocks are informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: GRADE: Hornfels
Greenschist
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Gold 0.6000 Grams per tonne
Copper 0.6000 Per cent
COMMENTS: Highest values from drillcore samples. Copper value from 7 metre intersection.
REFERENCE: Assessment Report 18179.

CAPSULE GEOLOGY

The Goodenough Central prospect is located 15 kilometres west-northwest of Vernon, north of Naswhito Creek. In the area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of

CAPSULE GEOLOGY

the informally named Terrace Creek batholith. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Altered andesite tuff and cherty tuff of the Harper Ranch Group and diorite host copper, gold and iron mineralization. Most of the mineralization occurs in a calc-silicate altered andesite tuff and comprises stratabound massive to semi-massive lenses of magnetite with disseminated blebs of chalcopyrite and pyrite. Minor bornite, chalcocite, galena and hematite have also been reported. The mineralization, 1 to 7 metres thick, occurs in a tightly folded volcaniclastic horizon. Chlorite, epidote alteration and quartz-calcite veining are common.

Samples from the surface assayed up to 1.45 per cent copper over about 7 metres, although the average grade is significantly lower (Assessment Report 6404). Drill core samples assayed up to about 0.6 per cent copper over about 7 metres; the highest gold value from the skarn zone was 0.6 gram per tonne (Assessment Report 18179).

The diorite is commonly sericitized, silicified and, where proximal to the calc-silicate mineralization, hosts minor disseminated and veined pyrite and chalcopyrite. Copper mineralization is also present in chert or cherty volcaniclastic rocks.

The first reference to the deposit is from 1899; by 1904 there were 8 shafts with depths totalling 47 metres. In 1928-29, Okanagan Copper Co. completed 75 metres of underground workings.

In 1956, New Jersey Zinc Co. carried out a magnetometer survey and stripping. In 1962, Highland Valley Mining Corp. drilled the occurrence. In 1963-64, Empire Development Co. Ltd. conducted geological mapping, soil geochemistry, drilling and magnetometer and self-potential surveys.

In 1969-75, Hudson Bay Exploration and Development Co. Ltd. carried out an induced polarization survey and drilling. In 1977-78, Cominco Ltd. carried out geological mapping and magnetometer and induced magnetometer surveys.

In 1985-88, Brican Resources Ltd. conducted trenching and drilling programs.

BIBLIOGRAPHY

- EMPR AR 1899-746; 1900-886,887; 1902-189; *1904-228; 1905-192;
*1921-191; 1923-161; 1924-140; *1929-247; 1930-208; 1962-66,104
EMPR ASS RPT 2042, *6404, 6947, *18179
EMPR EXPL 1977-E80; 1978-E95; 1988-C56
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPL GEM 1969-299,357
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (Gaul, A.J. (1929): Report of Examination of Goodenough Group; Geological Plan of Workings and Drillholes, Cons. Woodgreen Mines Ltd., 1962; Drillhole sections, drillhole logs and assay plan Cons. Woodgreen Mines Ltd., 1963; In 082LSW General - Claim Map, 1966; Barker, R.M. (1990): Draft Property Description)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 144
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 91-92

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW005**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOBBIN**, ALFY, BEAR
 POP, CHARLIE, NIGHT OWL,
 BARD, DOBBIN COPPER, TAD 3,
 TAD 4, ALOCIN, FLIP

MINING DIVISION: Vernon

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082L04W
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 00 10 N
 LONGITUDE: 119 46 42 W
 ELEVATION: 1740 Metres

NORTHING: 5542639
 EASTING: 300910

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of the mineralized zone (Assessment Report 5568).

COMMODITIES: Copper Platinum Palladium Silver Molybdenum
 Iridium

MINERALS

SIGNIFICANT: Chalcopyrite Bornite Molybdenite Pyrite
 COMMENTS: Molybdenite is associated with a dike cutting the pyroxenite.
 ASSOCIATED: Magnetite Pyrite Epidote Albite Calcite
 ALTERATION: Chlorite Malachite Azurite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated Vein
 CLASSIFICATION: Porphyry
 TYPE: L03 Alkalic porphyry Cu-Au
 DIMENSION: 120 x 30 Metres STRIKE/DIP: TREND/PLUNGE:
 COMMENTS: Surface dimensions of the main showing.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Middle Jurassic			

LITHOLOGY: Pyroxenite
 Hornblende Pyroxenite
 Biotite Pyroxenite
 Hornblende Gabbro
 Monzonite
 Quartz Diorite Dike

HOSTROCK COMMENTS: Intrusive rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
 TERRANE: Plutonic Rocks Quesnel

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1997
 SAMPLE TYPE: Drill Core
 COMMODITY GRADE
 Copper 0.1900 Per cent
 Platinum 0.4100 Grams per tonne
 Palladium 0.3520 Grams per tonne
 COMMENTS: A 111-metre intersection.
 REFERENCE: GCNL #223 (Nov.20), 1997.

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1972
 SAMPLE TYPE: Drill Core
 COMMODITY GRADE
 Copper 0.3000 Per cent
 Palladium 0.2700 Grams per tonne
 Platinum 0.3900 Grams per tonne
 COMMENTS: Copper grade is from a 122-metre drill intersection.
 Platinum and palladium values are average of 6 rocks from 1977.
 REFERENCE: Assessment Reports 5341, 6732.

CAPSULE GEOLOGY

The Alfy prospect is located 24 kilometres northwest of Kelowna, west of Whiterocks Mountain.

The area is underlain by argillaceous rocks, basalt tuffs and flows, and minor rhyolite and limestone of the Devonian to Triassic Harper Ranch Group. These rocks are intruded by Middle Jurassic ultramafic/monzonite and calc-alkaline complexes of the informally named Terrace Creek batholith. The diverse ultramafic/monzonite complex comprises hornblende gabbro, quartz monzonite, mafic monzonite, porphyritic monzonite, biotite pyroxenite and hornblende pyroxenite.

At the prospect, a northeast-trending hornblende pyroxenite plug hosts alkaline porphyry-type mineralization consisting of copper, platinum, palladium and silver. Pyrite, magnetite and chalcopyrite occur as disseminations in pyroxenite and in epidote-albite veinlets in hornblende and biotite pyroxenites, gabbro and, to a lesser extent, monzonite. Bornite, malachite and azurite have been reported and chlorite alteration is present. The central pyroxenite-hosted mineralization covers a 120 by 30 metre area, with surrounding mineralization covering a 400 by 200 metre area. Pyrite and chalcopyrite mineralization in pyroxenite and gabbro also occurs 600 and 900 metres to the north.

Copper can average about 0.3 per cent over 100 metres with platinum and palladium averaging 0.3 to 0.4 gram per tonne in some rock samples (Assessment Report 5341, 6732). Low silver values of about 3 grams per tonne have been reported.

Molybdenite mineralization occurs in quartz veinlets and fractures in quartz diorite dikes which cut the ultramafic/monzonite complex.

The area was staked in 1967 by A. Brewer. In 1968, I. Greg and G. Shell drilled the property and Texas Gulf Sulphur drilled the northern showings. In 1969-70, Atlas Exploration carried out a program of geological mapping, soil geochemistry, drilling and magnetometer and induced polarization surveys. Geoquest Resources Ltd. drilled the property in 1972. In 1974-76, Rockel Mines Ltd. carried out geological mapping, trenching and drilling. Cominco carried out geological mapping, magnetometer, induced polarization and drill programs in 1977-79.

Verdstone Gold Corp. and Molycor Gold Corp. drilled the property in 1997. A 111-metre intersection assayed 0.19 per cent copper, 0.410 grams per tonne platinum and 0.352 grams per tonne palladium, within which was 15 metres of 0.54 per cent copper, 1.316 grams per tonne platinum and 0.949 grams per tonne palladium (GCNL #223 (Nov.20), 1997). A 9-metre composite sample from another hole assayed 0.11 grams per tonne iridium (Exploration in BC 1997, page 40).

BIBLIOGRAPHY

EM GEOFIL 2000-2; 2000-5
EMPR ASS RPT *2255, *5341, *5568, *6732, *7269, *8456, 17700, 18985, 20269, 20830, *25290
EMPR EXPL 1975-E52; 1976-E54,55; 1977-E79,80; 1978-E93; 1979-9,101
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363; 2000, pp. 191-222, 223-230
EMPR GEM 1969-300; 1970-406; 1974-89; 1997-40
EMPR MAP 5207G, 7216G
EMPR OF 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; Verdstone Gold Corporation Website (Feb. 2000): Dobbin PGM-Copper Project)
EMPR RGS 1976
GSC MAP 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GCNL #115(June 16), #137(Jul.17),#140(Jul.22),#144(Jul.28), #147(Jul.31), #150(Aug.6),#157(Aug.15),#160(Aug.20), #177(Sept.15),#181(Sept.21), #196(Oct.10), #216(Nov.10), #223(Nov.20), 1997; #214(Nov.8), 2000
PR REL Verdstone Gold Corporation, June 12, July 14, 20, Aug.1, 11, Sept. 10, Nov. 6, 18, 1997
WWW <http://www.verdstonegroup.com/verdstone>
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1997/08/27

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW006**

NATIONAL MINERAL INVENTORY:

NAME(S): **EIN**, SWEETBRIDGE, MO

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 26 22 N
LONGITUDE: 119 25 31 W
ELEVATION: 850 Metres

NORTHING: 5590303
EASTING: 327787

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of the claims, in an area of EM conductors (Assessment Report 1572).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite

ASSOCIATED: Pyrite

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Andesite
Hornblende Talc Schist
Phyllite
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Ein showing is located 22 kilometres northwest of Vernon, on the steep slopes south of the Salmon River.

In the area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact, to the north, with Cambro-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south, the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granodiorite plugs intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

Hornblende-talc schist, phyllite, argillite and andesite of the Nicola Group underlie the property. Some of these units host copper mineralization comprising pyrite and rare chalcopyrite.

In 1968-69, Noranda Exploration Co. Ltd. carried out electromagnetic, magnetometer and trenching programs. In 1981, Noranda conducted an airborne electromagnetic and magnetic survey.

BIBLIOGRAPHY

EMPR AR 1968-278
EMPR ASS RPT *1572, 10516
EMPR EXPL 1981-314
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-239
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 323
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW007**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLACK HAWK**, BLACKHAWK, PEOTCH,
BJ, AU

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:
LATITUDE: 50 25 22 N
LONGITUDE: 119 22 19 W
ELEVATION: 1100 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: The East showing (Assessment Report 2516).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5588328
EASTING: 331514

COMMODITIES: Gold Silver Zinc Copper Lead

MINERALS

SIGNIFICANT: Sphalerite Chalcopyrite Galena
ASSOCIATED: Quartz Calcite Arsenopyrite Pyrite Pyrrhotite
Ankerite
ALTERATION: Limonite Chlorite
ALTERATION TYPE: Oxidation Chloritic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Shear Breccia
CLASSIFICATION: Mesothermal
TYPE: I01 Au-quartz veins
SHAPE: Tabular
MODIFIER: Fractured Sheared
DIMENSION: 6 Metres STRIKE/DIP: 095/52S TREND/PLUNGE:
COMMENTS: Attitude of shear zone. The East Zone is 2 to 6 metres thick.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Andesitic Tuff
Hornblende Porphyry Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1976
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 12.1000 Grams per tonne
Gold 11.3000 Grams per tonne
COMMENTS: Average from channel samples (average sample width 2.2 metres).
REFERENCE: Property File - Gutrath, G., 1976.

CAPSULE GEOLOGY

The Black Hawk showing is located 19 kilometres north-northwest of Vernon, southwest of Spallumcheen Lake.

In the area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south, the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granodiorite plugs intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

A quartz-veined and brecciated shear zone within Nicola Group andesitic tuff and hornblende porphyry andesite hosts gold, silver, zinc, copper and lead mineralization. The shear zone strikes 095 degrees and dips 52 degrees south.

The East Showing, between 2 and 6 metres thick, has a general

CAPSULE GEOLOGY

east-west strike, a moderate southerly dip and is traceable on surface for about 45 metres. Mineralization includes fine-grained, disseminated to semi-massive pyrite, pyrrhotite, arsenopyrite, variable sphalerite and minor chalcopyrite and galena. Sulphide content averages about 15 per cent. Some shattered quartz-calcite veins also occur within the chloritized shear zone. The average assay from channel sampling was 11.3 grams per tonne gold and 12.1 grams per tonne silver across 2.2 metres (Property File - Gutrath, 1976).

The West Showing is about 350 metres to the west and has similar mineralization. A 1 to 2-metre thick quartz vein strikes easterly in sheared and altered volcanic rocks. The vein and adjacent country rock carry fine-grained, disseminated pyrite, arsenopyrite and chalcopyrite. A chip sample across 1.2 metres of sheared footwall assayed 16 grams per tonne gold (Property File - Gutrath, 1976). Samples from the vein assayed 0.7 to 1.03 grams per tonne gold (Property File - Gutrath, 1976). A quartz-ankerite vein in the vicinity of the West showing assayed 20.8 grams per tonne gold (George Cross Newsletter June 24, 1988).

The Quartz showing, whose location is uncertain but may be 300 metres west of the West showing, reported assays of 4.6 grams per tonne gold over 2 metres (George Cross Newsletter June 24, 1988). The showing is a 3-metre zone of quartz veining which includes a 1-metre thick fractured vein striking 140 degrees and dipping 80 degrees east. The zone, with sparse or absent sulphides, occurs in a 15 metre thick zone of ankeritic carbonate-altered volcanics.

By 1902, a 3-metre shaft and a 67-metre tunnel were completed. By 1919, 2 tunnels had been extended to 130 metres. In 1969, Coin Canyon Mines Ltd. conducted geological mapping, soil geochemistry and trenching programs. In 1973-87, Keda Resources Ltd. and its associated companies carried out geological mapping, soil geochemistry, trenching, VLF-EM and induced polarization surveys, trenching and drilling.

BIBLIOGRAPHY

- EMPR AR 1899-747; 1900-887; *1902-189; *1919-184; *1922-144,145;
1934-D34
EMPR ASS RPT *2516, *4797, 5863, *6197, *6732, *7837, *12237, *15093
EMPR EXPL 1976-E55; 1977-E80,81; 1979-104; 1983-147; 1986-C102
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-239; 1973-100
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR RGS 1976
EMPR PF (In 082LSW General - Claim Map, 1966; *Gutrath, G., (1976):
Report on the Au claim group: In 082LSW052 - Keda Resources Ltd.
Prospectus Feb. 1977; Antelope Resources Inc. Filing Statement,
Feb. 1989; *Barker, R.M. (1990): Draft Property Description)
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 141
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 75,80
GCNL *June 24, 1988

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 326
REPORT: RGEN0100

MINFILE NUMBER: **082LSW008**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT VERNON**, SILVER STREAK, PROCTER,
VI, DCK, NOMAD

STATUS: Past Producer Open Pit
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:
LATITUDE: 50 17 20 N
LONGITUDE: 119 10 42 W
ELEVATION: 1070 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Area of workings (Assessment Report 5830).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5573021
EASTING: 344830

COMMODITIES: Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au L03 Alkalic porphyry Cu-Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Carbonaceous Argillite

GEOLOGICAL SETTING

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

CAPSULE GEOLOGY

The Mount Vernon showing is located 7 kilometres east-northeast of Vernon, north of Vernon Hill.

This area, east of the Okanagan Valley fault, is underlain by Upper Triassic to Lower Jurassic Nicola Group which unconformably overlies the Devonian to Triassic Harper Ranch Group. These Paleozoic and Mesozoic units overlie and are in probable fault contact with gneissic rocks of unknown age and metasedimentary rocks of the Proterozoic Silver Creek Formation. Middle Jurassic granitic rocks cut all of the above rocks. Outliers of Eocene Kamloops Group volcanic and sedimentary rocks cap the older units.

Quartz veins in Nicola Group carbonaceous argillites host silver, lead, zinc and gold mineralization. Narrow discontinuous quartz veins, up to about 1 metre thick, contain knots and blebs of galena and lesser blebs of sphalerite. In 1950 and 1969, two shipments, totalling 64 tonnes, reported grades of 190 grams per tonne silver, 3.8 per cent lead, 0.8 per cent zinc and 2 grams per tonne gold.

In 1968-74, King Graybarr Mines Ltd. carried out trenching, geological mapping, airborne magnetometer and drilling programs. In 1975, Canadian Superior Exploration Ltd. conducted geological mapping and drilling. Murray Ranking Developments Ltd. carried out trenching in 1978.

BIBLIOGRAPHY

EMPR AR 1950-115; 1968-223
EMPR ASS RPT 2000, *5003, 5432, *5830, *12097
EMPR BC METAL MM00434, MM00429
EMPR EXPL 1975-E53, 1978-E95,96; 1983-146
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-298,429; 1971-432,433; 1972-80; 1973-101; 1974-90
EMPR INDEX 3-206
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR RGS 1976
EMPR PF (In 082LSW General - Claim Map, 1966; Working Maps from Canadian Superior 1970-1975; King Greybarr Mines Ltd., Prospectus, 1970; Selnes, W.E. (1971): Supplemental Report to Accompany

MINFILE NUMBER: **082LSW008**

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 327
REPORT: RGEN0100

BIBLIOGRAPHY

Preliminary Report on the Vernon Hill claims; Notices of Work, May and July, 1975; Assay Results, Canadian Superior, 1975; Kandahar Resources Ltd., Statement of Material Facts, Aug. 1976)
GSC MAP 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GCNL #156, #200, 1976

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW009**

NATIONAL MINERAL INVENTORY:

NAME(S): **TADPOLE DOBBIN, NIGHT OWL,
BARD, ALFY, BEAR,
TAD 1, TAD**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:
LATITUDE: 50 01 29 N
LONGITUDE: 119 47 24 W
ELEVATION: 2030 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of the mineralized zone (Assessment Report 7596).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5545109
EASTING: 300165

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite Sericite K-Feldspar
ALTERATION TYPE: Chloritic Potassic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry
TYPE: L03 Alkalic porphyry Cu-Au
DIMENSION: 800 x 600 Metres
COMMENTS: Maximum dimensions of the surface area of the molybdenum mineralization.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Middle Jurassic			

LITHOLOGY: Porphyritic Quartz Monzonite
Quartz Monzonite
Sediment/Sedimentary

HOSTROCK COMMENTS: Intrusive rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Drill Core
COMMODITY Molybdenum GRADE 0.0440 Per cent
COMMENTS: Grade is from a 92-metre drill intersection.
REFERENCE: Assessment Report 8456.

CAPSULE GEOLOGY

The Tadpole showing is located 26 kilometres northwest of Kelowna, at Tadpole Lake. The area is underlain by Devonian to Triassic Harper Ranch Group argillaceous rocks, basalt tuffs and flows, and minor rhyolite and limestone. These are intruded by Middle Jurassic ultramafic/monzonite and calc-alkaline complexes of the informally named Terrace Creek batholith. Molybdenum mineralization is hosted by a north-northwest trending composite plug, of calc-alkaline composition, about 1.5 by 4 kilometres in area. The plug consists of a porphyritic quartz monzonite core bordered by quartz monzonite. Within the porphyry is an irregular 800 by 1900 metre zone of chlorite and sericite alteration. A zone of molybdenum mineralization 200 to 600 metres wide by 800 metres long occurs within the altered zone. A stockwork of quartz veinlets from 0.5 to 1 centimetre thick carries disseminated pyrite and molybdenite. Secondary K-feldspar and chlorite border the veinlets. The zone grades 0.030 to 0.054 per

CAPSULE GEOLOGY

cent molybdenum. Drilling samples assayed up to 0.195 per cent molybdenum over 3 metres (Assessment Report 8456). The best drillhole sample averaged 0.044 per cent molybdenum over 92 metres (Assessment Report 8456). The mineralized zone is open to depth and has a shallow plunge to both the north and south.

In 1967, Phelps Dodge Corporation carried out soil geochemistry. In 1968-69, Texas Gulf Sulphur Co. carried out a program of geological mapping, ground magnetometer, soil geochemistry and drilling. Between 1977 and 1980, Cominco carried out geological mapping, ground magnetometer, soil geochemistry, induced polarization and drill programs.

Verdstone Gold Corporation and Molycor Gold Corporation held the property in 1997.

BIBLIOGRAPHY

EMPR AR 1968-223
EMPR ASS RPT 1896, *7269, *7596, *8456, 8664
EMPR EXPL 1978-E93, 1979-9,101
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363; 2000, pp. 191-222
EMPR GEM 1969-299,300;
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; Summary of Drilling on Dobbin Property, Cominco, 1980)
EMPR RGS 1976
GSC MAP 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GCNL #186 (Sept.26), 1997
PR REL Verdstone Gold Corporation, Sept.24, 1997

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW010**

NATIONAL MINERAL INVENTORY: 082L6 Phs1

NAME(S): **SILVER QUEEN (L. 1182)**, SILVER STAR

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:
LATITUDE: 50 22 23 N
LONGITUDE: 119 03 31 W
ELEVATION: 1820 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Old workings visible on air photos.

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5582136
EASTING: 353616

COMMODITIES: Silver Lead Zinc Gold Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au 116 Unconformity-associated U
SHAPE: Tabular
DIMENSION:
COMMENTS: Vein is 1.2 to 2.1 metres wide. STRIKE/DIP: 070/50S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Calcareous Argillite
Granite Dike
Quartzite

GEOLOGICAL SETTING

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

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1950
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Silver 1197.5000 Grams per tonne
Lead 18.2000 Per cent
Zinc 1.5500 Per cent
COMMENTS: Grades are for recovered metals from a 2 tonne shipment in 1950.
REFERENCE: Minister of Mines Annual Report 1950, page 116.

CAPSULE GEOLOGY

The Silver Queen showing is located 19 kilometres northeast of Vernon on Silver Star Mountain.
The area is underlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These are faulted over metasedimentary rocks of the Proterozoic Silver Creek Formation.
Nicola Group calcareous argillite hosts mineralization in a 1.2 to 2.1 metre thick quartz vein in the axial plane of a minor fold. The footwall of the vein is argillite and the hangingwall is a granite dike(?). Galena, sphalerite, pyrite and chalcopyrite are present. The vein strikes 070 degrees and dips between 20 and 50 degrees south.
A sample from initial surface sampling in 1896 assayed 13.4 grams per tonne gold (\$8) and 83.6 grams per tonne silver (\$50) (Minister of Mines Annual Report 1896 page 579). Shipments in 1948 and 1950, totalling 3.4 tonnes, assayed 870 grams per tonne silver, 13 per cent lead and 1 per cent zinc.
Argentiferous galena also occurs in a 10 centimeter quartz stringer in quartzite.
Mineralization may be related to the major fault which separates the Nicola and Silver Creek rocks.

CAPSULE GEOLOGY

Exploration, by an 8 metre shaft, was first reported in 1896. By 1902, two shafts were reported; 20 and 14 metres deep. In 1948 and 1950, 3.4 tonnes were shipped producing 2955 grams of silver, 444 kilograms of lead, and 49 kilograms of zinc.

BIBLIOGRAPHY

EMPR AR *1896-579; *1899-747; 1900-*886,992; 1901-1126; *1902-188;
*1926-20; *1948-120; *1949-137,138; *1950-116
EMPR BC METAL MM00440
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR INDEX 3-213
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (Report on Aberdeen Mountain Park, 1958; In 082LSW General -
Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 150
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1930A, p. 122

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW011**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAY, BOP**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 25 52 N
LONGITUDE: 119 18 22 W
ELEVATION: 720 Metres

NORTHING: 5589107
EASTING: 336219

LOCATION ACCURACY: Within 500M

COMMENTS: Old workings (Assessment Report 17371).

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Paleozoic-Mesozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian-Ordovician	Unnamed/Unknown Group	Sicamous	

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Thompson Plateau	
TERRANE: Kootenay		
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE: Greenschist
COMMENTS: The Sicamous is regionally metamorphosed to lower greenschist facies.		

CAPSULE GEOLOGY

The May showing is located 19 kilometres north-northwest of Vernon, east of Round Lake.

In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks, and in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group to the south. Cretaceous granodiorite plugs intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

Sicamous argillaceous rocks host a quartz vein carrying "values in gold, silver and lead" (Geological Survey of Canada Summary Report 1931A).

By 1899, exploration included a 2 metre shaft and an 8 metre tunnel.

BIBLIOGRAPHY

EMPR AR 1899-747
EMPR ASS RPT 17371
EMPR EXPL 1988-C56
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 146
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 77

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW012**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRAND TIMES (L. 1173)**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 22 35 N
LONGITUDE: 119 28 59 W
ELEVATION: 900 Metres

NORTHING: 5583428
EASTING: 323450

LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Lot 1173.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

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
Triassic-Jurassic	Nicola	Undefined Formation	

LITHOLOGY: Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau	
TERRANE: Quesnel		
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.		

CAPSULE GEOLOGY

The Grand Times showing is located 19 kilometres northwest of Vernon, west of Banks Creek.

Sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Middle Jurassic granitic rocks intrude the Nicola and Harper Ranch. Outliers of Eocene Kamloops Group volcanic rocks are present.

A quartz vein in Nicola Group sedimentary rocks hosts free-milling native gold.

By 1899, a 55-metre tunnel had been completed. In the 1980s, various operators explored the area around this occurrence.

BIBLIOGRAPHY

EMPR AR *1898-1129; *1899-747
EMPR ASS RPT 10031, 14305, 15535, 18336
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW013**

NATIONAL MINERAL INVENTORY:

NAME(S): **SKOOKUM**, ONA

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

Underground

MINING DIVISION: Vernon

LATITUDE: 50 21 15 N
LONGITUDE: 119 23 42 W
ELEVATION: 1160 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5580752
EASTING: 329631

LOCATION ACCURACY: Within 500M

COMMENTS: Area of workings (Assessment Report 18860).

COMMODITIES: Silver Gold Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Tetrahedrite Chalcopyrite Gold
ASSOCIATED: Quartz Pyrite
ALTERATION: Graphite Malachite Sericite
ALTERATION TYPE: Oxidation Sericitic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Stockwork Disseminated
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Sheared
COMMENTS: Main vein is up to 4 metres thick.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Graphitic Phyllite
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 150.0000 Grams per tonne
Gold 0.4000 Grams per tonne

COMMENTS: Grades are the average of 8 channel samples.
REFERENCE: Assessment Report 17928.

CAPSULE GEOLOGY

The Skookum showing is located 13 kilometres northwest of Vernon on the north side of Newport Creek.

In the area, the Upper Triassic to Lower Jurassic Nicola Group is in probable unconformable contact with the Devonian to Triassic Harper Ranch Group. Middle Jurassic granitic rocks intrude these sedimentary and volcanic rocks. Outliers of Eocene Kamloops Group volcanic rocks are present.

A shear zone and associated quartz vein within Nicola Group argillites and phyllites host silver, gold, lead, zinc and copper mineralization. A saccharoidal quartz vein, up to 4 metres thick; quartz stringers; quartz-filled tension gashes; and a graphitic shear zone host pyrite, galena, sphalerite, chalcopyrite, tetrahedrite and native gold. Some sericite alteration is associated with the quartz veining.

The highest values came from the main quartz vein; high grade samples, containing 30 to 40 per cent sulphides (mainly galena and tetrahedrite), assayed up to 10,998 grams per tonne silver (Assessment Report 17928). Selected samples assayed up to 3 per cent copper, 10 per cent lead and 7 per cent zinc (Assessment Report

CAPSULE GEOLOGY

17928). Small shipments, from 1936 to 1969, totalling 195 tonnes returned grades of about 430 grams per tonne silver and 6 grams per tonne gold. Systematic channel sampling averaged assays of 150 grams per tonne silver and 0.4 grams per tonne gold (Assessment Report 17928).

The occurrence was first described in 1930; by 1933 a 15-metre inclined shaft and 9 metres of drifts and crosscuts had been completed. Small shipments, totalling 195 tonnes, were reported from 1936 to 1969 producing 84,414 grams of silver, 1,182 grams of gold, 45 kilograms of copper and 315 kilograms of lead. In 1980, M. Boe conducted a drill program. In 1988, Canova Resources Ltd. carried out geological mapping, trenching and drilling.

BIBLIOGRAPHY

EMPR AR 1930-208; 1931-116; 1932-143; *1933-196; 1934-D34;
1937-A35; 1940-23; 1941-60; 1951-43
EMPR ASS RPT 2552, 12313, *17928, *18860
EMPR BC METAL MM00441
EMPR BULL *1932 No. 1, pp. 78,79
EMPR EXPL 1980-134; 1988-C56
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-429
EMPR INDEX 3-213
EMPR INF CIRC 1988-1, pp. 26,27
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (Starr, C.C. (1939): Report on the Skookum Group of Claims,
4 p.; Sketch map showing main workings, 1939; in 082LSW General -
Claim Map, 1966; *Barker, R.G. (1990): Draft Property Description)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 150
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 78,86
GCNL Jun 16, Jul 27, Aug 17, Dec 1, 1988

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW014**

NATIONAL MINERAL INVENTORY:

NAME(S): **FINTRY POINT**, SHORTS POINT, SHORT CREEK,
EDWARD (L.5046), PERSEVERANCE (L.5047), L. 5049,
SCOTTEY, GOLDEN HORSESHOE, LUMBER JACK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:
LATITUDE: 50 08 24 N
LONGITUDE: 119 34 14 W
ELEVATION: 850 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of the surface trace of the wollastonite zone (Fieldwork 1988,
page 493).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5557361
EASTING: 316322

COMMODITIES: Wollastonite Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Wollastonite Calcite
ASSOCIATED: Quartz
ALTERATION: Wollastonite Garnet Diopside Prehnite
COMMENTS: Age of the formation of wollastonite.
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stratabound Podiform Stockwork Vein
CLASSIFICATION: Skarn Igneous-contact Hydrothermal Industrial Min.
TYPE: K09 Wollastonite skarn R09 Limestone
SHAPE: Tabular
MODIFIER: Fractured
DIMENSION: 850 x 500 x 50 Metres STRIKE/DIP: /90 TREND/PLUNGE:
COMMENTS: Dimensions of skarn zone containing wollastonite.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Unnamed/Unknown Informal
Middle Jurassic			

LITHOLOGY: Wollastonite Skarn
Marble
Limestone
Granodiorite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic and the limestone is Permian.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE: Hornfels
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Bulk Sample
COMMODITY: Wollastonite 70.8000 Per cent
COMMENTS: Grades are from wollastonite concentrate, with 4.7 garnet and 24.5 per cent silicates.
REFERENCE: Open File 1991-17, page 30.

CAPSULE GEOLOGY

The Fintry Point showing is located 26 kilometres west-southwest of Vernon, on the steep north slopes of Shorts Creek valley. Middle Jurassic granitic rocks intrude sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. Eocene Penticton Group volcanic and sedimentary rocks cover the older units. The Harper Ranch hosts wollastonite and limestone mineralization. Lenses, clusters and veinlets of wollastonite occur in a 800 by 500 by 50 metre bed of grey marble, forming up to 35 per cent of the rock, averaging about 25 per cent. The wollastonite zone, within a

CAPSULE GEOLOGY

grey to white marble unit, is parallel to and about 150 metres west of the contact of a granodiorite intrusion. Quartz, garnet, and minor diopside and prehnite are also reported. The wollastonite forms tough, massive aggregates of radial fibres, with fibre lengths up to 12 centimetres, averaging 2 to 3 centimetres. The 71 per cent wollastonite concentrate is too low grade for most industrial use, due to the presence of significant quartz content. In 1989, a 50 kilogram sample was submitted to CANMET for processing and analysis. The results are as follows:

SiO2	52.0 %
Al2O3	0.93%
Fe2O3	0.57%
CaCO3	16.4 %
MgO	1.01%
L.O.I.	6.57%
Brightness	73.58%
Lightness	88.16%

White to grey to black, fine to medium-grained crystalline limestone outcrops immediately west of the skarn contact zone and west of the wollastonite zone. Remnant beds strike north and dip steeply east or west between 60 and 90 degrees. Interbedded black argillite and fine-grained sandstone with minor pockets of conglomerate are exposed at lower elevations. Several grab samples from a 30 to 100 metre wide zone of white, medium to fine-grained limestone adjacent to the granodiorite, averaged 97 per cent CaCO3, 1.8 per cent CaSiO3, 0.7 per cent muscovite and 0.5 per cent SiO2 (Hallisey, 1963).

Three tunnels were driven on the Scottey Group of mineral claims by 1939 which included the Golden Horseshoe, Perservance, Ivanhoe and Lumberjack claims.

A 21-metre tunnel was driven on one of several quartz veins in the vicinity. The veins are up to 1.2 metres in width. Assays of the quartz show traces of gold and silver (Starr, Property File). Another tunnel was driven about 4.5 metres crosscutting a quartz body and another 6-metre tunnel was driven on a limestone-granite contact.

BIBLIOGRAPHY

- EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30, *1991-17, pp. 28-31, 1992-18
EMPR P *1989-1, p. 493
EMPR PF (*Starr, C.C. (1939): Report on the Scottey Group of Mining Claims, 2 p.; Sketch of claims showing claims and tunnel locations; in 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Hallisey, R.S., (1963): *Wollastonite, Its Occurrence, Production Uses, University of British Columbia Unpublished Bachelor of Applied Science Thesis

DATE CODED: 1988/11/21
DATE REVISED: 1993/03/31

CODED BY: GVV
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW015**

NATIONAL MINERAL INVENTORY:

NAME(S): **OCTAGON**, VERA 1-6, MAY,
GOLDEN ZONE 1-3, GLORIA 1

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:
LATITUDE: 50 21 15 N
LONGITUDE: 119 21 23 W
ELEVATION: 820 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Area of old workings (Assessment Report 17664).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5580665
EASTING: 332377

COMMODITIES: Silver Gold Copper Lead Zinc

MINERALS

SIGNIFICANT: Galena Freibergite Sphalerite Chalcopyrite Argentite
Gold
ASSOCIATED: Quartz Pyrite
ALTERATION: Azurite Malachite Sericite
ALTERATION TYPE: Oxidation Sericitic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 12 x 2 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: The vein, exposed by stripping, is over 12 metres in strike length and 2.4 metres thick.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Feldspar Porphyry Dike
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1923
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Silver 1400.0000 Grams per tonne
Gold 34.0000 Grams per tonne
COMMENTS: Grades are from a 1.8 tonne bulk sample.
REFERENCE: Index No. 3, page 207.

CAPSULE GEOLOGY

The Octagon prospect is located 12 kilometres north-northwest of Vernon, northwest of Okanagan Lake. Sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Middle Jurassic granitic rocks intrude the Nicola and Harper Ranch. Outliers of Eocene Kamloops Group volcanic rocks are present. Within a sequence of Nicola argillites and volcanic flows a quartz vein in a Jurassic(?) dike hosts gold, silver, copper, lead and zinc mineralization. The vein, exposed by stripping, is over 12 metres in strike length and 2.4 metres thick. The vein and the associated quartz stringer zone carry disseminations of freibergite (silver-rich tetrahedrite), galena, lesser pyrite and sphalerite and minor chalcopyrite, malachite, azurite, native gold and argentite. The native gold and argentite are mainly found with drusy quartz.

CAPSULE GEOLOGY

Mineralization is more common along the vein margins, especially where sheared, and within the stringer zone. The vein strikes approximately north-northeast and dips 25 degrees to the west. Localized sericite alteration adjacent to the vein has been reported. Systematic channel sampling of the quartz vein and stringer zones illustrates the sporadic nature of the mineralization.

A 1-metre channel sample taken along the strike of a 50 millimetre thick sulphide-rich quartz stringer assayed 4.9 grams per tonne gold, 941.7 grams per tonne silver, 1.5 per cent copper and 2.4 per cent lead (Assessment Report 17664). The average grades for gold and silver were 0.48 and 301.6 grams per tonne while the median values were only 0.04 and 23.6 grams per tonne.

In 1923, a 1.8-tonne shipment of (probably) selected ore was made producing 2,550 grams of silver and 62 grams of gold. In 1980, Thunderbird Resources Ltd. carried out geological mapping and soil geochemistry. In 1985, Tri-Pacific Resources Ltd. conducted some exploration. In 1987-88, Canova Resources Ltd. carried out geological mapping, magnetometer and VLF-EM surveys, and trenching.

BIBLIOGRAPHY

EMPR AR 1923-161,383
EMPR ASS RPT 2552, 16816, *17664, *17928
EMPR BC METAL MM00435
EMPR EXPL 1983-147; 1988-C56,57
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1970-407
EMPR INDEX 3-207
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; *Barker, R.M. (1990):
Draft Property Description)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296-148
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 77,85
GCNL #215, 1985; #72, 1986; #90, Jun 9, Aug 8, 1988

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW016**

NATIONAL MINERAL INVENTORY:

NAME(S): **PAYROLL**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 19 50 N
LONGITUDE: 119 21 57 W
ELEVATION: 470 Metres

NORTHING: 5578061
EASTING: 331622

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, Fig. 7).

COMMODITIES: Silver Lead Gold Copper

MINERALS

SIGNIFICANT: Galena Chalcopyrite

ASSOCIATED: Quartz Pyrite

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Mesothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: 090/45S

TREND/PLUNGE:

COMMENTS: The vein averages 0.8 metres in thickness and is traceable on surface for about 400 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Payroll showing is located 10 kilometres northwest of Vernon, along the southwest bank of Newport Creek.

Sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Middle Jurassic granitic rocks intrude the Nicola and Harper Ranch groups. Outliers of Eocene Kamloops Group volcanic rocks are present.

A banded quartz vein within Nicola argillaceous sediments hosts silver, lead, gold and copper mineralization. Mineralization is more pronounced on the hangingwall where the vein is more vuggy and comprises galena and minor pyrite and chalcopyrite. The east-west striking vein dips south at about 45 degrees, averages about 0.8 metre thick and is traceable on surface for about 400 metres. A sample of selected ore from the hangingwall assayed 1.37 grams per tonne gold, 1217 grams per tonne silver and 40.4 per cent lead (Minister of Mines Annual Report 1929, p. 247).

The first published information on this showing was in 1929.

BIBLIOGRAPHY

EMPR AR *1929-247; 1930-208
EMPR ASS RPT 12313
EMPR BULL 1932 No.1, p. 79
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 148
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 341
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT *1931A, pp. 78, 85-86

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW017**

NATIONAL MINERAL INVENTORY:

NAME(S): **MITCHELL AND COCHRANE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 53 N
LONGITUDE: 119 22 42 W
ELEVATION: 390 Metres

NORTHING: 5576329
EASTING: 330676

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, Fig. 7).

COMMODITIES: Lead Silver Copper Zinc

MINERALS

SIGNIFICANT: Galena Chalcopyrite Sphalerite

ASSOCIATED: Quartz Pyrite

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: STRIKE/DIP: 090/80S

TREND/PLUNGE:

COMMENTS: The veins average 2 metres in thickness and can be traced for about 60 metres on surface.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Mitchell and Cochrane showing is located 9 kilometres north-west of Vernon, north of Bradley Creek.

Sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Middle Jurassic granitic rocks intrude the Nicola and Harper Ranch. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

Two quartz veins within Nicola argillite host lead, silver, copper and zinc. The parallel veins, averaging about 2 metres thick, carry disseminated pyrite, galena, chalcopyrite and sphalerite. The east/west striking veins dip steeply south and can be traced on surface for about 60 metres. Sorted samples assayed up to 300 grams per tonne silver and 15 per cent lead (Minister of Mines Annual Report 1922, p. 145). Sulphides also occur in the wallrocks.

Some exploration work was carried out in 1922.

BIBLIOGRAPHY

EMPR AR *1922-145
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 147
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 84-85

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW018**

NATIONAL MINERAL INVENTORY: 082L6 Cu1

NAME(S): **PORTEOUS CAMP**, I.O.U., GOODENOUGH,
HUGAL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

MINING DIVISION: Vernon

LATITUDE: 50 18 10 N
LONGITUDE: 119 28 21 W
ELEVATION: 800 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5575220
EASTING: 323929

LOCATION ACCURACY: Within 5 KM
COMMENTS: Showing (Minister of Mines Annual Report 1900, page 886).

COMMODITIES: Gold Lead Copper

MINERALS

SIGNIFICANT: Gold Galena Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Argillite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau	
TERRANE: Harper Ranch		
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE: Greenschist
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.		

CAPSULE GEOLOGY

The Porteus Camp showing is located 15 kilometres west-northwest of Vernon north of Naswhito Creek.

Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Quartz veins within Harper Ranch argillite host gold, lead and copper mineralization. The veins are up to 2 metres thick, strike east/west and dip to the north. The veins carry disseminations of galena, native gold and minor chalcopyrite.

The first reference to this occurrence is from the 1900 Minister of Mines Annual Report.

BIBLIOGRAPHY

EMPR AR *1900-866,887
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 145
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW019**

NATIONAL MINERAL INVENTORY:

NAME(S): **RIBBLEWORTH**, WINFIELD

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 05 08 N
LONGITUDE: 119 19 42 W
ELEVATION: 1090 Metres

NORTHING: 5550740
EASTING: 333440

LOCATION ACCURACY: Within 1 KM
COMMENTS: Workings (Assessment Report 7700).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Garnet Magnetite
MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 5000 x 1500 x 60 Metres STRIKE/DIP:
COMMENTS: Dimensions are the estimated extent of the fluvial deposits which include the 082LSW072, 93 and 142 deposits. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Quartz Pebble Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage
PHYSIOGRAPHIC AREA: Okanagan Highland
Undivided Metamorphic Assembl.

CAPSULE GEOLOGY

The Ribbleworth showing is located 20 kilometres south-southwest of Vernon, between Ribbleworth and Clark Creeks.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks. Middle Jurassic granitic plutons intrude the older rocks. Eocene Penticton Group and Miocene volcanic and sedimentary rocks cap areas of older rock.

The basal, partly cemented, well rounded, quartz pebble gravels of Miocene fluvial deposits host placer gold mineralization. The fluvial deposits unconformably overlie gneissic rocks containing amphibolite, and/or volcanic rocks of the Penticton Group. The Miocene sediments are commonly overlain by Miocene plateau basalt flows. The gold is pure (850 fine), of a reddish colour, and is found as flattened pellets up to 2 millimetres in size, with some very fine gold reported. Garnet and a little magnetite occur with the gold. The fluvial deposits, including 082LSW072, 93 and 142, are estimated to cover a 5000 by 1550 by 60 metre area.

Old exploration shafts have been located. In 1977-79, Union Oil Company explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical, radiometric, airborne magnetometer and drill programs were conducted.

BIBLIOGRAPHY

EMPR AR *1933-A197,198; *1933-D46,47,48
EMPR ASS RPT 6631, 6944, *7700
EMPR EXPL 1977-E77; 1978-E90; 1979-98
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR MEM *296, p. 137
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 345
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 89-1E pp. 51-60
Canadian Journal of Earth Sciences, V. 25, No. 5, pp. 725-731

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW020**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEVERLEY**, BEVERLEY NO.2, PEGGY,
MARIE, EDITH

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 45 N
LONGITUDE: 119 18 24 W
ELEVATION: 740 Metres

NORTHING: 5575921
EASTING: 335770

LOCATION ACCURACY: Within 1 KM
COMMENTS: Showing (Geological Survey of Canada Map 1059A).

COMMODITIES: Gold Silver Lead Copper

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Concordant

CLASSIFICATION: Mesothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

COMMENTS: The veins are 0.3 to 9 metres thick and are traceable for 250 metres.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcanic
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1934

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

1100.0000

Grams per tonne

Gold

27.0000

Grams per tonne

Lead

31.0000

Per cent

COMMENTS: Highest reported values.

REFERENCE: Minister of Mines Annual Report 1934, page D32.

CAPSULE GEOLOGY

The Beverley showing is located 6 kilometres north-northwest of Vernon, between Swan and Okanagan lakes.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

A network of quartz veins within volcanic and sedimentary rocks of the Nicola host gold, lead, silver and copper mineralization. The generally concordant veins carry pyrite, galena, and occasional chalcopyrite and tetrahedrite. The veins are persistent in width, range from 0.3 to 9 metres thick, and are traceable for 250 metres in length. The values are generally low, but values up to 27 grams per tonne gold, 1100 grams per tonne silver and 31 per cent lead have been reported (Minister of Mines Annual Report 1934, page D32).

By 1934, exploration included trenches, open cuts and shallow shafts.

BIBLIOGRAPHY

EMPR AR *1934-D32

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 347
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 141
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW021**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEYSTONE-1**, KEYSTONE

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 33 N
LONGITUDE: 119 18 00 W
ELEVATION: 650 Metres

NORTHING: 5575536
EASTING: 336233

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, Figure 7).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 095/90

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuffaceous Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Greenschist

CAPSULE GEOLOGY

The Keystone-1 showing is located 5 kilometres north-northwest of Vernon, between Swan and Okanagan lakes.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

A quartz vein within tuffaceous volcanic rocks of the Nicola hosts copper mineralization. A malachite-stained vertical quartz vein, striking 095 degrees, carries minor chalcopyrite.

By 1931, an open cut had exposed the vein.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 146
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, p. 77, 83

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW022**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUE JAY (L. 738)**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 07 N
LONGITUDE: 119 17 23 W
ELEVATION: 580 Metres

NORTHING: 5572858
EASTING: 336883

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft on Lot 738 (Assessment Report 4960).

COMMODITIES: Gold Lead Copper

MINERALS

SIGNIFICANT: Galena Tetrahedrite Gold
ASSOCIATED: Quartz Pyrite Arsenopyrite
ALTERATION: Clay Graphite
ALTERATION TYPE: Argillic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Shear Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 30 x 1 Metres STRIKE/DIP: 015/60E TREND/PLUNGE:
COMMENTS: The vein is 1.4 metres wide and is traceable for 30 metres.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Andesite Flow
Andesite Tuff
Andesitic Breccia
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1974
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 140.0000 Grams per tonne
COMMENTS: Highest value from selected sampling.
REFERENCE: Assessment Report 4960.

CAPSULE GEOLOGY

The Blue Jay showing is located 3 kilometres north-northwest of Vernon.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

A quartz vein in Nicola andesite flows, tuffs and breccias hosts gold, lead and copper mineralization. Disseminated pyrite, arsenopyrite, and minor galena, tetrahedrite and native gold are reported. The vein, 1.4 metres thick, is traceable for 30 metres. A two-centimetre graphitic clay fault gouge on the hangingwall contains higher gold values than the vein. Gold values from selected sampling were up to 140 grams per tonne (Assessment Report 4960).

By 1899, a 13-metre shaft and a 53-metre adit were completed. The claim was Crown-granted in 1898. Additional exploration was

CAPSULE GEOLOGY

reported in 1934.

BIBLIOGRAPHY

EMPR AR *1897-609; 1898-1195; *1899-747; *1934-D32,34
EMPR ASS RPT *4960
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM *1974-89,90
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (Jones, W.C. (1959): Groundwater in the BX Creek Area; In
082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 142
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, p. 75

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW023**

NATIONAL MINERAL INVENTORY:

NAME(S): **EXPO**, EXPO 4, EXPO 6

MINING DIVISION: Nicola

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 55 N
LONGITUDE: 119 41 29 W
ELEVATION: 1640 Metres

NORTHING: 5575297
EASTING: 308326

LOCATION ACCURACY: Within 500M

COMMENTS: The showing is near a flow contact on a cliff face (Assessment Report 17883).

COMMODITIES: Agate Gemstones Silver

MINERALS

SIGNIFICANT: Agate Jasper
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Eocene GROUP: Kamloops FORMATION: Unnamed/Unknown Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Volcaniclastic Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Overlap Assemblage Plutonic Rocks
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Zeolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Grab
COMMODITY: Silver GRADE: 35.0000 Grams per tonne
COMMENTS: Highest value from samples taken from the area of chalcidonic agate.
REFERENCE: Assessment Report 17883.

CAPSULE GEOLOGY

The Expo showing is located 30 kilometres west of Vernon, north of Little Bouleau Lake.
In this area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Extensive Eocene Penticton Group and Kamloops Group volcanic and sedimentary rocks overlie the older units.
Along a fault(?) escarpment several interflow volcaniclastic sediments of the Kamloops Group host agate, jasper and silver mineralization. Samples taken from the area of chalcidonic agate assayed around 35 grams per tonne silver (Assessment Report 17883).
In 1988, Pacific Northwest Resources Inc. carried out prospecting in the area.

BIBLIOGRAPHY

EMPR ASS RPT 17882, *17883, 18878
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37 (rev), 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW024**

NATIONAL MINERAL INVENTORY:

NAME(S): **JUMBO (L. 4882)**

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 06 N
LONGITUDE: 119 17 07 W
ELEVATION: 530 Metres

NORTHING: 5574670
EASTING: 337256

LOCATION ACCURACY: Within 500M

COMMENTS: Adits have been located in the field.

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold Pyrite
ASSOCIATED: Quartz
ALTERATION: Sulphur
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I01 Au-quartz veins
SHAPE: Irregular
MODIFIER: Fractured Faulted
DIMENSION: 20 x 1 Metres STRIKE/DIP: 090/65S TREND/PLUNGE:
COMMENTS: Dimensions of vein.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuffaceous Volcanic
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1940
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Silver 8.4000 Grams per tonne
Gold 7.7000 Grams per tonne

COMMENTS: Grades are for recovered metals from 49 tonnes.

REFERENCE: Index No. 3, page 201.

CAPSULE GEOLOGY

The Jumbo prospect is located 4 kilometres north-northwest of Vernon, between Swan and Okanagan Lakes.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Penticton Group volcanic rocks underlie the older rocks.

Quartz veins and veinlets in Nicola volcanic rocks, adjacent to argillites, host gold and silver mineralization. A series of north-south stringers is cut by an east-west vein. This irregular drusy vein is fractured and faulted, up to 1.2 metres thick and traceable for 20 metres. The vein carries disseminated free gold and sparse to heavy pyrite mineralization. Native sulphur is reported as a weathering product of pyrite. The vein contains erratic grades; the best values are 93 grams per tonne gold and 10 grams per tonne silver (Minister of Mines Annual Report 1930, page 208).

The first reference to the occurrence is from 1897. In 1929, a

CAPSULE GEOLOGY

3.5 metre shaft was sunk and a short crosscut driven. In 1940, a 49-tonne shipment produced 373 grams of silver and 342 grams of gold.

BIBLIOGRAPHY

EMPR AR 1897-608; *1928-220; *1929-248; *1930-208; 1931-116;
1934-D31,34; 1940-23
EMPR ASS RPT 4960
EMPR BC METAL MM00430
EMPR BULL 1932 No. 1, p. 78
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1974-89,90
EMPR INDEX 3-201
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296 p. 145
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 76,82-83

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW025**

NATIONAL MINERAL INVENTORY:

NAME(S): **REX (L. 3328)**, THREE TRAMPS, IG

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 32 N
LONGITUDE: 119 21 01 W
ELEVATION: 560 Metres

NORTHING: 5570058
EASTING: 332477

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft on IG claim (Assessment Report 18983).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Gold Chalcopyrite
ASSOCIATED: Quartz Pyrite

COMMENTS: Mineralization occurs in quartz veins cutting ultramafic rocks.

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:

STRIKE/DIP: 090/

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Ultramafic Intrusions

LITHOLOGY: Amphibolite
Hornblendite

HOSTROCK COMMENTS: The ultramafic rocks intrude or are in fault contact with Devonian to Triassic rocks of the Harper Ranch Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Harper Ranch

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Rex showing is located 6 kilometres west of Vernon, north of the east end of Vernon Arm of Okanagan Lake.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Occasional Upper Paleozoic ultramafic rocks are associated with the Harper Ranch Group. These rocks are intruded by Middle Jurassic granitic rocks. Patches of Eocene Pentiction Group volcanic rocks overlie the older rocks.

Quartz veins in amphibolite and hornblendite of Upper Paleozoic(?) age host gold mineralization. Two banded quartz veins, about 0.4 metre thick, carry disseminated pyrite, chalcopyrite and native gold.

By 1901, exploration had been conducted through a 22-metre shaft and 6 metres of drifting. The area of the shaft was sampled in 1988 by G. Benvenuto, but samples had very low assay results (Assessment Report 18983).

BIBLIOGRAPHY

EMPR AR *1899-746; *1901-1125; 1902-189; 1904-300; *1905-192
EMPR ASS RPT *18983
EMPR MAP 7216G, 8513G
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 1059A, 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 355
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT *1931A, p. 78

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW026**

NATIONAL MINERAL INVENTORY:

NAME(S): **FALCON (L. 903)**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 16 59 N
LONGITUDE: 119 18 02 W
ELEVATION: 630 Metres

NORTHING: 5572635
EASTING: 336104

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 903 (National Topographic Map, 082LSW, 1:50,000).

COMMODITIES: Gold Silver Copper Lead

MINERALS

SIGNIFICANT: Gold Chalcopyrite Galena
ASSOCIATED: Quartz Pyrite Arsenopyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular

STRIKE/DIP: 025/40W

TREND/PLUNGE:

COMMENTS: The vein is 0.4 to 0.6 metres thick and is traceable for 90 metres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite
Tuffaceous Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1899

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

9999.0000

Grams per tonne

COMMENTS: Pockets of free gold in shaft contained up to 17,140 grams per tonne gold.

REFERENCE: Minister of Mines Annual Report 1899, page 747.

CAPSULE GEOLOGY

The Falcon showing is located 3 kilometres northwest of Vernon. In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Penticton Group volcanic rocks underlie the older rocks.

A quartz vein in Nicola argillaceous and tuffaceous sediments hosts gold, silver, copper and lead mineralization. The vein is 0.4 to 0.6 metre thick and traceable for 90 metres. Mineralization consists of disseminated arsenopyrite, pyrite and minor chalcopyrite, galena and free gold. Arsenopyrite also occurs in the wallrock. Free gold was taken from each 3 metres of the shaft and although average grades were low, some pockets assayed up to 17,140 grams per tonne gold (Minister of Mines Annual Report 1899, page 747). By 1899, a 15-metre shaft had been sunk.

BIBLIOGRAPHY

EMPR AR *1899-747; 1902-304; *1921-191; *1932-143; *1934-D30
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 357
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 144
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 76,82

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW027**

NATIONAL MINERAL INVENTORY:

NAME(S): **BON DIABLE (L. 1179)**, BX CAMP

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 26 N
LONGITUDE: 119 12 51 W
ELEVATION: 690 Metres

NORTHING: 5575135
EASTING: 342338

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, Fig. 7).

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION:

STRIKE/DIP: 020/75W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic
Jurassic

GROUP

Undefined Group

FORMATION

Silver Creek

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Quartzite
Granitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Bulk Sample
COMMODITY

YEAR: 1899

Silver

GRADE

498.0000 Grams per tonne

COMMENTS: Grade is from a 1 tonne shipment.

REFERENCE: Index No. 3, page 190.

CAPSULE GEOLOGY

The Bon Diable showing is located 6 kilometres northeast of Vernon, northwest of BX Creek.

In the area, east of the Okanagan Valley fault zone, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks and gneissic rocks of unknown age are faulted over metasedimentary rocks of the Proterozoic Silver Creek Formation. Jurassic granitic dikes cut the older rocks.

In an area of dikes, faulted quartzites of the Silver Creek Formation host gold, silver and copper mineralization in quartz veins. Several small quartz veins and irregular bodies carry spotty free gold and malachite staining. The main vein is 0.9 metre thick and is faulted off at depth. The vein strikes 020 degrees and dips 75 degrees west.

Initial sampling assayed up to 320 grams per tonne gold although average grades are low. A 1-tonne shipment in 1899 produced 498 grams of silver.

Exploration is first mentioned in 1895 and by 1901 a 12-metre shaft, with about 30 metres of underground working had been completed.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 359
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1895-706; *1897-609; *1899-747,848;
*1901-1125
EMPR BC METAL MM00426
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR INDEX 3-190
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 142
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 75

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW028**

NATIONAL MINERAL INVENTORY:

NAME(S): **KLONDYKE**, BEAU

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 02 N
LONGITUDE: 119 28 34 W
ELEVATION: 640 Metres

NORTHING: 5569423
EASTING: 323478

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 14905).

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Chlorite Silica
ALTERATION TYPE: Chloritic Silicific'n
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Breccia
CLASSIFICATION: Epithermal Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Middle Jurassic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Granodiorite
Argillite
Marble

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic. The plutonic rocks are informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Contact
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Hornfels

CAPSULE GEOLOGY

The Klondyke showing is located 14 kilometres west of Vernon, on the west side of Okanagan Lake.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Quartz veins within granodiorite near the contact with argillite and marble of the Harper Ranch host copper and gold mineralization. The irregular quartz-calcite veins occur in an area of fracturing, brecciation and chlorite and silica alteration. The veins are up to 1 metre thick and carry minor disseminated pyrite, chalcopyrite and "gold values".

By 1899, two shafts, 15 and 2.5 metres deep, had been sunk. In 1986, Tournigan Mining Exploration Ltd. carried out geological mapping.

BIBLIOGRAPHY

EMPR AR 1898-1130; *1899-746
EMPR ASS RPT 14905
EMPR EXPL 1986-C98
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 146

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 361
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, p. 77

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW029**

NATIONAL MINERAL INVENTORY:

NAME(S): **OPHIR, BRENT**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

Open Pit

MINING DIVISION: Vernon

LATITUDE: 50 16 37 N
LONGITUDE: 119 22 11 W

UTM ZONE: 11 (NAD 83)

NORTHING: 5572110
EASTING: 331155

ELEVATION: 460 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, Fig. 7).

COMMODITIES: Copper Zinc Silver Gold Lead

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Galena

ASSOCIATED: Pyrite

MINERALIZATION AGE: Paleozoic-Mesozoic

DEPOSIT

CHARACTER: Stratiform Massive Disseminated
CLASSIFICATION: Volcanogenic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G04 Besshi massive sulphide Cu-Zn
SHAPE: Tabular
DIMENSION: 250 x 60 x 2 Metres STRIKE/DIP: 135/ TREND/PLUNGE:
COMMENTS: High-grade, zinc-rich zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Harper Ranch Undefined Formation

LITHOLOGY: Sericitic Schistose Rhyolite
Slaty Schistose Argillite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Greenschist
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1928
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 80.0000 Grams per tonne
Gold 2.0000 Grams per tonne
Copper 1.6000 Per cent
Lead 2.0000 Per cent
Zinc 21.0000 Per cent

COMMENTS: Sample from zinc-rich zone.

REFERENCE: Geological Survey of Canada Summary Report 1931A, page 92-94.

CAPSULE GEOLOGY

The Ophir showing is located 7 kilometres west of Vernon, east of Okanagan Lake. In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks. A stratiform, volcanogenic, massive to semi-massive sulphide layer is associated with Harper Ranch slaty to schistose argillite and sericitic schistose rhyolite. The minerals present in order of abundance are pyrite, chalcopyrite, sphalerite and galena. Some secondary zinc, iron and copper minerals are present. Pyrite is ubiquitous, occurring disseminated throughout the zone while chalcopyrite and sphalerite show marked zoning. Chalcopyrite occurs as massive bands and lenses, up to 3 millimetres thick; disseminated

CAPSULE GEOLOGY

with sphalerite and galena; or occasionally disseminated in the adjoining rhyolite.

Samples of the copper-rich massive sulphides assayed 4.3 per cent copper and 7 grams per tonne silver over 0.6 metre (Geological Survey of Canada Summary Report 1931A, page 92-94).

A zinc-rich zone occurs 120 metres along strike to the southeast. Massive to disseminated sphalerite, with associated galena, pyrite and chalcopyrite, occurs in a 0.9-metre thick zone. Samples assayed up to 21 per cent zinc, 1.6 per cent copper, 2 per cent lead, 2 grams per tonne gold and 80 grams per tonne silver (Geological Survey of Canada Summary Report 1931A, page 92-94). This zone is reported to be 250 metres long, at least 60 metres wide with an average thickness of 6 metres.

Exploration work was first reported in 1923 and continued to 1928. A 33-tonne shipment in 1928 produced 3,484 grams of silver, 62 grams of gold, 360 kilograms of copper and 756 kilograms of lead.

BIBLIOGRAPHY

- EMPR AR *1923-161; *1925-183,184; *1926-200; *1927-213;
*1928-220,221
- EMPR BC METAL MM00436
- EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
- EMPR INDEX 3-208
- EMPR MAP 7216G, 8513G
- EMPR OF 1989-5, 1990-30; 1999-2
- EMPR PF (In 082LSW General - Claim Map, 1966)
- EMPR RGS 1976
- GSC MAP 46-7, 48-4A, 1059A, 1712A
- GSC MEM 296, p. 142, 148
- GSC OF 637 (Map C), 736, 2167
- GSC P 89-1E pp. 51-60
- GSC SUM RPT *1931A, pp. 92-94

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW030**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROYAL AND PEERLESS**, ROYAL, PEERLESS

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 06 N
LONGITUDE: 119 17 20 W
ELEVATION: 610 Metres

NORTHING: 5574678
EASTING: 336999

LOCATION ACCURACY: Within 1 KM

COMMENTS: The Peerless adjoined the Jumbo (082LSW024) on the west.

COMMODITIES: Silver Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Volcanic

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

LITHOLOGY: Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Royal and Peerless showings are located 4 kilometres north-northwest of Vernon, between Swan and Okanagan Lakes.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

A quartz vein in Nicola volcanic rocks hosts silver, zinc and lead mineralization. The vein carries disseminations of sphalerite and galena.

In 1942 and 1952, 2 shipments totalling 5 tonnes (4 from the Royal and 1 from the Peerless) produced 2,829 grams of silver, 89 kilograms of lead and 278 kilograms of zinc.

BIBLIOGRAPHY

EMPR AR 1942-26; 1952-41
EMPR ASS RPT 4960
EMPR BC METAL MM00437, MM00438
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR INDEX 3-208, 211
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW031**

NATIONAL MINERAL INVENTORY:

NAME(S): **RUBY GOLD (L. 2548)**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 59 N
LONGITUDE: 119 24 44 W
ELEVATION: 480 Metres

NORTHING: 5569181
EASTING: 328029

LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Lot 2548.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I01 Au-quartz veins
COMMENTS: Vein is 3 to 3.7 metres thick and has been traced for about 60 metres.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Mylonitic Granite

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.
PHYSIOGRAPHIC AREA: Thompson Plateau
GRADE: Greenschist

CAPSULE GEOLOGY

The Ruby Gold showing is located 10 kilometres west of Vernon, on the east side of Okanagan Lake. In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks. A quartz vein in mylonitic granite hosts gold mineralization. The 3 to 3.7 metre thick quartz vein carries pyrite and free gold and has been traced for about 60 metres. At the bottom of the 9.1-metre shaft the vein breaks up into stringers. A shaft was driven on the claim in 1897. The Ruby Gold claim was Crown-granted in 1904.

BIBLIOGRAPHY

EMPR AR *1897-608; *1904-300
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM *296, p. 149
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 78

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW032**

NATIONAL MINERAL INVENTORY:

NAME(S): **MORNING GLORY (L. 736)**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 13 N
LONGITUDE: 119 24 22 W
ELEVATION: 550 Metres

NORTHING: 5567746
EASTING: 328419

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 736 (National Topographic Map, 082LSW, 1:50,000).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Gold Chalcopyrite
ASSOCIATED: Quartz Pyrite Arsenopyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au I01 Au-quartz veins
COMMENTS: Vein averages 1.5 metres in thickness and is traceable for 120 metres on surface.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Foliated Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1988
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Gold		65.0000	Grams per tonne
Copper		4.0000	Per cent

COMMENTS: Highest values reported.
REFERENCE: Assessment Report 18983.

CAPSULE GEOLOGY

The Morning Glory showing is located 10 kilometres southwest of Vernon, on the east side of Okanagan Lake.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

A quartz vein, striking 050 degrees, in foliated diorite hosts gold and copper mineralization. The quartz vein averages about 1.5 metres in thickness and is traceable for 120 metres on surface. Mineralization consists of pyrite, chalcopyrite, native gold and arsenopyrite. Values up to 65 grams per tonne gold and 4 per cent copper have been reported (Minister of Mines Annual Report 1896, page 579 and Assessment Report 18983).

By 1896, a 24-metre shaft had been sunk. In 1897, some quartz vein material was processed in a stamp mill but results were not favourable.

BIBLIOGRAPHY

EMPR AR *1896-579; *1897-608; 1902-189
EMPR ASS RPT *18983

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 367
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 147
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 77

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW033**

NATIONAL MINERAL INVENTORY:

NAME(S): **DENSY (L. 1051)**, EMPRESS, GOLDEN SUNBEAM
RAINBOW, EHFU, EHU

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

LATITUDE: 50 15 06 N
LONGITUDE: 119 22 26 W
ELEVATION: 510 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Adit on Lot 1051 (Assessment Report 18983).

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

NORTHING: 5569309
EASTING: 330769

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Gold Chalcopyrite
ASSOCIATED: Quartz Pyrite
ALTERATION: Ankerite Sericite
ALTERATION TYPE: Carbonate Sericitic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Quartzite
Argillaceous Siltstone
Volcanic

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 33.2500 Grams per tonne
COMMENTS: Highest value from 3 narrow quartz veins.
REFERENCE: Assessment Report 18983.

CAPSULE GEOLOGY

The Densy showing is located 7 kilometres west of Vernon, north of Okanagan Lake. The British Empire showing (082LSW034) is 220 to 250 metres to the southeast.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

Quartz veins in Harper Ranch siltstones, quartzites and volcanic rocks host gold and copper mineralization.

An adit was driven on 3 narrow quartz veins with free gold and which assayed 33.25 grams per tonne gold (Assessment Report 18983). The veins are hosted in iron-carbonate-sericite altered dirty quartzite and carry disseminated pyrite, chalcopyrite and native gold. One vein is up to 1.8 metres thick.

Four veins are exposed in outcrops above the adit and 13 to 75 metres southeast of the portal. The best sample in 1988 was from a vein 0.5 metre west of the main vein. This vein, up to 8 centimetres wide, strikes 40 degrees and dips vertically. The sample

CAPSULE GEOLOGY

assayed 0.71 grams per tonne gold (Assessment Report 18983).
The Densy claim was Crown-granted in 1898 and by 1899 a 40-metre
adit and 4 shafts had been developed. The veins were sampled in 1988
by G. Benvenuto with disappointing results.

BIBLIOGRAPHY

EMPR AR 1898-1195; *1899-746
EMPR ASS RPT *18983
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 144
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 76

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW034**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRITISH EMPIRE (L. 2539)**, ROYAL STANDARD (L. 2540), DOMINION FRACTION (L. 2541),
IMPERIAL, EHU, EH-U

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:
LATITUDE: 50 14 56 N
LONGITUDE: 119 24 44 W
ELEVATION: 460 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Shaft on Lot 2539 (Assessment Report 18983).

Underground

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

NORTHING: 5569088
EASTING: 328026

COMMODITIES: Gold Silver Copper

MINERALS

SIGNIFICANT: Gold Chalcopyrite
ASSOCIATED: Quartz Pyrite Arsenopyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Argillite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Gold
GRADE: 4.5000 Grams per tonne

YEAR: 1987

COMMENTS: Sample, including 2 and 7 centimetre thick veins, from the main adit zone.

REFERENCE: Assessment Report 18983.

CAPSULE GEOLOGY

The British Empire showing is located 7 kilometres west of Vernon, north of the Vernon Arm of Okanagan Lake. Three adits and 2 short shafts occur at this showing. The similar Densy showing (082LSW033) is 220 to 250 metres to the northwest.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

Quartz veins and adjoining wallrocks in Harper Ranch quartzites and argillites host gold, silver and copper mineralization. Within a 220-metre section, 18 narrow quartz veins, up to 0.6 metre thick, carry gold, pyrite, arsenopyrite and chalcopyrite as disseminations and on fractures. The quartz veins have a general strike of 065 to 085 and dip steeply. They form lenses that pinch and swell along shears and fractures, and have a contorted appearance. Their walls are commonly sheared and gouge-filled. The 2 main gold-bearing veins are 27 and 29 centimetres thick and strike north.

In the main adit zone a recent sample assayed up to 4.5 grams

CAPSULE GEOLOGY

per tonne gold over 3.3 metres, including 2 and 7-centimetre thick quartz veins (Assessment Report 18983). The arsenopyrite content does not correlate with gold values.

The British Empire claim was Crown-granted in 1901. During 1903-06, 185 tonnes of ore produced 342 grams of silver and 2,022 grams of gold. By 1931 there were over 200 metres of underground cross-cuts, drifts, raises and shafts. In 1986-87, G. Benvenuto carried out geological mapping and sampling.

BIBLIOGRAPHY

EMPR AR *1901-1125; 1902-189,303; *1903-178; *1905-192; 1906-172,250;
1913-194; 1925-184; 1927-213
EMPR ASS RPT *16115; *18983
EMPR BC METAL MM00427
EMPR BULL 1932 No. 1, p. 8; No. 20 part III, p. 24
EMPR EXPL 1987-C88
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR INDEX 3-190
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR P 1989-1, pp. 356-357
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 142
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 75,81-82
IPDM Mar/Apr, 1983
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW035**

NATIONAL MINERAL INVENTORY:

NAME(S): **IRON CAP**, EH-U, EHU

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 20 N
LONGITUDE: 119 22 13 W
ELEVATION: 600 Metres

NORTHING: 5569733
EASTING: 331040

LOCATION ACCURACY: Within 500M
COMMENTS: Shaft (Assessment Report 18983).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz Pyrite
ALTERATION: Ankerite Sericite
ALTERATION TYPE: Carbonate Sericitic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
SHAPE: Tabular
DIMENSION:

STRIKE/DIP: 120/75S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Basalt
Quartzite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch	
METAMORPHIC TYPE: Regional	RELATIONSHIP: GRADE: Greenschist
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.	

CAPSULE GEOLOGY

The Iron Cap showing is located 7 kilometres west of Vernon, north of the Vernon Arm of Okanagan Lake. In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Pentiction Group volcanic rocks overlie older rocks. Quartz veins in Harper Ranch basalt host copper mineralization. Two narrow quartz veins, explored by shallow pits and a shallow shaft, occur about 600 metres northeast of the Densy adit (082LSW033). The veins, striking 120 degrees and dipping 75 degrees to the south, carry disseminated pyrite and chalcopyrite. The basalt appears to be iron-carbonate-sericite altered. The thickest vein is 94 centimetres and a sample (#3052) assayed 0.116 gram per tonne gold (Assessment Report 18983). About 235 metres to the northwest of the above vein, 3 shallow pits appear to have explored a quartz vein hosted in quartzite. By 1897, a 3 metre shaft had been sunk. The veins were sampled by G. Benvenuto in 1988.

BIBLIOGRAPHY

EMPR AR *1897-609
EMPR ASS RPT *18983
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 373
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM *296, p. 145
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 76

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW036**

NATIONAL MINERAL INVENTORY:

NAME(S): **THREE TRAMPS (L. 525)**, EH-U, EHU

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 18 N
LONGITUDE: 119 21 26 W
ELEVATION: 530 Metres

NORTHING: 5569642
EASTING: 331969

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft at the northeast corner of the EHU claim (Assessment Report 18983).

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrrhotite Magnetite Pyrite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Paleozoic-Mesozoic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Ultramafic Intrusions

LITHOLOGY: Amphibolite
Hornblendite

HOSTROCK COMMENTS: The ultramafic rocks intrude or are in fault contact with the Devonian to Triassic Harper Ranch Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Three Tramps showing is located 6 kilometres west of Vernon, north of the end of the Vernon Arm of Okanagan Lake. At the showing, an inclined shaft explored a quartz vein and another shaft explored an amphibolite unit hosting chalcopyrite.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Occasional Upper Paleozoic ultramafic rocks are associated with the Harper Ranch. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

Amphibolite and hornblendite of Upper Paleozoic(?) age hosts copper and gold mineralization. The amphibolite hosts disseminated pyrrhotite, chalcopyrite, pyrite, magnetite and malachite.

Chalcopyrite-pyrrhotite and magnetite stringers, up to 3 millimetres thick, are reported. The chalcopyrite occurs as disseminated grains or along pyrrhotite or magnetite stringers. Samples taken in 1987 assayed low values, the highest was 0.017 gram per tonne gold (Assessment Report 18983).

A 2.5-metre inclined shaft was driven along the footwall of a narrow barren quartz vein striking 223 degrees and dipping 45 degrees northwest.

From 1897 to 1899, an 11-metre shaft was sunk and in 1903 the claim was Crown-granted. The showing was sampled by G. Benvenuto in 1988.

BIBLIOGRAPHY

EMPR AR *1897-609; *1899-746; 1902-189; 1903-248
EMPR ASS RPT *18983

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 375
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 149
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 78

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW037**

NATIONAL MINERAL INVENTORY:

NAME(S): **BACHELOR**, BACHELOR NO.1, BACHELOR NO.2,
BATCHELOR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

MINING DIVISION: Vernon

LATITUDE: 50 13 12 N
LONGITUDE: 119 22 12 W
ELEVATION: 690 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5565780
EASTING: 330934

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location is in the northwest 1/4, Section 13, Township 13 (Record of Mineral Claim).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Gold Pyrite Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1896
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE
Gold 35.0000 Grams per tonne
COMMENTS: A representative sample taken from depth (\$22 per tonne).
REFERENCE: Minister of Mines Annual Report 1896, page 579.

CAPSULE GEOLOGY

The Bachelor showing is located 8 kilometres southwest of Vernon, east of Okanagan Lake.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Granitic Coryell rocks of Eocene age intrude these rocks and patches of Eocene Pentiction Group volcanic rocks overlie the older rocks.

A quartz vein in Middle Jurassic quartz diorite hosts gold and copper mineralization. The 1.1 to 2.4-metre thick vein carries pyrite, chalcopyrite and native gold. Selected surface samples assayed up to 800 grams per tonne gold (\$480) while more representative samples taken at depth assayed 35 grams per tonne (\$22) (Minister of Mines Annual Report 1896).

By 1899, exploration included the sinking of 2 shafts, totalling 12 metres, and 17 metres of tunnels.

BIBLIOGRAPHY

EMPR AR *1896-579; *1899-747; 1934-D34
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 377
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 141
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 75

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW038**

NATIONAL MINERAL INVENTORY:

NAME(S): **RITA, RETA**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 51 N
LONGITUDE: 119 18 34 W
ELEVATION: 440 Metres

NORTHING: 5570554
EASTING: 335406

LOCATION ACCURACY: Within 5 KM

COMMENTS: Approximate location from corrected description in Minister of Mines Annual Report 1914.

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Unknown
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Unknown

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau	
TERRANE: Harper Ranch		
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.		

CAPSULE GEOLOGY

The Rita showing is located approximately 3 kilometres west of Vernon.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Occasional Paleozoic ultramafic rocks are associated with the Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks and patches of Eocene Kamloops Group volcanic rocks overlie the older rocks.

Samples assayed up to 2500 grams per tonne silver, 1.4 per cent copper and 3 grams per tonne gold (Minister of Mines Annual Report 1914, page 360). By 1914 two open cuts, 15 and 6 metres, had been completed. No other information is available on this showing.

BIBLIOGRAPHY

EMPR AR *1914-360
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 149
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW039**

NATIONAL MINERAL INVENTORY:

NAME(S): **MISSION HILL EAST**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 03 N
LONGITUDE: 119 18 52 W
ELEVATION: 500 Metres

NORTHING: 5563524
EASTING: 334831

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, Fig. 7).

COMMODITIES: Silver Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Mission Hill East showing is located 8 kilometres south-southwest of Vernon, west of Kalamalka Lake. In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks informally named the Terrace Creek batholith. Granitic Coryell rocks of Eocene age intrude these units and patches of Eocene Kamloops Group volcanic rocks overlie older rocks. Quartz-calcite stringers and lenses within Middle Jurassic quartz diorite host silver, copper and gold mineralization. The irregular stringers and lenses carry disseminations, streaks and bunches of pyrite and minor chalcopyrite. The zone of quartz is several metres wide. The wall-rock also contains disseminated sulphide mineralization. By 1931, exploration had been carried out by means of a 60-metre tunnel.

BIBLIOGRAPHY

EMPR AR *1928-221
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 147
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 77, 84

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 380
REPORT: RGEN0100

MINFILE NUMBER: **082LSW040**

NATIONAL MINERAL INVENTORY:

NAME(S): **MILLIGAN, SALLY BROWN (L. 4710), OLD MAN,**
ALBERTA, TRANSMERE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:
LATITUDE: 50 13 06 N
LONGITUDE: 119 17 27 W
ELEVATION: 520 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Old trenches on Lot 4710.

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

NORTHING: 5565418
EASTING: 336575

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Breccia Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
COMMENTS: Breccia zone is up to 60 metres thick and 150 metres high.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Jurassic	Harper Ranch	Undefined Formation	Nelson Intrusions

LITHOLOGY: Quartz Limestone Breccia
Limestone
Granite
Sediment/Sedimentary

HOSTROCK COMMENTS: Mineralization occurs in a breccia zone near the contact between the granitic rocks and the Devonian to Triassic sedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1902
SAMPLE TYPE: Grab
COMMODITY: Gold
Gold 5.0000 Grams per tonne
COMMENTS: Highest gold value reported.
REFERENCE: Minister of Mines Annual Report 1902, page 188.

CAPSULE GEOLOGY

The Milligan showing is located 5 kilometres south-southwest of Vernon, at the edge of Kalamalka Lake.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by the Jurassic Nelson Intrusions. Granitic Coryell rocks of Eocene age intrude these rocks.

A breccia zone in limestone, near the contact with Middle Jurassic granitic rocks, hosts gold mineralization. The zone, up to 60 metres thick and 150 metres high, contains quartz fragments and free gold. Gold values up to 5 grams per tonne are reported (Minister of Mines Annual Report 1902 p. 188).

The occurrence was first described in 1902. Development includes one small adit, trending west-northwest, about 200 metres north of the breccia zone and 100 metres west of the edge of the lake.

MINFILE NUMBER: **082LSW040**

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 381
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1902-188
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 147
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW041**

NATIONAL MINERAL INVENTORY:

NAME(S): **COPPER KING**, KIK, PETE

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 30 N
LONGITUDE: 119 13 48 W
ELEVATION: 1350 Metres

NORTHING: 5547499
EASTING: 340383

LOCATION ACCURACY: Within 1 KM

COMMENTS: The location is now under Swalwell Lake (Assessment Report 1095).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Copper

ASSOCIATED: Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Unnamed/Unknown Informal

LITHOLOGY: Feldspar Amphibolite Gneiss

HOSTROCK COMMENTS: Shuswap Terrane gneiss is intruded by pegmatite.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Okanagan Highland

TERRANE: Undivided Metamorphic Assembl.

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The Copper King showing is located 21 kilometres southeast of Vernon, below the flood level of Swalwell Lake.

In this area, metamorphic rocks of the Shuswap Terrane are intruded by Middle Jurassic granitic rocks. Volcanic and sedimentary rocks of both Eocene and Miocene ages cap the older rocks.

Feldspar amphibolite gneiss hosts copper mineralization.

Pyrite, traces of copper mineralization and specks of native copper occur in foliated seams and in fractures.

The first record of this occurrence is in 1929. In 1967, Kokanee Moly Mines Ltd. conducted soil geochemistry. In 1973-75, Westley Mines Ltd. carried out magnetic, electromagnetic and induced polarization surveys. In 1975, Granges Exploration conducted a program of soil geochemistry and drilling. Westley Mines Ltd. completed an electromagnetic survey in 1981.

BIBLIOGRAPHY

EMPR AR *1929-249
EMPR ASS RPT *1095, 4798, 4799, 4800, 5412, *5796, 10093
EMPR EXPL 1975-E51; 1981-200
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1973-99
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296, p. 143
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW042**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHITE ELEPHANT (L. 4880)**, PRE-CAMBRIAN PINE (L.4883),
RALFRED NO. 2 (L.5042), EAST (L.5044), WEST (L.5045),
EDWARD (L.5046)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:
LATITUDE: 50 08 53 N
LONGITUDE: 119 33 25 W
ELEVATION: 1030 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Shaft on Lot 4880.

Underground

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

NORTHING: 5558223

EASTING: 317325

COMMODITIES: Gold

Silver

Bismuth

Tellurium

Tungsten

MINERALS

SIGNIFICANT: Tetradymite Chalcopyrite Scheelite Gold Pyrrhotite
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Podiform Massive
CLASSIFICATION: Mesothermal
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
SHAPE: Regular
MODIFIER: Fractured Faulted
DIMENSION: 30 x 10 Metres STRIKE/DIP: 045/60N TREND/PLUNGE:
COMMENTS: Surface dimensions of vein.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Middle Jurassic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Hornblende Biotite Granodiorite

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The White Elephant showing is located 25 kilometres west-southwest of Vernon, north of Shorts Creek.

In this area, Middle Jurassic granitic rocks of the informally named Terrace Creek batholith intrude Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Eocene Penticton Group volcanic and sedimentary rocks cover the older units.

A quartz vein or lens in granodiorite hosts gold, silver, tungsten, bismuth and tellurium. The highly fractured and faulted quartz vein strikes northeast and dips 60 degrees northwest. The vein, greater than 10 metres thick, is traceable on surface for at least 30 metres. A pod of massive pyrrhotite, up to 4 metres thick, occurs at the footwall contact, although the best gold values occur in lenses and stringers some distance from the vein wall. Pyrrhotite, pyrite, chalcopyrite and tetradymite (gold-bearing bismuth telluride) occur as lens-like bodies with the vein. Stringers and segregations of bismuth telluride, free gold and scheelite are also reported. Ore-shoots are up to 7.5 metres thick and 15 metres long. Underground workings include a 91-metre inclined shaft with four levels of development to a depth of 60 metres.

In 1921, a 2-metre shaft had been completed and in 1922 about 264 tonnes of mineralized rock were shipped producing 5,257 grams of silver and 13,468 grams of gold. In 1924, Okanagan Premier Mines Ltd. extended the shaft to 30 metres and drove a 60-metre crosscut. In 1928, Pre-Cambrian Mines Ltd. continued underground exploration and in 1929, mining from the pyrrhotite lens produced 27 tonnes of pyrrhotite concentrate, containing low gold values. Production from the quartz vein during the period 1933-35, totalled 4882 tonnes and produced 4,292 grams of silver and 49,702 grams of gold.

BIBLIOGRAPHY

EM OF 1999-3
EMPR AR *1921-192,196; *1922-144; 1923-159; *1924-140;
1927-213; 1928-220; *1929-248,441; *1930-207,208; 1931-116;
*1932-143; *1933-A196; 1934-A24,29,C36(photo),*D29-30,31;
1935-A24,30,D13; 1950-115
EMPR BC METAL MM00443
EMPR BULL *1(1932), p. 79; 10(1943), p. 117; 20(1944)
Part III, p. 24, 25
EMPR EXPL 1978-E92; 1979-100; 1980-132; 1987-C90;
1988-A21,A43,*B35-38
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR INF CIRC 1989-1, p. 26
EMPR INDEX 3-218
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30, 1991-17, p. 31, 1999-3
EMPR P 1982-1, p. 9; 1987-15, p. 43; 1989-1, p. 35
EMPR RGS 1976
EMPR PF (In 082LSW General - Claim Map, 1966; Lucky 7 Exploration
Ltd., Prospectus, June 1988)
GSC MAP 46-7, 1059A, 1712A
GSC MEM 296, p. 151
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 79, 86-90

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW043**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOBBIN NORTH**, DOBBIN, TAD 7,
TAD, FLOP

MINING DIVISION: Nicola

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 09 N
LONGITUDE: 119 47 52 W
ELEVATION: 1720 Metres

NORTHING: 5548218
EASTING: 299724

LOCATION ACCURACY: Within 500M
COMMENTS: Area of drilling (Assessment Report 8456).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite Garnet
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry Igneous-contact
TYPE: K01 Cu skarn 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>
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Monzonite
Garnet Skarn
Calcareous Argillite

HOSTROCK COMMENTS: Intrusive rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies. GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Drill Core
COMMODITY: Molybdenum GRADE: 0.0160 Per cent
COMMENTS: Sample is from 53 metres of percussion drill cuttings.
The hole ended in mineralization.
REFERENCE: Assessment Report 8456.

CAPSULE GEOLOGY

The Dobbin North showing is located 28 kilometres northwest of Kelowna, east of Dome Rock Mountain.
In this area, Devonian to Triassic Harper Ranch Group argillaceous rocks, basalt tuffs and flows, minor rhyolite and limestone are intruded by Middle Jurassic monzonite of the informally named Terrace Creek batholith.
Chloritized and sericitized monzonitic rocks and garnet skarn (calcareous argillite) host molybdenum mineralization. Quartz veinlets carry disseminated pyrite and molybdenite. Drilling samples assayed from 0.039 per cent molybdenum over 3 metres to 0.016 per cent molybdenum over 53 metres (Assessment Report 8456).
In 1979-80, Cominco Ltd. carried out geological mapping, soil geochemistry and drill programs. The area was explored for gold mineralization in 1987, 1988 and 1990 by Chevron Minerals Ltd. and Inco Exploration and Technical Services Inc.

BIBLIOGRAPHY

EMPR ASS RPT *7596, *8456, 17095, 18550, 20831

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 386
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1979-101
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363; 2000, pp. 191-222
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Chevron File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW044**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZION**, ZION MOUNTAIN, HOMESTAKE (L. 1690),
NO. 1-4

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 08 24 N
LONGITUDE: 119 34 52 W
ELEVATION: 620 Metres

NORTHING: 5557387
EASTING: 315568

LOCATION ACCURACY: Within 500M
COMMENTS: Adit on Lot 1690.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Volcanic

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Gold
GRADE: 8.0000 Grams per tonne
COMMENTS: Highest gold value reported.
REFERENCE: Minister of Mines Annual Report 1907, page 128.

CAPSULE GEOLOGY

The Zion showing is located 26 kilometres west-southwest of Vernon, adjacent to Shorts Creek.
In this area, Middle Jurassic granitic rocks intrude sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. Eocene Penticton Group volcanic and sedimentary rocks occur nearby, overlying the older units.
A quartz vein, 0.4 metre thick, in Harper Ranch volcanic rocks carries free gold. Reported values range from 3 to 8 (\$2-\$5) grams per tonne gold (Minister of Mines Annual Report 1907, page 128).
By 1907, 50 metres of tunnels had been developed to explore the vein.

BIBLIOGRAPHY

EMPR AR *1907-128
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296 p. 151
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 388
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT 1931A, p. 79

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW045**

NATIONAL MINERAL INVENTORY: 082L5 Mo1

NAME(S): **KENALLAN**, BUM, MOLY,
CHIP, YOKAHAMA, BRENDA,
WIN, GRAND PRAIRIE, KEY,
FOREST QUEEN, ALICE HAY, HENRIETTA,
NELSON, SIX-MILE CREEK, SILVER WEDDING,
BONACCORD

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L05W
BC MAP:
LATITUDE: 50 26 21 N
LONGITUDE: 119 49 06 W
ELEVATION: 890 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Shaft on the West Skarn Zone (Assessment Report 2360).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5591257
EASTING: 299879

COMMODITIES: Molybdenum Copper Gold

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite
ASSOCIATED: Pyrite K-Feldspar
ALTERATION: Pyroxene Garnet Wollastonite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Triassic-Jurassic

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Skarn Igneous-contact
TYPE: L03 Alkalic porphyry Cu-Au K07 Mo skarn
SHAPE: Tabular
DIMENSION: 335 x 2 Metres STRIKE/DIP: 180/50W TREND/PLUNGE:
COMMENTS: Surface dimensions(length x width) and attitude of the West Skarn zone.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Triassic-Jurassic	Harper Ranch	Undefined Formation	Klotassin Intrusions

LITHOLOGY: Cherty Siltstone
Cherty Argillite
Diopside Garnet Skarn
Diorite
Marble

HOSTROCK COMMENTS: The Devonian to Triassic Harper Ranch Group is intruded by the Klotassin Intrusions.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch
METAMORPHIC TYPE: Contact RELATIONSHIP: Syn-mineralization GRADE: Hornfels
COMMENTS: Harper Ranch regionally metamorphosed to prehnite-pumpellyite facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1959
SAMPLE TYPE: Grab
COMMODITY GRADE
Molybdenum 3.6100 Per cent
COMMENTS: Commodity is Molybdenite. Highest value from samples.
REFERENCE: Assessment Report 282.

CAPSULE GEOLOGY

The Kenallan prospect is located 19 kilometres west of Falkland, southwest of Westwold.
In this area, sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Granitic rocks of the Triassic to Jurassic Klotassin Intrusions intrude the Harper Ranch and Nicola groups. Extensive Eocene Kamloops Group volcanic rocks cap the older rocks.

CAPSULE GEOLOGY

The Harper Ranch Group hosts molybdenum and lesser copper mineralization. Within commonly hornfelsed cherty siltstones and argillites, two narrow stratabound skarn zones, 150 metres apart, host clusters of coarse books, rosettes and fine disseminations of molybdenite and minor chalcopyrite and pyrite. The skarn mineralogy includes pyroxene, garnet, and wollastonite.

The West Skarn Zone, 335 metres long, 0.15 to 2.4 metres thick, and the East Skarn Zone, 245 metres long, 0.15 to 2.4 metres thick, are erratically mineralized. The skarn zones grade into marble along strike. Molybdenite mineralization also occurs in small granitic apophyses.

Samples taken by government engineers assayed as high as 3.61 per cent molybdenite (Assessment Report 282). Several excavations were made from which 45 to 67 tonnes of ore grading 1 to 2 per cent, were removed (Assessment Report 282).

The showings were discovered by 1892. By 1901, an exploration shaft and open cuts had been recorded on 5 claims. In 1959, Noranda Exploration carried out geological mapping. In 1966, Northwest Ventures Ltd. conducted trenching and drilling programs. Dresser Industries, in 1966, carried out geological mapping, soil geochemistry and magnetometer surveys. In 1978-80, Denar Mines Ltd. carried out geological mapping, trenching and drill programs. In 1981 Score Resources Ltd. conducted electromagnetic and magnetic surveys.

BIBLIOGRAPHY

- EMPR AR 1892-540; 1893-1069; 1896-568; 1898-1107; *1899-733;
1901-1080; *1915-216,217,218; 1936-D53; *1964-104,105
EMPR ASS RPT 282, *2360, 9972
EMPR BULL 9, p. 28, 82
EMPR EXPL 1978-E95; *1979-103; *1980-133,134; 1981-169
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (Geological Plan, Moly Property, date unknown;
Correspondence, W. Robertson, 1915; In 082LSW General - Claim Map,
1966; Property Examination Report, Canadian Superior Exploration,
1972)
EMPR RGS 1976
GSC EC GEOL *20, pp. 43, 272-275
GSC MAP 47-6, 48-4, 1059A, 1712A
GSC MEM 296 p. 146
GSC MISC RPT 8, p. 22
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GCNL c. 1979

DATE CODED: 1985/07/24
DATE REVISED: 1995/03/13

CODED BY: GSB
REVISED BY: GR

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW046**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIWASH**, SIWASH 3, NASH

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 11 N
LONGITUDE: 119 36 12 W
ELEVATION: 1550 Metres

NORTHING: 5573715
EASTING: 314549

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 20226).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz Chalcedony Pyrite
ALTERATION: Silica Hematite Goethite
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epithermal
TYPE: L03 Alkalic porphyry Cu-Au
DIMENSION: 3000 x 750 x 150 Metres
COMMENTS: Dimensions of the alteration zone.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Penticton	Unnamed/Unknown Formation	

LITHOLOGY: Trachytic Tuff
Trachyandesite Flow
Breccia
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Zeolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1989

COMMODITY	GRADE	
Silver	16.6000	Grams per tonne
Gold	5.5000	Grams per tonne

COMMENTS: Highest values from sampling.
REFERENCE: Assessment Report 20226.

CAPSULE GEOLOGY

The Siwash showing is located 23 kilometres west of Vernon, between Bouleau and Naswhito Creeks.

In this area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Extensive Eocene Penticton Group volcanic and sedimentary rocks overlie the older units.

A trachytic tuff-breccia paleochannel deposit is in fault contact with trachyandesite flows. A large alteration zone with silica flooding, chalcedonic quartz stockworks and hematitic and goethite staining predominates within the tuffaceous rocks. The alteration zone is 3000 by 750 by 150 metres in area. Minor, very fine-grained pyrite occurs in drusy quartz veinlets. These quartz veinlets, within altered tuffs and flows, carry gold and silver mineralization. Samples assayed up to 5.55 grams per tonne gold and 16.6 grams per tonne silver (Assessment Report 20226).

In 1989, Prosperity Gold Corporation carried out geological mapping, soil geochemistry, magnetic and VLF-EM surveys.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 392
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 12030, 19100, *20226
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167G
GSC P 89-1E pp. 51-60
PR REL Solomon Resources Ltd., Feb.14, 18, 2003
WWW <http://www.bmts.bc.ca/srb/>

DATE CODED: 1993/03/31
DATE REVISED: 1993/06/03

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW047**

NATIONAL MINERAL INVENTORY:

NAME(S): **BREWER, BRETT 2**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 03 N
LONGITUDE: 119 39 00 W
ELEVATION: 1325 Metres

NORTHING: 5568027
EASTING: 311018

LOCATION ACCURACY: Within 500M

COMMENTS: Mid-point between pits on the No. 1 and 2 veins, 350 metres apart (Assessment Report 19482).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Gold Chalcopyrite Galena Sphalerite

ASSOCIATED: Quartz Pyrite

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal
SHAPE: Tabular
DIMENSION:

STRIKE/DIP: 150/25E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Foliated Granodiorite

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Plutonic Rocks Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1986
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	190.0000	Grams per tonne	
Gold	40.0000	Grams per tonne	

COMMENTS: Highest assays from sampling.
REFERENCE: Assessment Report 15564.

CAPSULE GEOLOGY

The Brewer showing is located 28 kilometres west of Vernon, on the steep north slope of Whiteman Creek Valley.

In this area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude the Jurassic and Eocene rocks.

Quartz veins within Middle Jurassic foliated granodiorite host gold, silver, copper, lead and zinc mineralization. Two narrow quartz veins, 0.1 to 0.5 metre thick, of limited strike length and shallow dip carry disseminated pyrite, native gold, chalcopyrite, galena and sphalerite. Samples assayed up to 40 grams per tonne gold and 190 grams per tonne silver (Assessment Report 15564).

The showings were discovered in 1939 by A. Brewer. In 1984-86, Huntington Resources Ltd. carried out geological mapping and soil geochemistry.

BIBLIOGRAPHY

EMPR ASS RPT 13469, 13471, *15564, *19482
EMPR EXPL 1984-100,101; 1985-A39,62; 1986-A28,64
EMPR FIELDWORK 1987, pp. B15-22, 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR RGS 1976

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 394
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (In 082LSW General - Claim Map, 1966)
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Placer Dome File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW048**

NATIONAL MINERAL INVENTORY:

NAME(S): **PAT**, WHIT

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 31 N
LONGITUDE: 119 36 01 W
ELEVATION: 1230 Metres

NORTHING: 5565061
EASTING: 314465

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of a kaolin zone (Assessment Report 6572).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ALTERATION: Kaolin Silica Jarosite Limonite
ALTERATION TYPE: Argillic Silicific'n Oxidation
MINERALIZATION AGE: Tertiary

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Eocene

Coryell Intrusions

LITHOLOGY: Rhyodacite Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Pat showing is located 24 kilometres west-southwest of Vernon, on the steep south side of Whiteman Creek valley.

In this area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are intruded by Middle Jurassic granitic rocks. An Eocene Coryell rhyodacite to syenite porphyry, high-level plug intrudes and is in fault contact with the Jurassic intrusions. Eocene Pentiction Group volcanic rocks overlie the igneous and sedimentary rocks.

An altered, bleached, fractured and brecciated zone within the rhyodacite porphyry hosts Tertiary, possibly Eocene, copper mineralization. Chalcopyrite, bornite, jarosite and limonite are reported. Alteration envelopes of kaolinized feldspars, talc(?) and silicification occur along fractures, usually less than 10 centimetres thick.

In 1967-68, Noranda Exploration Co. Ltd. carried out a program of geological mapping, soil geochemistry and drilling. During 1975-77, Canadian Occidental Petroleum Ltd. carried out uranium exploration on the property.

BIBLIOGRAPHY

EMPR AR 1967-222,223; 1968-223
EMPR ASS RPT 1039, 5692, 6052, *6572, 7811, 18004, 19626
EMPR EXPL 1975-E51,52; 1976-E54; 1977-E78,79; 1979-101;
1980-133
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW049**

NATIONAL MINERAL INVENTORY:

NAME(S): **WESTWOLD**, ANNIS INDUSTRIES, MONTE LAKE

STATUS: Past Producer Open Pit

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082L05W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 50 26 54 N

LONGITUDE: 119 49 13 W

ELEVATION: 870 Metres

NORTHING: 5592281

EASTING: 299780

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry (Assessment Report 9972).

COMMODITIES: Marble Dimension Stone Building Stone Aggregate

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Permian

DEPOSIT

CHARACTER: Massive Stratiform
CLASSIFICATION: Sedimentary Igneous-contact Industrial Min.
TYPE: R04 Dimension stone - marble R09 Limestone
R15 Crushed rock

SHAPE: Tabular

MODIFIER: Fractured

DIMENSION: 2000 x 75 Metres STRIKE/DIP: 150/30W

TREND/PLUNGE:

COMMENTS: Dimension is for marble knoll. The age of limestone recrystallization is probably Triassic-Jurassic.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Klotassin Intrusions
Triassic-Jurassic			

LITHOLOGY: Marble
Limestone

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic, the limestone is Permian.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Harper Ranch

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE: Hornfels

COMMENTS: Harper Ranch regionally metamorphosed to prehnite-pumpellyite facies.

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1968
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Limestone	54.7500 Per cent

COMMENTS: Grade given is for CaO.

REFERENCE: Minister of Mines Annual Report 1968, page 322, average of 2 samples.

CAPSULE GEOLOGY

The Westwold showing is located 19 kilometres west of Falkland, southwest of Westwold.

In this area, sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Triassic to Jurassic granitic rocks of the Klotassin intrusions intrude the Harper Ranch and Nicola groups. Extensive Eocene Kamloops Group volcanic rocks cap the older rocks.

The Harper Ranch includes a Permian limestone, contact metamorphosed to marble, which has been quarried for industrial use. The 2000-metre long, 75-metre wide massive marble is in contact with granodiorite to the north and grades into a skarn zone of to the south at the Kenallan prospect (082LSW045). The marble is white, medium to coarse-grained and has abundant fractures at 10 to 40-centimetre spacings. Sampling in 1968 returned 54.8 per cent CaO, 0.47 per cent MgO, 0.07 per cent Fe₂O₃ and insolubles at 0.85 per cent (Minister of Mines Annual Report 1968, page 322).

CAPSULE GEOLOGY

The deposit was put into production in 1968 by Annis Industries Ltd. and up to 1970 produced 4810 tonnes of marble for stucco dash, roof rock, riprap and driveway rock.

BIBLIOGRAPHY

EMPR AR 1967-309; *1968-322
EMPR ASS RPT 9972
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-398
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30, 1992-18, p. 81, 82
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Maps B,C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW050**

NATIONAL MINERAL INVENTORY:

NAME(S): **KALAMALKA**, CHANCE (L.2825), GUS

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L03E
BC MAP:

Underground

MINING DIVISION: Vernon

LATITUDE: 50 12 20 N
LONGITUDE: 119 05 59 W
ELEVATION: 910 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5563596
EASTING: 350168

LOCATION ACCURACY: Within 500M

COMMENTS: Extensive workings (Assessment Report 18043).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Gold Chalcopyrite Galena Sphalerite
ASSOCIATED: Quartz Pyrite Pyrrhotite Calcite
ALTERATION: Graphite Sericite Chlorite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Disseminated Shear
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G04 Besshi massive sulphide Cu-Zn
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 50 x 30 x 2 Metres STRIKE/DIP: 045/80W TREND/PLUNGE: 225/80
COMMENTS: The dimensions and attitudes are of the main ore shoot.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Jurassic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Nelson Intrusions

LITHOLOGY: Foliated Hornblende Diorite
Argillaceous Sediment/Sedimentary

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

Harper Ranch
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Okanagan Highland

GRADE: Greenschist

CAPSULE GEOLOGY

The Kalamalka mine is located 13 kilometres east-southeast of Vernon, west of Craster Creek.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group and are in probable fault contact with metamorphic rocks of the Shuswap Terrane. Jurassic granitic plutons of the Nelson Intrusions intrude the older rocks. Eocene Penticton Group and Miocene Chilcotin Group volcanic and sedimentary rocks cap areas of older rock.

A shear zone within foliated diorite, near the contact with metamorphosed Harper Ranch sediments, hosts gold, silver, copper, zinc and lead mineralization. The 7 metre-thick, northeast-southwest striking and steeply northwest-dipping shear is occupied by quartz veins and lenses. The 2 to 25 centimetre-thick quartz bands alternate with zones of altered diorite and argillaceous sediments. Pyrite and graphite are common throughout the shear. Native gold, pyrrhotite, chalcopyrite, and minor galena and sphalerite occur as disseminations in the quartz veins and pods and in the chlorite-quartz matrix of the shear. The gold mineralization is concentrated in shoots which plunge steeply and occur progressively deeper to the southwest. The main ore shoot was about 30 metres long, 50 metres deep and 2.5 metres thick. Sericite and chlorite alteration is present up to 0.5 metre from the veins. Carbonate (calcite) flooding of the hangingwall, up to several metres thick, has occurred locally.

By 1897, an 8-metre shaft had been sunk on the vein, and by 1934, an additional 43 metres of crosscuts and drifts had been completed.

CAPSULE GEOLOGY

Mining commenced in 1935 and continued until 1944. The mine was developed on 3 main levels through one adit. A total of 6592 tonnes of direct-shipping ore produced 108,052 grams of silver, 90,137 grams of gold, 208 kilograms of copper, 420 kilograms of lead and 172 kilograms of zinc. Base metals were only reported for a few shipments.

In 1967, Coin Canyon Mines Ltd. did minor exploration drilling. In 1987-88, Triple Star Resources Ltd. carried out rehabilitation of underground workings, geological mapping, trenching, an induced polarization survey and drilling.

BIBLIOGRAPHY

EMPR AR 1897-609; 1906-255; *1934-D32,33; 1935-A25,D13; 1937-A35,41,
D31; 1938-A33,D36; 1939-35; 1940-23,71; 1941-24,60;
1942-26,59; 1944-40; 1967-222
EMPR ASS RPT *16442, *18043, 21454
EMPR BC METAL MM00431
EMPR BULL 1944 No. 20, Part III, p. 24,25
EMPR EXPL 1987-A28,C88; 1988-A21,43,C54
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR INDEX 3-201
EMPR INF CIRC 1988-1, p. 26; 1989-1, p. 26
EMPR MAP 7216G, 8512G
EMPR OF 1989-5; 1990-30; 1991-19, p. 32
EMPR PF (In 082LSW General - Claim Map, 1966; Triple Star Resources
Corp., Prospectus, Jan. 1988)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM *296, p. 145, 153
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, p. 75

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW051**

NATIONAL MINERAL INVENTORY:

NAME(S): **AT, DUN, ESPERON 18,
ESPERON, DOBBIN**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 07 35 N
LONGITUDE: 119 42 35 W
ELEVATION: 1600 Metres

NORTHING: 5556199
EASTING: 306325

LOCATION ACCURACY: Within 500M
COMMENTS: Southern trench (Assessment Report 4133).

COMMODITIES: Molybdenum Copper

MINERALS

SIGNIFICANT: Molybdenite Chalcopyrite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite Sericite Epidote
ALTERATION TYPE: Chloritic Sericitic Epidote
MINERALIZATION AGE: Jurassic

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Middle Jurassic

GROUP

Nicola

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite Porphyry
Argillaceous Sediment/Sedimentary

HOSTROCK COMMENTS: Plutonic rocks are informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The AT showing is located 29 kilometres north-northwest of Kelowna, north and west of Dun Waters Creek.

In this area, Middle Jurassic quartz monzonite of the informally named Terrace Creek batholith intrudes argillaceous sediments of the Upper Triassic to Lower Jurassic Nicola Group. The stock is intruded by diorite plugs and dikes which are cut by quartz monzonite and aplite dikes. The intrusive rocks are cut by Tertiary basalt dikes related to volcanic rocks which overlie the older rocks.

Chloritized and sericitized, moderately fractured quartz monzonite porphyry hosts molybdenum and a trace of copper mineralization. Quartz veinlets, usually 1 to 10 centimetres thick, carry disseminated molybdenite, pyrite and traces of chalcopyrite. Pyrite and molybdenite occur on fracture planes. Alteration is associated with the quartz stockwork and the fractures.

About 1 kilometre to the northwest, sericite and epidote-altered quartz monzonite porphyry hosts quartz veinlets carrying a trace of disseminated molybdenite.

In 1966-67, Noranda Exploration Co. Ltd. carried out soil geochemistry and trenching programs. In 1972, Canadian Johns-Manville Co. Ltd. carried out a soil geochemistry survey. In 1979-80, Cominco Ltd. carried out geological mapping, induced polarization and magnetometer surveys.

BIBLIOGRAPHY

EMPR AR 1967-222
EMPR ASS RPT *1071, *4133, *7753, *8664
EMPR EXPL 1979-99,100; 1980-131
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1972-79
EMPR MAP 37, 5207G, 7216G

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 401
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW052**

NATIONAL MINERAL INVENTORY:

NAME(S): **JIM, DEL, ADELPHI,
WOOD**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 24 38 N
LONGITUDE: 119 47 45 W
ELEVATION: 950 Metres

NORTHING: 5588016
EASTING: 301357

LOCATION ACCURACY: Within 500M
COMMENTS: Centre of the mineralized area (Assessment Report 7718).

COMMODITIES: Molybdenum Tungsten Copper

MINERALS

SIGNIFICANT: Molybdenite Scheelite Chalcopyrite
ASSOCIATED: Quartz Pyrite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry
TYPE: L03 Alkalic porphyry Cu-Au
SHAPE: Irregular
MODIFIER: Fractured
COMMENTS: Mineralization is on fractures and in quartz veins.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Biotite Granodiorite
Quartzite
Argillite
Chlorite Schist
Rhyolite Dike
Aplite Dike

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic. Granodiorite of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau	
TERRANE: Plutonic Rocks	Harper Ranch	
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE:
COMMENTS: Harper Ranch regionally metamorphosed to prehnite-pumpellyite facies.		

CAPSULE GEOLOGY

The Jim showing is located 19 kilometres west-southwest of Falkland, north of Adelphi Creek. In this area, sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Middle Jurassic granitic plutons intrude the Harper Ranch and Nicola, and Cretaceous granodiorite plugs intrude the Nicola. Extensive Eocene Kamloops Group volcanic rocks cap the older rocks. Middle Jurassic well-jointed biotite granodiorite intrudes quartzites, with minor interbedded argillite, and metavolcanic chlorite schists. Later quartz-eye aplite and rhyolite dikes cut the above rocks. The granodiorite and, to a lesser degree, the quartzite host molybdenum, tungsten and minor copper mineralization. Molybdenite occurs as disseminations and rosettes along fractures and as clots within sericitic vuggy quartz veinlets. Scheelite occurs in quartz veinlets, chalcopyrite and pyrite are also present. The showing was discovered by S. Brewer. In 1965, Bralorne Pioneer Mines Ltd. carried out geological mapping, soil geochemistry and trenching programs. In 1967, D. Bonlie conducted a program of geological mapping, soil geochemistry and drilling. In 1972, Cutlass Exploration Ltd. conducted a trenching program. In 1975, Teck Corporation Ltd. prospected the property and in 1979 Hudson's Bay Oil and Gas Co. Ltd. carried out geological mapping, soil geochemistry,

CAPSULE GEOLOGY

induced polarization and magnetometer surveys.

BIBLIOGRAPHY

EMPR AR 1965-164
EMPR ASS RPT 884, *7167, *7718
EMPR EXPL 1975-E52; *1979-102
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1972-80
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; Keda Resources Ltd.,
Prospectus, Feb. 1977)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW053**

NATIONAL MINERAL INVENTORY:

NAME(S): **ESPERON 2**, ESPERON, DOBBIN,
ESP

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 06 50 N
LONGITUDE: 119 41 39 W
ELEVATION: 1450 Metres

NORTHING: 5554770
EASTING: 307386

LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole 80-37 (Assessment Report 8664).

COMMODITIES: Molybdenum Tungsten

MINERALS

SIGNIFICANT: Molybdenite Scheelite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite Porphyry
Argillaceous Sediment/Sedimentary
Diorite
Quartz Monzonite
Aplite Dike

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1980
SAMPLE TYPE:	Drill Core		
COMMODITY		GRADE	
Molybdenum		0.0250	Per cent
Tungsten		0.0450	Per cent

COMMENTS: The molybdenum grade is from an 8-metre drill intersection and the tungsten is from a 30-metre intersection above it.

REFERENCE: Assessment Report 8664.

CAPSULE GEOLOGY

The Esperon 2 showing is located 29 kilometres north-northwest of Kelowna, north of Dun Waters Creek.

In this area, Middle Jurassic quartz monzonite of the informally named Terrace Creek batholith intrudes argillaceous sediments of the Eocene Penticton Group. The stock is cut by diorite plugs and dikes which are intruded by quartz monzonite and aplite dikes. The intrusive rocks are cut by Tertiary basalt dikes related to volcanic rocks which overlie the older rocks.

Chloritized and sericitized quartz monzonite porphyry hosts molybdenum mineralization. Quartz veinlets, usually 1 to 10 centimetres thick, carry blebs of molybdenite, scheelite and pyrite. The bottom 8 metres of the drill hole assayed 0.025 per cent molybdenum (Assessment Report 8664). A 30-metre section above this zone assayed 0.045 per cent tungsten (Assessment Report 8664).

Another drill hole, 800 metres to the southeast, encountered 4.5 metres of 0.021 per cent molybdenum.

In 1979 and 1980, Cominco Ltd. carried out geological mapping, induced polarization, magnetometer and percussion drill programs.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 405
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *7753, *8664, 17916, 18986, 20271
EMPR EXPL 1979-99,100; 1980-131
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Chevron File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW054**

NATIONAL MINERAL INVENTORY:

NAME(S): **ESPERON 1**, ESPERON, DOBBIN

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 06 29 N
LONGITUDE: 119 42 51 W
ELEVATION: 1530 Metres

NORTHING: 5554173
EASTING: 305933

LOCATION ACCURACY: Within 500M
COMMENTS: Showing (Assessment Report 7753).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Porphyritic Quartz Monzonite
Argillaceous Sediment/Sedimentary
Diorite
Quartz Monzonite
Aplite Dike

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Quesnel
PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Chip
COMMODITY Molybdenum GRADE 0.0210 Per cent
COMMENTS: The grade is from a 25-metre chip sample.
REFERENCE: Assessment Report 8664.

CAPSULE GEOLOGY

The Esperon 1 prospect is located 29 kilometres north-northwest of Kelowna, south of Dun Waters Creek.
In this area, Middle Jurassic quartz monzonite of the informally named Terrace Creek batholith intrudes argillaceous sediments of the Upper Triassic to Lower Jurassic Nicola Group. The stock is cut by diorite plugs and dikes which are cut by quartz monzonite and aplite dikes. The intrusive rocks are cut by Tertiary basalt dikes related to overlying Eocene Penticton Group volcanic rocks.
Chloritized and sericitized porphyritic quartz monzonite hosts molybdenum mineralization. Quartz veinlets carry disseminated molybdenite and pyrite. A 25-metre chip sample assayed 0.021 per cent molybdenum (Assessment Report 8664).
About 600 metres to the east, straddling Dun Waters Creek, quartz veins carrying disseminated molybdenite cut chloritized and sericitized porphyritic quartz monzonite, adjacent to diorite, and a quartz monzonite dike intruding argillites.
In 1979-80, Cominco Ltd. carried out geological mapping, induced polarization and magnetometer surveys.

BIBLIOGRAPHY

EMPR ASS RPT *7753, *8664

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 407
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1979-99,100; 1980-131
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW055**

NATIONAL MINERAL INVENTORY:

NAME(S): **ESPERON 3**, ESPERON, DOBBIN,
ESP

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 05 56 N
LONGITUDE: 119 41 54 W
ELEVATION: 1480 Metres

NORTHING: 5553113
EASTING: 307028

LOCATION ACCURACY: Within 500M
COMMENTS: Showing (Assessment Report 7753).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Middle Jurassic

GROUP

Nicola

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Porphyritic Quartz Monzonite
Argillaceous Sediment/Sedimentary
Diorite
Quartz Monzonite
Aplite Dike

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Esperon 3 showing is located 28 kilometres north northwest of Kelowna, north of Terrace Creek.

In this area, Middle Jurassic quartz monzonite of the informally named Terrace Creek batholith intrudes argillaceous sediments of the Upper Triassic to Lower Jurassic Nicola Group. The stock is cut by diorite plugs and dikes which are cut by quartz monzonite and aplite dikes. The intrusive rocks are cut by Tertiary basalt dikes related to overlying Eocene Penticton Group volcanic rocks.

Chloritized and sericitized porphyritic quartz monzonite hosts molybdenum mineralization. Quartz veinlets carry traces of disseminated molybdenite and pyrite.

In 1979 and 1980, Cominco Ltd. carried out geological mapping, induced polarization and magnetometer surveys.

BIBLIOGRAPHY

EMPR ASS RPT *7753, *8664, 17916, 18986, 20271
EMPR EXPL 1979-99,100; 1980-131
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Chevron File

DATE CODED: 1993/03/31
DATE REVISED: 1993/04/08

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW056**

NATIONAL MINERAL INVENTORY: 082L4 Cr1

NAME(S): **CHROME-VANADIUM**, HORNE, CHROME RIDGE,
ALOCIN CHROME, ROC, NAN-ROC,
CV

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:
LATITUDE: 50 00 26 N
LONGITUDE: 119 51 59 W
ELEVATION: 1450 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Old workings (Assessment Report 6775).

MINING DIVISION: Nicola
UTM ZONE: 11 (NAD 83)
NORTHING: 5543371
EASTING: 294620

COMMODITIES: Chromium

MINERALS

SIGNIFICANT: Chromite Magnetite
ASSOCIATED: Olivine Orthopyroxene
ALTERATION: Serpentine Talc Chrysotile
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Disseminated Stratabound
CLASSIFICATION: Magmatic Industrial Min.
TYPE: M03 Podiform chromite
SHAPE: Tabular
MODIFIER: Sheared Fractured
DIMENSION: 9000 Metres STRIKE/DIP: 150/85E TREND/PLUNGE:
COMMENTS: The shape, dimension(length) and attitude are for the host rock. The age of the chrysotile (asbestos) veins is unknown.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Chapperon	Unnamed/Unknown Formation	Ultramafic Intrusions
Paleozoic			

LITHOLOGY: Serpentinized Harzburgite
Phyllite
Greenstone
Mica Schist

HOSTROCK COMMENTS: The harzburgite is fault bounded in the Permian and older Chapperon Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Okanagan
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Greenschist
COMMENTS: The age of metasomatism of the harzburgite is unknown.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1977
SAMPLE TYPE: Grab
COMMODITY GRADE
Chromium 28.0000 Per cent
COMMENTS: The grade is the average of 7 selected samples of chromite mineralization.
REFERENCE: Assessment Report 6775.

CAPSULE GEOLOGY

The Chrome-Vanadium showings are located 33 kilometres west-northwest of Kelowna, south of Alocin Creek. The showings are on top of a prominent northwest trending ridge. The Cameo Lake showings are located 1600 metres to the southeast in 082E16W.
In this area, Devonian to Triassic volcanic and sedimentary rocks of the Harper Ranch Group and the Permian and older Chapperon Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Extensive Eocene Kamloops Group volcanic and sedimentary

CAPSULE GEOLOGY

rocks overlie the older units.

Serpentinized harzburgite in pelitic and volcanic rocks of the Chaperon Group hosts chromite and magnetite mineralization. This unit is likely a fault bounded remnant of lower crustal oceanic rocks. The unit, striking 150 degrees and dipping 85 degrees east has been traced for 9 kilometres. The pelitic rocks comprise phyllite, greenstone and mica schist.

Chromite occurs as closely spaced "kidneys", 1 to 3 centimetres in diameter, and as heavy disseminations of small angular aggregates. Several small lenses, containing 25 to 75 per cent chromite and up to 0.2 by 0.3 metres in area, are also present at the Alocin and Cameo Lake showings. Serpentine alteration is common, with lesser talc and chrysotile. Relict orthopyroxene indicates that the protolith was harzburgite. Sampling of high grade chromite pods averaged 28 per cent chromite (Assessment Report 6775). Heavy mineral sampling of stream sediments indicates the likely presence of gold and platinum mineralization.

The showings were initially staked as the Chrome-Vanadium group and prospected in the late 1920s by A.H. Raymer and Associates. Later, in the 1930s, the Chrome Ridge Mining Syndicate held claims that covered the better part of the serpentinite containing chromite mineralization. During that time a small amount of hand trenching, sampling and prospecting was done. In 1956, Noranda Exploration Company Ltd. did an extensive geological mapping, sampling, prospecting and aeromagnetic surveys of the area. By 1977, Nicola Copper Mines Ltd. and Buccaneer Resources Ltd. did further geological mapping, ground magnetometer surveys, soil sampling and trenching. At that time the Alocin and Cameo Lake showings were named. In 1986, the Laramie Mining Corp. collected heavy mineral samples. The showings are presently covered by the Jack 5 claim, owned by Rea Gold Corp.

Northwest along strike, prospecting on the Bart claims of Mineta Resources Ltd. has outlined the extension of the serpentinite and further probable chromite mineralization (W. Kovacevic, personal communication, 1990).

BIBLIOGRAPHY

- EMPR AR 1929-210,249
EMPR ASS RPT 168, *6775, 15233
EMPR BULL (*Stevenson, J.S. (1941): unpublished report)
EMPR EXPL 1986-C100
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1977-E79
EMPR MAP 5207G, 7216G
EMPR MEIP 78/79 (Report on Chromite Potential, Nana-Roc Mineral Claims, Cameo Lake, Kelowna, Von Rosen, G. Jun.28, 1977; Report on Drilling, Blasting and Trenching Roc Mineral claim, Crosby, R., Dec. 1978; Report on Mag.Survey and Grid Location Plenty, Host, Zip Mineral claims, Crosby, Richard & Assoc. Dec. 1978)
EMPR OF *1988-19, pp. 23, 25, 27, 96, 97; 1989-5; 1990-27, pp. 18, 19; 1990-30; 1995-25
EMPR P 1991-4, p. 132
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 1059A, 1712A
GSC MEM 296, pp. 143, 145
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 94-95
GCNL #147, #212, 1977; #118, 1978
Whittaker, P. (1983): *Geology & Petrogenesis of Chromite and Chrome Spinel in Alpine-type Peridotites of the Cache Creek Group; unpublished Ph.D. Thesis, Carleton University

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW057**

NATIONAL MINERAL INVENTORY:

NAME(S): **LONE STAR**

MINING DIVISION: Nicola

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 13 N
LONGITUDE: 119 57 49 W
ELEVATION: 1130 Metres

NORTHING: 5565473
EASTING: 288522

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing (Geological Survey of Canada Map 48-4A and Open File 637).

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Chrysotile
ASSOCIATED: Serpentine
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Metamorphic Hydrothermal Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos
SHAPE: Tabular
DIMENSION: 1500 Metres STRIKE/DIP: 150/
COMMENTS: The shape, dimension(length) and attitude are for the host rock.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE

Paleozoic
Paleozoic

GROUP

Chapperon

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Ultramafic Intrusions

LITHOLOGY: Serpentinized Harzburgite

HOSTROCK COMMENTS: The harzburgite is fault bounded in the Permian and older Chapperon Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Okanagan
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: The age of metasomatism of peridotite is unknown.

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Greenschist

CAPSULE GEOLOGY

The Lone Star showing is located 50 kilometres west of Vernon, on the south side of Chapperon Creek.

In this area, Devonian to Triassic volcanic and sedimentary rocks of the Harper Ranch Group and the Permian and older Chapperon Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Serpentinized harzburgite of the Chapperon Group hosts chrysotile (asbestos) mineralization. The unit has been traced for 1.5 kilometres and strikes 150 degrees.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30; 1995-25
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, *48-4A, 1712A
GSC MEM 296
GSC OF *637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW058**

NATIONAL MINERAL INVENTORY:

NAME(S): **PILOT, PILOT LODE, ROYAL,
JG, PILOT GOLD, A ZONE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 21 41 N
LONGITUDE: 119 58 01 W
ELEVATION: 1030 Metres

NORTHING: 5583022
EASTING: 288983

LOCATION ACCURACY: Within 500M

COMMENTS: Showing beside Weyman Creek (Assessment Report 18242).

COMMODITIES: Gold Copper Silver Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite
ASSOCIATED: Quartz Pyrrhotite Pyrite
ALTERATION: Chlorite K-Feldspar Malachite Azurite
ALTERATION TYPE: Chloritic Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Stockwork Disseminated Massive
CLASSIFICATION: Epigenetic Hydrothermal Igneous-contact Skarn
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Triassic-Jurassic	Nicola	Unnamed/Unknown Formation	Klotassin Intrusions

LITHOLOGY: Quartz Diorite
Granodiorite
Gabbro
Tuffaceous Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1989
SAMPLE TYPE:	Drill Core		
COMMODITY	GRADE		
Silver	3.2000	Grams per tonne	
Gold	0.7400	Grams per tonne	
Copper	0.2047	Per cent	

COMMENTS: Best values from 1989 drilling; 1 metre intersection.
REFERENCE: Assessment Report 22482.

CAPSULE GEOLOGY

The Pilot showing is located 32 kilometres west-southwest of Falkland, on Weyman Creek.

In the area, sedimentary rocks of the Permian and older Chaperon Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Triassic to Jurassic rocks of the Klotassin Intrusions cut these rocks. Volcanic rocks of the Eocene Kamloops Group cap older rocks.

Foliated quartz diorite, granodiorite and gabbro of the Klotassin Intrusions and, to a lesser extent, Nicola tuffaceous volcanic rocks host copper, gold and zinc mineralization. A quartz vein stockwork carries disseminated to massive pyrrhotite, pyrite, chalcopyrite and minor sphalerite. Veins up to 1 metre thick are reported. Similar mineralization occurs disseminated and on fractures in the diorite. The sheared and brecciated rocks have undergone chloritic and K-feldspar alteration.

CAPSULE GEOLOGY

The best values from drilling in 1989 were 0.740 gram per tonne gold, 3.2 grams per tonne silver and 0.2047 per cent copper over 1.02 metres (Assessment Report 22482).

By 1932, a 5-metre shaft had been developed. Between 1984 and 1992, H. Adams explored the property through drilling.

BIBLIOGRAPHY

EMPR AR 1932-146
EMPR ASS RPT 13417, *18242, *19633, 22482
EMPR EXPL 1984-102
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR INF CIRC 1993-1, p. 18
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW059**

NATIONAL MINERAL INVENTORY:

NAME(S): **MYSTERY**, MYSTERY NO. 1, MYSTERY NO. 2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 23 54 N
LONGITUDE: 119 03 28 W
ELEVATION: 1667 Metres

NORTHING: 5584945
EASTING: 353753

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing about 3 kilometres north of the Silver Queen (082LSW010) prospect (Minister of Mines Annual Report 1902, page 188).

COMMODITIES: Silver Gold Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Mesozoic-Cenozoic

GROUP

Nicola

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Porphyry Dike
Sediment/Sedimentary
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Mystery showing is located 20 kilometres northeast of Vernon, near the headwaters of Putnam Creek.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks are faulted over metasedimentary rocks of the Proterozoic Silver Creek Formation. A porphyry dike of Mesozoic-Cenozoic age cuts the Nicola Group.

The light grey porphyry dike carries silver, lead and gold mineralization. The dike is impregnated with galena and pyrite. The mineralized dike extends north to the Prince of Wales showing (082LSW060).

By 1902 exploration included the sinking of a 20 metre shaft.

BIBLIOGRAPHY

EMPR AR *1902-188
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW060**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRINCE OF WALES**, BLACK PRINCE, MAID OF ERIN,
ARMSTRONG, ABERDEEN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 24 06 N
LONGITUDE: 119 03 28 W
ELEVATION: 1866 Metres

NORTHING: 5585315
EASTING: 353763

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing about 3 kilometres north of Silver Queen (082LSW010) prospect
(Minister of Mines Annual Report 1902, page 188).

COMMODITIES: Silver Gold Lead Molybdenum

MINERALS

SIGNIFICANT: Galena Molybdenite
ASSOCIATED: Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 180 x 1 Metres
COMMENTS: Surface dimensions of mineralized dike.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Porphyry Dike
Sediment/Sedimentary
Volcanic

GEOLOGICAL SETTING

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

CAPSULE GEOLOGY

The Prince of Wales showing is located 21 kilometres northeast of Vernon, near the headwaters of Putnam Creek.
In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks are faulted over metasedimentary rocks of the Proterozoic Silver Creek Formation. A porphyry dike of Mesozoic-Cenozoic age cuts the Nicola Group.
The light grey porphyry dike carries silver, lead, gold and molybdenum values. The 0.5 to 1.2 metre thick dike is impregnated with galena, pyrite and molybdenite and is exposed for up to 180 metres length on surface. The mineralized dike extends south to the Mystery showing (082LSW59).
By 1902 exploration was through tunnels and cross-cuts (at least 60 metres in length) and open cuts.

BIBLIOGRAPHY

EMPR AR *1899-747; 1900-886; *1902-188
EMPR BULL 1940 No. 9, p. 95
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
CANMET (Mines Branch, Department of Mines) No. 592, p. 52

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW061**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLD MOUNTAIN**, WOODLAND BELL

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 24 00 N
LONGITUDE: 119 03 10 W
ELEVATION: 1500 Metres

NORTHING: 5585120
EASTING: 354113

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing about 3 kilometres north of the Silver Queen (082LSW010) prospect (Minister of Mines Annual Report 1902, page 188).

COMMODITIES: Gold Copper

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Chalcopyrite assumed.
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Gold Mountain showing is located 21 kilometres northeast of Vernon, near the headwaters of Putnam Creek.

In the area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks are faulted over metasedimentary rocks of the Proterozoic Silver Creek Formation.

Nicola Group argillite hosts gold and copper mineralization in a 1.5 metre thick quartz vein. Copper mineralization, probably chalcopyrite, is present. Sampling from underground exploration returned gold values of 27 grams per tonne (Minister of Mines Annual Report 1902, page 188).

The first reference to this occurrence is from the 1902 Annual Report.

BIBLIOGRAPHY

EMPR AR *1902-188
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW062**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHORTS CREEK**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 08 33 N
LONGITUDE: 119 37 33 W
ELEVATION: 1050 Metres

NORTHING: 5557776
EASTING: 312383

LOCATION ACCURACY: Within 500M

COMMENTS: Adit (Geological Survey of Canada, Summary Report 1931A, Plate I).

COMMODITIES: Coal

MINERALS

SIGNIFICANT: Coal
COMMENTS: Grade of coal is impure bituminous.
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Layered Stratiform Massive
CLASSIFICATION: Fossil Fuel Sedimentary
TYPE: A04 Bituminous coal
SHAPE: Tabular
DIMENSION: 1000 x 1 Metres STRIKE/DIP: 100/20N
COMMENTS: Narrow beds, about 1.5 metres thick, can be traced on surface for 1 kilometre.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Penticton	Unnamed/Unknown Formation	

LITHOLOGY: Coal
Conglomerate
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Shorts Creek showing is located 28 kilometres west-southwest of Vernon, on the steep north slopes of Shorts Creek.

In this area, Middle Jurassic granite intrudes Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. A major graben-like Eocene basin of Penticton Group volcanic and sedimentary rocks extends north-south across Shorts Creek.

A 30 to 60-metre thick basal conglomeratic unit of the Penticton Group hosts an impure bituminous coal seam. The coal-bearing beds, striking 100 degrees and dipping 20 degrees north, are about 30 metres above the base of the sediments. The coal occurs as narrow beds intercalated with thin layers of shale and can be traced for about 1 kilometre on surface, averaging about 1.5 metres thick.

The first reference to this occurrence is from 1905. By 1932, a 24-metre shaft and a 12-metre tunnel had been completed.

BIBLIOGRAPHY

EMPR AR 1905-193; 1911-180; *1913-179,180; 1929-249
1930-208; *1932-144; 1933-198
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR P 1982-1, pp. 12-16
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 1712A
GSC MEM 296 p. 162
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 100-103

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW063**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARBARA ANN (L. 4925)**, SONNY (L. 4926), BLUFF

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 17 N
LONGITUDE: 119 06 53 W
ELEVATION: 660 Metres

NORTHING: 5591327
EASTING: 349885

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry (Open File 1988-19, page 26).

COMMODITIES: Talc Magnesite Magnetite

MINERALS

SIGNIFICANT:	Talc	Magnesite	Magnetite		
ASSOCIATED:	Serpentinite	Olivine			
ALTERATION:	Talc	Magnesite	Serpentine	Calcite	Tremolite
ALTERATION TYPE:	Actinolite				
MINERALIZATION AGE:	Serpentin'zn				
	Unknown				

DEPOSIT

CHARACTER:	Podiform	Massive	Disseminated
CLASSIFICATION:	Replacement	Industrial Min.	
TYPE:	M07 Ultramafic-hosted talc-magnesite		
SHAPE:	Irregular		
MODIFIER:	Sheared	Faulted	
DIMENSION:	400 x 60	Metres	
COMMENTS:	Sill (length x thickness).		

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Serpentinized Peridotite Sill
Quartz Mica Schist

HOSTROCK COMMENTS: The host peridotite sill intrudes Kootenay Terrane metasedimentary rocks.

GEOLOGICAL SETTING

TECTONIC BELT:	Omineca	PHYSIOGRAPHIC AREA:	Shuswap Highland
TERRANE:	Kootenay		
METAMORPHIC TYPE:	Regional	RELATIONSHIP:	GRADE: Greenschist
COMMENTS:	The age of metasomatism of the peridotite is unknown.		

INVENTORY

ORE ZONE:	QUARRY	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1951
SAMPLE TYPE:	Chip		
COMMODITY		GRADE	
Magnetite		6.2500	Per cent
Magnesite		14.5000	Per cent
Talc		71.0000	Per cent

COMMENTS: A 4-metre sample is from the base of the quarry.
REFERENCE: Minister of Mines Annual Report 1951, page 229.

CAPSULE GEOLOGY

The Barbara Ann showing is located 6 kilometres east of Armstrong, on the north side of Kendry Creek. This area, east of the Okanagan Valley fault, is underlain by gneissic rocks of unknown age, metasedimentary rocks of the Proterozoic-Paleozoic Kootenay Assemblage and volcanic and sedimentary rocks of the Cambro-Ordovician Tsalkom Formation and the Upper Triassic to Lower Jurassic Nicola Group. All these units are probably in low-angle fault contact with each other. Middle Jurassic granitic plutons intrude the above rocks. Pegmatite bodies of Mesozoic or Cenozoic age intrude the Silver Creek Formation. A peridotite sill of unknown age intrudes quartz mica schists (Kootenay Assemblage) and hosts talc mineralization within serpentized sections. The 60-metre thick sill is at least 400 metres in length, is offset by a fault and may be related to the

CAPSULE GEOLOGY

major low-angle faulting or to mafic volcanic rocks of the Tsalkom. The talc is found in sheared discontinuous lenses along with other alteration minerals including magnetite, magnesite, serpentinite, calcite, tremolite and actinolite. Alteration is stronger in the upper portions of the sill. A 4-metre sample from the quarry assayed 71 per cent talc, 14.5 per cent magnesite, 6.25 per cent magnetite and 2.5 per cent calcite (Minister of Mines Annual Report 1951).

The area was staked for talc in 1946. In 1950, a 39-tonne bulk sample was shipped. By 1951, a small quarry and several open cuts were completed. Local artists use the soapstone for sculpture.

BIBLIOGRAPHY

EMPR AR *1951-227,228,229,230
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF *1988-19, pp. 26, 27, 28, 29, 97; 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM *296, p. 157
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW064**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRETT-BIRD**, BIRD, BRETT,
ARMSTRONG MICA

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 28 45 N
LONGITUDE: 119 06 23 W
ELEVATION: 490 Metres

NORTHING: 5594028
EASTING: 350553

LOCATION ACCURACY: Within 500M

COMMENTS: Adit (Minister of Mines Annual Report 1950, page 226).

COMMODITIES: Mica Uranium

MINERALS

SIGNIFICANT: Muscovite Uraninite
COMMENTS: Radioactive mineral is possibly uraninite. A "few grains" present.
ASSOCIATED: Oligoclase Orthoclase Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O03 Muscovite pegmatite
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic	Unnamed/Unknown Group	Silver Creek	
Mesozoic-Cenozoic			Unnamed/Unknown Informal

LITHOLOGY: Pegmatite
Quartz Biotite Schist

HOSTROCK COMMENTS: The pegmatite host rock intrudes the Proterozoic Silver Creek Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist
COMMENTS: The Silver Creek Formation is regionally metamorphosed.

CAPSULE GEOLOGY

The Brett-Bird showing is located 7 kilometres east-northeast of Armstrong, near Sneesby Creek.

This area, east of the Okanagan Valley fault, is underlain by metamorphic rocks of unknown age, metasedimentary rocks of the Proterozoic Silver Creek Formation and volcanic and sedimentary rocks of the Cambro-Ordovician Tsalkom Formation. All these units are probably in low-angle fault contact with each other. Intruding these rocks are Middle Jurassic granitic plutons. Pegmatite bodies of Mesozoic or Cenozoic age intrude the Silver Creek. Eocene Kamloops Group volcanic rocks occur to the north.

Quartz biotite schist of the Silver Creek is intruded by irregular, sheet-like bodies of oligoclase, orthoclase, quartz and muscovite pegmatite. Fresh greenish-tinged muscovite occurs disseminated and in patches throughout the pegmatite, with the grain size of the mica varying with the grain size of the other minerals. Muscovite plates range in size from 1 millimetre to 15 by 25 centimetres in size. In a coarse-grained section of the pegmatite, patches of muscovite, 30 by 60 centimetres in size, cover up to 5 or 10 per cent of the exposure. A few grains of radioactive mineral, possibly uraninite, occur in the pegmatite.

The first record of exploration is from 1927 when an open cut exposed muscovite plates. By 1950, a 10-metre adit and the three main open cuts had been completed. Approximately 100 tonnes of mica were shipped between 1932 and 1950.

BIBLIOGRAPHY

EMPR AR 1927-photo(following p. 192),*213; 1932-144; *1950-226,227;
1958-66
EMPR ASS RPT 49

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 421
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. B15-22, 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30, 1990-32
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC EC GEOL 16(1952) p. 44; *16(2nd Ed.) p. 229
GSC MEM *296, p. 157
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW065**

NATIONAL MINERAL INVENTORY:

NAME(S): **JEWEL**, RUBY, OPAL,
PEARL, TOPAZ, GROUSE,
EUREKA, SALMON RIVER, IRON CAP,
BONANZA, HOPE, BLACK JACK

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:
LATITUDE: 50 27 46 N
LONGITUDE: 119 39 14 W
ELEVATION: 770 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Main showing area (Assessment Report 20203).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5593452
EASTING: 311648

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite Copper
ASSOCIATED: Quartz Pyrite Gypsum
ALTERATION: Hematite Malachite Azurite Chlorite Clay
Silica
ALTERATION TYPE: Oxidation Chloritic Argillic Silicific'n
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated Vein Breccia
CLASSIFICATION: Porphyry
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G04 Besshi massive sulphide Cu-Zn
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	Unnamed/Unknown Informal
Middle Jurassic			

LITHOLOGY: Siliceous Siltstone
Quartz Diorite Dike

HOSTROCK COMMENTS: The Devonian to Triassic Harper Ranch Group is intruded by rocks of the named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:
COMMENTS: Harper Ranch regionally metamorphosed to prehnite-pumpellyite facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Drill Core
COMMODITY: Copper GRADE: 0.1600 Per cent
COMMENTS: Grade is from a 30-metre intersection.
REFERENCE: Assessment Report 20203.

CAPSULE GEOLOGY

The Jewel showing is located 8 kilometres southwest of Falkland, on the south slope of the Salmon River Valley.

In this area, Upper Triassic to Lower Jurassic Nicola sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Harper Ranch Group siltstones and quartz diorite dikes host alkaline porphyry-type copper, gold and silver mineralization. The 1 to 3-metre thick dikes are brecciated in places. The dikes and sediments have been chloritized, weakly clay altered and locally silicified. Gypsum veining and pyrite is also present. Within portions of this alteration zone copper occurs as supergene native copper, malachite, azurite, and as chalcopyrite, in disseminations

CAPSULE GEOLOGY

and on fractures, with or without quartz. A 30-metre section of drill core assayed 0.16 per cent copper with erratic gold values up to 1 gram per tonne (Assessment Report 20203). A series of hematitic structures cuts the supergene zone and host enrichments in copper, gold and silver. Below the supergene zone, hypogene fracture-controlled chalcopyrite mineralization assayed up to 0.5 per cent copper over 7.5 metres.

From 1957 to 1971, the Marzoffs explored the area with trenches and in 1974 carried out some drilling. In 1967, Canex Aerial Exploration Ltd. carried out geological mapping, soil geochemistry, magnetic, VLF-EM and induced polarization surveys, and drilling. Utah Mines Ltd. conducted geological mapping in 1986. In 1988-90, Corona Corporation carried out geological mapping, soil geochemistry, trenching, VLF-EM and magnetic surveys, and drilling.

BIBLIOGRAPHY

EMPR AR 1898-1107; 1899-733; 1901-1080; 1967-136
EMPR ASS RPT 5272, *15302, *17370, *18968, *20203
EMPR EXPL 1976-E55; 1986-101; 1988-55-56; 1989-22,50; 1990-18,55
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1974-89
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW066**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT ROSE (L. 2683)**, IVAN, MOUNT ROSE SILICA,
MINERAL LEASE 21, RADEX

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:
LATITUDE: 50 26 23 N
LONGITUDE: 119 16 49 W
ELEVATION: 800 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Quarry (Open File 1987-15).

Open Pit

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5590008
EASTING: 338083

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz Pyrite Galena Chalcopyrite Pyrrhotite
ASSOCIATED: Pyrite Galena Chalcopyrite Pyrrhotite
COMMENTS: Sparsely disseminated.
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Epigenetic Hydrothermal Industrial Min.
TYPE: I07 Silica veins I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
MODIFIER: Faulted Fractured
DIMENSION: 75 x 30 x 12 Metres
COMMENTS: Massive vein. STRIKE/DIP: 070/55N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian-Ordovician Cretaceous	Unnamed/Unknown Group	Sicamous	Unnamed/Unknown Informal

LITHOLOGY: Quartz Diorite
Phyllite

HOSTROCK COMMENTS: Salmon Arm Intrusions.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: PHYSIOGRAPHIC AREA: Thompson Plateau
COMMENTS: The Sicamous is regionally metamorphosed to lower greenschist facies. GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1969
SAMPLE TYPE: Grab
COMMODITY GRADE
Silica 99.5600 Per cent
COMMENTS: Sample is of randomly picked chips from loose muck in the quarry.
REFERENCE: Minister of Mines Annual Report 1969, page 407.

CAPSULE GEOLOGY

The Mount Rose showing is located 6 kilometres west of Armstrong, southwest of the summit of Mount Rose. In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formations) rocks. To the south, the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granitic plugs of the Salmon Arm Intrusions intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present. Cretaceous quartz diorite hosts a large quartz vein (the Ivan vein) which has been mined for industrial use. The quartz is massive, milky white and is cut off by a fault to the northeast. The vein is about 12 metres thick, is exposed for 75 metres along strike

CAPSULE GEOLOGY

and averages 30 metres in plan width. Minor impurities including sparse disseminations of galena, chalcopyrite, pyrite, pyrrhotite and limonite occur near the hangingwall and the fault. Limonitic fractures are also present near the fault. Fractures 3 to 15 centimetres apart are common. The analysis of a random sample of loose muck from the quarry returned 99.56 per cent silica (Minister of Mines Annual Report 1969, page 407).

Between 1968-75, the Mount Rose Mining Co. produced about 5034 tonnes for stucco dash, exposed aggregate and metallurgical use.

BIBLIOGRAPHY

EMPR AR *1968-331
EMPR ASS RPT 17569, 18846
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM *1969-406,407; 1973-564,565
EMPR MAP 7216G, 8513G
EMPR MINING Vol. *1, p. 49
EMPR OF *1987-15, pp. 27-28; 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; Inspection Report, Aug-Sept, 1975)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW067**

NATIONAL MINERAL INVENTORY:

NAME(S): **AB 9**

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 29 59 N
LONGITUDE: 119 29 09 W
ELEVATION: 1100 Metres

NORTHING: 5597146
EASTING: 323712

LOCATION ACCURACY: Within 500M
COMMENTS: Trench (Assessment Report 4830).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Disseminated Stratabound
CLASSIFICATION: Unknown
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Tabular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian-Ordovician	Unnamed/Unknown Group	Sicamous	

LITHOLOGY: Quartz Biotite Schist
Schist
Chloritic Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1973
SAMPLE TYPE: Chip	
COMMODITY	<u>GRADE</u>
Copper	0.2100 Per cent

COMMENTS: Grade is from a 15-metre chip sample.
REFERENCE: Assessment Report 4830.

CAPSULE GEOLOGY

The AB 9 showing is located 5 kilometres east of Falkland, north of Warren Creek.

In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granodiorite plugs of the Salmon Arm Intrusions intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

The Sicamous Formation (possibly the Eagle Bay Formation or the Nicola Group) metasedimentary or metavolcanic rocks host copper mineralization. A sequence of chloritic argillites includes about 30 per cent interbedded quartz biotite schist which may represent original arenaceous beds. These sheared schist layers host disseminated chalcopyrite and pyrite over a 55 metre thickness. The best sample results are 15 metres of 0.21 per cent copper, including(?) 3 metres of 0.74 per cent copper (Assessment Report 4830).

In 1973, El Paso Mining and Milling Co. carried out a program of geological mapping, soil geochemistry and trenching.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 427
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *4830
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1973-100,101
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30; 1999-2
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW068**

NATIONAL MINERAL INVENTORY:

NAME(S): **OKANAGAN SUNSET**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 12 N
LONGITUDE: 119 24 08 W
ELEVATION: 610 Metres

NORTHING: 5564000
EASTING: 328576

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry (Fieldwork 1986, page 320).

COMMODITIES: Granite Dimension Stone Building Stone Aggregate

MINERALS

SIGNIFICANT: Orthoclase
ASSOCIATED: Plagioclase Quartz Biotite Hornblende
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite
DIMENSION: 80 x 25 x 20 Metres
COMMENTS: Ridge of granite containing potential reserves.

STRIKE/DIP: R15 Crushed rock TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene			Coryell Intrusions

LITHOLOGY: Orthoclase Porphyritic Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Okanagan Sunset deposit is located 11 kilometres southwest of Vernon, near the east shore of Okanagan Lake. In this area, Devonian to Triassic sediments of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. These are intruded by Eocene granites and hypabyssal equivalents of the Coryell Intrusions. Patches of Eocene Pentiction Group volcanic rocks overlie the older rocks. The Eocene Coryell granite has been quarried for industrial use. It has an attractive fresh pale pink tone, is medium to coarse-grained and contains pink orthoclase feldspar crystals up to 8 millimetres in length. Weathered surfaces are light to dark grey with occasional yellow iron staining. Potential reserves exist in a well-defined ridge of granite, northeast of the abandoned face. This ridge is 80 metres long, 25 metres wide with a face up to 20 metres high. Spacing between joints and fractures is irregular although 48 per cent are spaced greater than 50 centimetres apart. In 1969, Columbia Marble Company opened the quarry and operated for some time afterwards. Stone was shipped to the company's processing plant in Burnaby where it was cut into slabs to be used as facing stone. The stone has also been crushed and used as aggregate for decorative slabs. Similar stone, from the Vernon Granite quarry (082LSW087), was used in the Vernon courthouse.

BIBLIOGRAPHY

EMPR EXPL *1985-B27,28,29
EMPR FIELDWORK 1982, pp. 33-36; *1986, pp. 309-342; 1987, pp. 55-58; 1988, pp. 355-363
EMPR INF CIRC *1988-6, p. 10; 1994-15
EMPR INSP RPT Sept. 1975
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; Inspection Report, Sept. 1975)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1712A
GSC MEM 296

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 429
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW069**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOUL**, BOUL 1, BOUL 5,
BOULEAU

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 21 N
LONGITUDE: 119 37 40 W
ELEVATION: 1700 Metres

NORTHING: 5570380
EASTING: 312688

LOCATION ACCURACY: Within 500M
COMMENTS: Centre of a zone of gold-bearing quartz veins (Assessment Report 21877).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold
COMMENTS: Electrum is likely present.
ASSOCIATED: Quartz Chalcedony
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epithermal
DIMENSION: 1000 x 600 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Surface dimensions of the area containing gold-bearing quartz veinlets.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1991
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		180.0000	Grams per tonne
Gold		27.0000	Grams per tonne
COMMENTS:	Highest values, averages are much lower.		
REFERENCE:	Assesment Report 21877.		

CAPSULE GEOLOGY

The Boul showing is located 26 kilometres west of Vernon, between Whiteman and Bouleau Creeks. In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude these rocks. Quartz veins within foliated Middle Jurassic granodiorite host gold and silver mineralization. Numerous quartz vein and veinlets, sometimes forming stockworks, carry native gold and/or electrum, and occur over a 1000 by 600 metre area. The precious metal veins have a very fine grained saccharoidal texture with local colloform chalcedonic banding. The veins are narrow (up to 0.4 metre thick) and discontinuous (up to 15 metres long). Assay values up to 27 grams per tonne gold and 180 grams per tonne silver are reported, although average values are much lower (Assessment Report 21877). In 1988-90, Chevron Mineral Ltd. carried out a soil geochemistry program and in 1991 Inco Exploration and Technical Services Inc. conducted geological mapping and rock sampling.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 431
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 18541, 18542, *20969, *21877
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
PR REL Solomon Resources Ltd., Feb.14, 18, 2003
WWW <http://www.bmts.bc.ca/srb/>
Chevron File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW070**

NATIONAL MINERAL INVENTORY:

NAME(S): **WESTWOLD CLAY**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L05W
BC MAP:

Open Pit

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 27 N
LONGITUDE: 119 47 26 W
ELEVATION: 640 Metres

NORTHING: 5593221
EASTING: 301928

LOCATION ACCURACY: Within 5 KM

COMMENTS: Showing (Bulletin 30, Figure 1).

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated Stratiform Layered
CLASSIFICATION: Sedimentary Industrial Min.
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Quaternary

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Glaciolacustrine Calcareous Clay
Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Westwold Clay deposit is located 16 kilometres west of Falkland, in the Salmon River Valley.

In this area, sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Middle Jurassic granitic rocks of the informally named Terrace Creek batholith intrude these rocks. Extensive Eocene Kamloops Group volcanic rocks cap the older rocks.

Quaternary glaciolacustrine beds host a clay deposit quarried for industrial use. A grey, calcareous clay suitable for good quality brick and tile was mined by the Falkland Brick, Tile and Pottery Ltd. in the late 1940s.

BIBLIOGRAPHY

EMPR AR 1947-A207
EMPR BULL *30, pp. 12, 50
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW071**

NATIONAL MINERAL INVENTORY:

NAME(S): **ASH 1**, ASH, HUDSON BAY

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 24 N
LONGITUDE: 119 44 42 W
ELEVATION: 1630 Metres

NORTHING: 5563363
EASTING: 304064

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of the mineralized area (Assessment Report 9487).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
ALTERATION: K-Feldspar Kaolin
ALTERATION TYPE: Potassic Argillic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: 600 x 300 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Dimension is of an area of quartz (\pm molybdenite) veins and/or fracture mineralization.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: K-Feldspar Porphyry Granite

HOSTROCK COMMENTS: Informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Ash 1 showing is located 35 kilometres west of Vernon, west-southwest of Hudson Bay Lake.

In this area, Middle Jurassic porphyritic granite of the informally named Terrace Creek batholith intrudes Devonian to Triassic sediments of the Harper Ranch Group. Much of the surrounding area is underlain by Eocene volcanic, tuffaceous and sedimentary rocks of the Penticton Group and by Miocene Chilcotin Group olivine basalts.

The K-feldspar porphyritic granite hosts molybdenite mineralization. The mineralization, of possible Jurassic age, occurs in narrow, widely spaced quartz veins and on some joint planes. Small molybdenite rosettes occur in the quartz veins and fracture planes can be weakly mineralized with pyrite clusters and molybdenite blebs. K-feldspar and kaolin alteration occurs along the quartz veins and fractures. The low grade mineralization occurs over a 600 by 300 metre area.

In 1980, Brenda Mines Ltd. carried out geological mapping and soil geochemistry.

BIBLIOGRAPHY

EMPR ASS RPT *9487
EMPR EXPL 1980-131,132
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 434
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW072**

NATIONAL MINERAL INVENTORY:

NAME(S): **STUART**, WINFIELD

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 04 04 N
LONGITUDE: 119 21 01 W
ELEVATION: 1000 Metres

NORTHING: 5548812
EASTING: 331808

LOCATION ACCURACY: Within 500M

COMMENTS: Old workings (Assessment Report 7700).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Garnet Magnetite
MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Stratabound Disseminated Unconsolidated
CLASSIFICATION: Placer
SHAPE: Tabular
DIMENSION: 5000 x 1500 x 60 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Dimensions are the estimated extent of the fluvial deposits including 082LSW019, 093 and 142.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Miocene	Chilcotin	Undefined Formation	

LITHOLOGY: Quartz Pebble Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage Plutonic Rocks
PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Stuart showing is located 23 kilometres south-southwest of Vernon, between Wood Lake and Clark Creek.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks. Middle Jurassic granitic plutons of the informally named Terrace Creek batholith intrude the older rocks. Eocene Penticton Group and Miocene volcanic and sedimentary rocks cap areas of older rock.

The basal, partly cemented, well rounded, quartz pebble gravels of Miocene fluvial deposits host placer gold mineralization. The fluvial deposits unconformably overlie Middle Jurassic monzonite and granodiorite and/or volcanic rocks of the Penticton Group. The Miocene sediments are commonly overlain by Miocene basalt flows. The gold is pure (850 fine), of a reddish colour, and is found as flattened pellets up to 2 millimetres in size, with some very fine gold reported. Garnet and a little magnetite occur with the gold.

By 1936, an exploration drift of 30 metres had been completed. Between 1933 and 1945, a total of 2330 grams of placer gold production (refer to 082LSW093) was reported from the Winfield camp (includes 082LSW019, 093 and 142). In 1977-79, Union Oil Company explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical, radiometric, airborne magnetometer and drill programs were conducted.

BIBLIOGRAPHY

EMPR AR *1933-A197,198; *1934-D34; *1936-D46,47,48
EMPR ASS RPT 6631, 6944, *7700
EMPR BULL 28, p. 62, 63
EMPR EXPL 1977-E77; 1978-E90; 1979-98
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM *296, p. 137

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 436
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Canadian Journal of Earth Sciences, V. 25, No. 5, pp. 725-731

DATE CODED: 1993/03/31
DATE REVISED: 1993/09/17

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW073**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEDGE** MOBY, BOULEAU

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 16 14 N
LONGITUDE: 119 37 06 W
ELEVATION: 1230 Metres

NORTHING: 5571993
EASTING: 313419

LOCATION ACCURACY: Within 500M

COMMENTS: Area of showings (Assessment Report 21877).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold
COMMENTS: Electrum is likely present.
ASSOCIATED: Quartz Chalcedony
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epithermal
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
YEAR: 1991
CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Gold GRADE: 3.5000 Grams per tonne
COMMENTS: Highest value.
REFERENCE: Assessment Report 21877.

CAPSULE GEOLOGY

The Wedge showing is located 25 kilometres west of Vernon, on the steep south slope of Bouleau Creek Valley. In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell quartz latite porphyry to syenite plugs and dikes intrude these rocks. Quartz veins within foliated Middle Jurassic granodiorite host gold and silver mineralization. Numerous quartz veins and veinlets, sometimes forming stockworks, carry native gold and/or electrum. The precious metal veins have a very fine grained saccharoidal texture with local colloform chalcedonic banding. They are narrow and discontinuous. Assays up to 3.5 grams per tonne gold are reported (Assessment Report 21877). In 1988-90, Chevron Mineral Ltd. carried out a soil geochemistry program and in 1991 Inco Exploration and Technical Services Inc. conducted geological mapping.

BIBLIOGRAPHY

EMPR ASS RPT 18541, 19089, *21877
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 438
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
PR REL Solomon Resources Ltd., Feb.14, 18, 2003
WWW <http://www.bmts.bc.ca/srb/>

DATE CODED: 1993/03/31
DATE REVISED: 1993/07/07

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW074**

NATIONAL MINERAL INVENTORY:

NAME(S): **SWEETSBRIDGE**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 10 N
LONGITUDE: 119 28 44 W
ELEVATION: 650 Metres

NORTHING: 5591911
EASTING: 324030

LOCATION ACCURACY: Within 500M

COMMENTS: Location is 300 metres north of the old Sweetsbridge railway station
(Open File 1991-15, page 36).

COMMODITIES: Gypsum

MINERALS

SIGNIFICANT: Gypsum
MINERALIZATION AGE: Triassic-Jurassic

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Exhalative Industrial Min.
SHAPE: Tabular
DIMENSION: 180 x 12 Metres
COMMENTS: Gypsum deposit (length x thickness).

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Gypsum
Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Sweetsbridge showing is located 8 kilometres southeast of Falkland, on the north slope of the Salmon River valley.

In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granodiorite plugs of the Salmon Arm Intrusions intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

Sedimentary rocks of the Nicola Group host a gypsum deposit. White, brown and grey gypsum is exposed over a length of 180 metres, with a 12 metre thickness. It is similar to the Falkland deposit (082LNW001), 8 kilometres along strike to the northwest. The deposit may be a gypsum-rich facies of a Kuroko-type deposit.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30, *1991-15, p. 36
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW075**

NATIONAL MINERAL INVENTORY:

NAME(S): **TUKTAKAMIN**, FALKLAND, TUK

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 49 N
LONGITUDE: 119 35 19 W
ELEVATION: 1650 Metres

NORTHING: 5593381
EASTING: 316284

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 8439).

COMMODITIES: Volcanic Glass

MINERALS

SIGNIFICANT: Volcanic Glass
COMMENTS: Alteration mineral is palagonite.
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Breccia
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: R12 Volcanic glass - perlite

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Basaltic Breccia

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Quesnel
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Zeolite

CAPSULE GEOLOGY

The Tuktakamin showing is located 5 kilometres south-southwest of Falkland, on the summit of Tuktakamin Mountain.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group volcanic rocks host volcanic glass. A breccia, about 100 metres thick, caps the top of the mountain. The breccia consists of fragments of black basaltic glass, from 1 centimetre to several metres across, surrounded by orange to light-brown palagonite.

Prospecting was carried out in 1980.

BIBLIOGRAPHY

EMPR ASS RPT 8439
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296-157
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW076**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOFFAT CREEK**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 04 N
LONGITUDE: 119 22 31 W
ELEVATION: 500 Metres

NORTHING: 5591485
EASTING: 331378

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, page 74).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Unconsolidated Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Moffat Creek showing is located 22 kilometres north-northwest of Vernon, on Moffat Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. The Nicola Group is intruded by Cretaceous granitic rocks of the Salmon Arm Intrusions. Eocene Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks.

Quaternary sediments host placer gold mineralization. Poorly sorted unconsolidated sediments contain some nuggets and fine, well-worn gold.

By 1932, some hydraulic placer mining had occurred.

BIBLIOGRAPHY

EMPR AR *1932-144,145
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, pp. 136, 137
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 73, 74

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW077**

NATIONAL MINERAL INVENTORY:

NAME(S): **LUMSDEN**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 26 33 N
LONGITUDE: 119 14 15 W

NORTHING: 5590224
EASTING: 341129

ELEVATION: 420 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing (Geological Survey of Canada, Open File 637, Map C).

COMMODITIES: Granite Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Commodity is granodiorite.
ASSOCIATED: Pyrite Mica
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Granodiorite

HOSTROCK COMMENTS: Salmon Arm Intrusions intrude Nicola Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Lumsden showing is located 3 kilometres west of Armstrong, at the base of Mount Rose.

In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granodiorite plugs of the Salmon Arm Intrusions intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

Cretaceous granodiorite has been quarried for industrial use. The granodiorite contains amber-coloured mica, has good rift and grain, and works with ease. However, the pyrite content makes it a poor building material.

About 1910 the stone was quarried for monument bases and building stone.

BIBLIOGRAPHY

EMPR AR 1947-212
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 47-6, 1712A
GSC MEM 296, p. 161
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, Figure 7, p. 99
CANMET RPT (Bureau of Mines) *452, p. 70; *846, p. 173

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW078**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHITEROCK**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 25 15 N
LONGITUDE: 119 03 48 W
ELEVATION: 1690 Metres

NORTHING: 5587457
EASTING: 353428

LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Whiterock claim.

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Massive Vein
CLASSIFICATION: Epigenetic Hydrothermal Industrial Min.
TYPE: O04 Feldspar-quartz pegmatite

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Whiterock showing is located 10 kilometres east-southeast of Armstrong, near the headwaters of Fortune Creek.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks are faulted over metasedimentary rocks of the Proterozoic Silver Creek Formation.

A small plug-shaped quartz body intrudes argillaceous Nicola Group sediments.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1978-15, p. 45; 1989-5; 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW079**

NATIONAL MINERAL INVENTORY:

NAME(S): **LITTLE DUNCAN AND PANORAMA**, LITTLE DUNCAN (L. 904), PANORAMA (L. 905),
NEWPORT, PAYROLL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:
LATITUDE: 50 20 25 N
LONGITUDE: 119 22 14 W
ELEVATION: 930 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Old workings (Assessment Report 20448).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5579153
EASTING: 331320

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Gold Chalcopyrite
ASSOCIATED: Quartz Pyrite Marcasite
ALTERATION: Sulphur
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Mesothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Little Duncan and Panorama showing is located 11 kilometres northwest of Vernon, north of Newport (Deep) Creek. In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Middle Jurassic granitic rocks intrude the Nicola and Harper Ranch groups. Outliers of Eocene Kamloops Group volcanic rocks are present in the area. Quartz veins in Nicola Group argillaceous rocks host gold, silver, lead, zinc and copper mineralization. One vein carries disseminated galena, sphalerite, marcasite, pyrite, native sulphur and native gold. Galena carries about 34 grams of silver for each per cent lead (Geological Survey of Canada Summary Report 1931A). Representative sampling reported about 3 to 4 grams (\$2-\$3) per tonne gold (Geological Survey of Canada Summary Report 1931A). A second vein, by Newport Creek, is well mineralized with galena, sphalerite and minor pyrite and chalcopyrite. By 1899, exploration work included a 10-metre shaft and 15-metre adit on the Little Duncan claim, and a 4-metre adit on the Panorama. The claims were Crown-granted in 1901.

BIBLIOGRAPHY

EMPR AR 1899-746,747; 1901-1230; 1929-248
EMPR ASS RPT 12313, *20448
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 445
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT *1931A, pp. 77, 85-86

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW080**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIWASH CREEK**, NASWHITO CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 29 N
LONGITUDE: 119 27 16 W
ELEVATION: 480 Metres

NORTHING: 5573911
EASTING: 325172

LOCATION ACCURACY: Within 1 KM

COMMENTS: Area of hydraulic mining (Geological Survey of Canada Summary Report 1931A, Plate I).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Quaternary

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Overlap Assemblage

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Naswhito Creek showing is located 13 kilometres west-northwest of Vernon, on Naswhito Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Penticton Group or Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks.

Quaternary gravels host placer gold mineralization. At the base of a 60-metre thick sequence of gravels, sand and clay, 1 metre or so of rusty-weathering gravel hosts the best values, with the highest concentration occurring on bedrock. The fineness of the gold is reported to average about 840. The gravels extend to the north past Equis Creek and cover an area of about 6 square kilometres.

Placer gold exploration and mining (through tunnels) was first reported in 1889. From 1889-95 approximately 15 kilograms of placer gold production was reported (Bulletin 28). From 1915-18, hydraulic mining reportedly produced 19 kilograms of placer gold (Bulletin 28). Minor reported production during 1924-35 was about 1 kilogram.

BIBLIOGRAPHY

EMPR AR 1889-292; 1890-379; 1891-576; 1892-543; 1893-1073; 1894-753;
1895-706; *1915-21,252,253; 1916-20,263; 1917-20; 1918-21;
*1924-140; 1926-200; 1930-208; 1931-116; 1934-D34; 1935-D15
EMPR BULL 1933 No. 1, p. 41; *28, pp. 62-63
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, pp. 136-137
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 73-74, 113

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW080**

MINFILE NUMBER: **082LSW081**

NATIONAL MINERAL INVENTORY:

NAME(S): **EQUESIS CREEK**, SIX-MILE CREEK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 20 25 N
LONGITUDE: 119 27 35 W
ELEVATION: 550 Metres

NORTHING: 5579359
EASTING: 324976

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A, page 74).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Equesis Creek showing is located 16 kilometres northwest of Vernon, on Equesis Creek near Musgrave Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Penticton Group or Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks.

Quaternary gravels along the creek host placer gold mineralization. Good values are reported along sections of Equesis Creek, particularly in the vicinity of its junction with Musgrave Creek.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, pp. 136-137
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 73-74

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW082**

NATIONAL MINERAL INVENTORY:

NAME(S): **BALD**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 52 N
LONGITUDE: 119 31 44 W
ELEVATION: 960 Metres

NORTHING: 5548859
EASTING: 319015

LOCATION ACCURACY: Within 500M

COMMENTS: Pit (Assessment Report 7973).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Unknown

MINERALIZATION AGE: Recent

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Sedimentary
TYPE: B07 Bog Fe, Mn, U, Cu, Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP
Recent Undefined Group

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sediment/Sedimentary

HOSTROCK COMMENTS: Host rock is organic-rich bog.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Channel
COMMODITY GRADE
Uranium 0.0350 Per cent

COMMENTS: Results are from a 1.4 metre sample of organic material.
REFERENCE: Assessment Report 7973.

CAPSULE GEOLOGY

The Bald showing is located 20 kilometres north of Kelowna; about 2 kilometres west of Okanagan Lake.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks have been intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Outliers of Eocene Penticton Group volcanic and sedimentary rocks overlie the older units.

A Recent organic bog, overlying Middle Jurassic quartz monzonite, hosts uranium mineralization. A 1.4 metre sample of homogeneous black organic muck with cedar wood fibre and roots assayed 0.035 per cent uranium, with 0.3 metre of 0.125 per cent uranium (Assessment Report 7973).

In 1978-79, Canadian Occidental Petroleum Ltd. carried out geological mapping, soil geochemistry, a radiometric survey and trenching.

BIBLIOGRAPHY

EMPR ASS RPT 7332, *7973
EMPR EXPL 1978-91; 1979-99
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30, 1990-32 p. 20
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 449
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 89-1E pp. 51-60

DATE CODED: 1987/03/26
DATE REVISED: 1993/03/31

CODED BY: LDJ
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW083**

NATIONAL MINERAL INVENTORY:

NAME(S): **EBRING**, VERNON, POTTERY ROAD

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 16 N
LONGITUDE: 119 15 32 W
ELEVATION: 400 Metres

NORTHING: 5569363
EASTING: 338976

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated Layered
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B06 Fireclay
SHAPE: Tabular
DIMENSION: 1 Metres
COMMENTS: Clay deposit is 1 metre thick.

E07 Sedimentary kaolin

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Glaciolacustrine Silty Calcareous Clay
Clay

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage
PHYSIOGRAPHIC AREA: Okanagan Highland
Undivided Metamorphic Assembl.

CAPSULE GEOLOGY

The Ebring showing is located 1 kilometre southeast of the centre of Vernon.

In this area, east of the Okanagan Valley fault, sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These rocks are faulted over metamorphic rocks. Outliers of Eocene Penticton Group volcanic rocks are present. Much of the valley floor is covered by thick Quaternary sediments.

Quaternary glaciolacustrine beds host a 1 metre thick clay deposit quarried for industrial use. Light grey, calcareous silty clay, somewhat suitable for common brick and tile manufacture, was mined pre-1930.

BIBLIOGRAPHY

EMPR AR 1947-A207
EMPR BULL *30, pp. 12, 51
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW022 - Jones, W.C.(1959): Groundwater in the BX Creek Area; In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, pp. 158-159
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 99-100

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW084**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRETT EAST**, BRETT 1

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 51 N
LONGITUDE: 119 39 22 W
ELEVATION: 1220 Metres

NORTHING: 5567672
EASTING: 310570

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 19482).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz Pyrite
ALTERATION: Silica Pyrite
ALTERATION TYPE: Silicific'n Pyrite
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stockwork Stratabound
CLASSIFICATION: Epithermal
TYPE: I01 Au-quartz veins

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Eocene

GROUP

Penticton

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Trachyandesite Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Zeolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1989

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Gold

1.8000

Grams per tonne

COMMENTS: Highest value from drilling, across 6 metres.

REFERENCE: Property File - Huntington Resources Inc., 1989.

CAPSULE GEOLOGY

The Brett East showing is located 28 kilometres west of Vernon, on the steep north slope of Whiteman Creek Valley. The Brett Main prospect (082LSW110) occurs about 600 metres to the west.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude the Middle Jurassic and Penticton rocks.

At the East Zone, a quartz vein stockwork in Penticton Group trachyandesite flows hosts gold mineralization. The shallow dipping stockwork is associated with a bleached, silicified, and pyritized zone. Samples from drilling assayed up to 1.8 grams per tonne gold over 6 metres (Property File - Huntington Resources Inc., Statement of Material Facts, July 21, 1989).

In 1984-86, Huntington Resources Ltd. carried out geological mapping and soil geochemistry. During 1987-89, Corona Corporation carried out additional exploration including drilling.

BIBLIOGRAPHY

EMPR ASS RPT *13469, *13471, *15564, *19482
EMPR EXPL 1984-100,101; 1985-A39,62; 1986-A28,64; 1987-A29,67,71,
B15-22,C88; 1988-A2,21,43
EMPR FIELDWORK 1987, pp. B15-22, 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 452
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; In 082LSW110 -
Huntington Resources Inc., Statement of Material Facts, July 21,
1989)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Placer Dome File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW085**

NATIONAL MINERAL INVENTORY:

NAME(S): **BOULEAU CREEK**, BOLEAN CREEK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 11 N
LONGITUDE: 119 32 01 W
ELEVATION: 600 Metres

NORTHING: 5566133
EASTING: 319263

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence (Geological Survey of Canada, Open File 637, Map C).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Bouleau Creek showing is located 19 kilometres west-southwest of Vernon, on Bouleau Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally name Terrace Creek batholith. Eocene Coryell granitic rocks intrude and are in fault contact with the Middle Jurassic intrusions. Eocene Pentiction Group volcanic rocks overlie the igneous and sedimentary rocks.

Quaternary gravels along the creek host placer gold mineralization. In 1915, hydraulic placer mining leases were granted.

BIBLIOGRAPHY

EMPR AR *1915-253
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, pp. 136-137
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 74
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 454
REPORT: RGEN0100

MINFILE NUMBER: **082LSW086**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHITEMAN CREEK**, WHITE MANS CREEK, TWELVE-MILE CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

Open Pit

MINING DIVISION: Vernon

LATITUDE: 50 13 00 N
LONGITUDE: 119 31 32 W
ELEVATION: 580 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5565774
EASTING: 319826

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrence (Geological Survey of Canada, Open File 637, Map C).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Whiteman Creek showing is located 19 kilometres west-southwest of Vernon, on Whiteman Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Coryell granitic rocks intrude and are in fault contact with the Middle Jurassic intrusions. Eocene Pentiction Group volcanic rocks overlie the igneous and sedimentary rocks.

Quaternary gravels along the creek host placer gold mineralization. In 1915, hydraulic placer mining leases were granted. The recorded production is 90 grams of placer gold, during 1936-40 (Bulletin 28).

BIBLIOGRAPHY

EMPR AR *1915-253; 1920-187; 1921-196
EMPR BULL *28, pp. 62-63
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, pp. 136-137
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, pp. 73-74

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW086**

MINFILE NUMBER: **082LSW087**

NATIONAL MINERAL INVENTORY:

NAME(S): **VERNON GRANITE** VERNON QUARRY

STATUS: Past Producer Open Pit

MINING DIVISION: Vernon

REGIONS: British Columbia

NTS MAP: 082L03W

BC MAP:

LATITUDE: 50 10 16 N

LONGITUDE: 119 26 47 W

ELEVATION: 350 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry (Paper 87-1, page 321).

UTM ZONE: 11 (NAD 83)

NORTHING: 5560521

EASTING: 325307

COMMODITIES: Granite Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Orthoclase

ASSOCIATED: Plagioclase Quartz Biotite Hornblende

MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Magmatic Industrial Min.

TYPE: R03 Dimension stone - granite

DIMENSION: 50 x 10 Metres

COMMENTS: Quarry dimensions.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene			Coryell Intrusions

LITHOLOGY: Orthoclase Porphyritic Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Plutonic Rocks

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Vernon Granite deposit is located 16 kilometres southwest of Vernon, on the east shore of Okanagan Lake.

In this area, Devonian to Triassic sediments of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. These are intruded by granites and hypabyssal equivalents of the Eocene Coryell Intrusions. Patches of Penticton Group volcanic rocks overlie the older rocks.

The granite has been quarried for industrial use. It is coarse-grained with a fresh light pink tone, containing pink orthoclase feldspar crystals up to 10 millimetres in length. Quartz, plagioclase, biotite and hornblende are also present. Quartz stringers cut the granite and isolated red iron stain patches occur on weathered surfaces.

The quarry is approximately 50 metres long with a face up to 10 metres high. Potential reserves exist to the east. Spacing between joints and fractures is irregular, varying from 0.2 to 2.5 metres, with 60 per cent of recoverable blocks being greater than 50 centimeters square. The stone splits well in all three directions, is practically devoid of knots, takes a high polish and meets all ASTM standards.

From 1912 to the early 1940s about 850 cubic metres were quarried for building purposes and for monument bases by the Vernon Granite and Marble Works. The stone was used in the Vernon courthouse and still looks attractive after 60 years.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; *1986, pp. 309-342; 1987, pp. 55-58;
1988, pp. 355-363
EMPR INF CIRC *1988-6, p. 11, 29
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1712A
GSC MEM *296, pp. 160-161
GSC OF 637 (Map C), 736, 2167

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 456
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, Figure 7, p. 98
CANMET RPT *452, pp. 68-70; *846, pp. 172, 173

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW088**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEFROY**, BENJAMIN LEFROY

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 47 N
LONGITUDE: 119 25 20 W
ELEVATION: 350 Metres

NORTHING: 5563275
EASTING: 327124

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada Map 46-7).

COMMODITIES: Granite Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Orthoclase
ASSOCIATED: Plagioclase Quartz Biotite Olivine
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite
DIMENSION: 15 x 6 Metres
COMMENTS: Quarry dimensions.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene			Coryell Intrusions

LITHOLOGY: Orthoclase Coarse Grained Granite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Lefroy showing is located 13 kilometres southwest of Vernon, on the east shore of Okanagan Lake.

In this area, Devonian to Triassic sediments of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. These are intruded by granites and hypabyssal equivalents of the Eocene Coryell Intrusions. Patches of Kamloops Group volcanic rocks overlie the older rocks.

The granite was quarried for industrial use. It has a dull, light reddish colour, is medium to coarse-grained, containing pink orthoclase feldspar crystals up to 8 millimetres in length. Quartz is less abundant than feldspar. Plagioclase, biotite and a few grains of olivine are also reported. The quarry is 15 metres long with a face up to 6 metres high. The stone has good rift and grain and is practically devoid of knots or flaws. The rock is jointed but was able to supply fair-sized stone for building purposes.

From 1910 to 1912 about 200 cubic metres were quarried for building purposes and for monument bases by the Vernon Granite and Marble Works.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1712A
GSC MEM *296, p. 160
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, Figure 7, p. 98
CANMET RPT *452, pp. 67-68; *846, p. 172

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW088**

MINFILE NUMBER: **082LSW089**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAKESIDE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

Open Pit

MINING DIVISION: Vernon

LATITUDE: 50 14 01 N
LONGITUDE: 119 21 42 W
ELEVATION: 370 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5567274
EASTING: 331576

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Sedimentary
TYPE: B06 Fireclay
SHAPE: Tabular

Layered
Industrial Min.

E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Quaternary

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Glaciolacustrine Clay

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Lakeside showing is located 7 kilometre west-southwest of Vernon at Okanagan Landing.

In this area, west of the Okanagan Valley fault zone, sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Middle Jurassic granitic rocks of the informally named Terrace Creek batholith intrude older rocks. Outliers of Eocene Penticton Group volcanic rocks are present. Much of the valley floor is covered by thick Quaternary sediments.

Quaternary glacio-lacustrine beds host a clay deposit quarried for industrial use. In 1920, some good quality tile was produced from the clay.

BIBLIOGRAPHY

EMPR AR 1920-169
EMPR BULL 30, p. 12, 51
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, pp. 158-159
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 99-100

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW090**

NATIONAL MINERAL INVENTORY:

NAME(S): **KING EDWARD**, CODY, CHANNEL

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 20 N
LONGITUDE: 119 11 11 W

NORTHING: 5561921
EASTING: 343929

ELEVATION: 1020 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Drillhole C-2 (Assessment Report 7666).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

SHAPE: Tabular

DIMENSION: 4000 x 800 x 50 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Dimensions are the estimated extent of the fluvial deposits including 082LSW135 and 136.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Miocene

Chilcotin

Undefined Formation

LITHOLOGY: Quartz Pebble Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The King Edward showing is located 10 kilometres southeast of Vernon east of Deer Creek.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks. Middle Jurassic granitic rocks of the informally named Terrace Creek batholith intrude older rocks. Eocene Penticton Group and Miocene Chilcotin Group volcanic and sedimentary rocks cap areas of older rock.

The basal, partly cemented, well rounded, quartz pebble gravels of Miocene fluvial deposits host placer gold mineralization. The fluvial deposits unconformably overlie metamorphic, granitic and pegmatitic rocks, and are generally overlain by Miocene basalts. The fluvial deposits, including 082LSW135 and 136, cover an area of 4000 by 800 by 50 metres.

Exploration pits are located at the base of the gravels. In 1977 Kerr Addison Mines Ltd. explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical and drill programs were conducted. In 1978-79, Banqwest Resources Ltd. carried out geological mapping, hydrogeochemical, soil geochemical, radiometric, and trenching programs.

BIBLIOGRAPHY

EMPR ASS RPT 6483, 6914, *7666
EMPR EXPL 1977-E77; 1978-E89; 1979-97,98
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 460
REPORT: RGEN0100

BIBLIOGRAPHY

Canadian Journal of Earth Sciences, V. 25, No. 5, pp. 725-731

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW091**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARRIS CREEK**, LOWER HARRIS CREEK, BESSETTE CREEK,
 BURCHAN

STATUS: Past Producer	Open Pit	MINING DIVISION: Vernon
REGIONS: British Columbia		UTM ZONE: 11 (NAD 83)
NTS MAP: 082L03E		NORTHING: 5563009
BC MAP:		EASTING: 356896
LATITUDE: 50 12 07 N		
LONGITUDE: 119 00 19 W		
ELEVATION: 560 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Adit west of Harris Creek (Assessment Report 6812).		

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
 MINERALIZATION AGE: Cenozoic

DEPOSIT

CHARACTER: Unconsolidated		
CLASSIFICATION: Placer		
TYPE: C01 Surficial placers		
DIMENSION: 18 x 14 Metres	STRIKE/DIP:	TREND/PLUNGE:
COMMENTS: Channel (width x thickness).		

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cenozoic	Undefined Group	Undefined Formation	

LITHOLOGY: Boulder Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PLUTONIC BELT: Plutonic Rocks	PHYSIOGRAPHIC AREA: Okanagan Highland
TERRANE: Overlap Assemblage		

CAPSULE GEOLOGY

The Harris Creek deposit is located 6 kilometres south-southwest of Lumby, at Harris and Nicklen Creeks.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks. The Harper Ranch Group is unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group volcanic and sedimentary rocks. Middle Jurassic granitic rocks intrude the older rocks. Eocene Penticton Group and Miocene volcanic and sedimentary rocks cap areas of older rock.

A paleo-channel of Quaternary age or older, perched about 6 metres above Harris Creek, hosts placer gold mineralization. The poorly-sorted, stratified, angular boulder gravel of generally local derivation hosts coarse gold. The nuggets weigh up to 55 grams, are dark in colour and thoroughly polished. The gold is pure with a fineness of 874. Very minor black sand is reported. The channel is up to 18 metres wide and 14 metres deep. Gold-bearing remnants of the channel gravels occur to the east along the sides of Harris Creek.

The old channel was discovered in 1936 by A. Brewer and P. Johnson. Exploration adits and pits were dug both west of Harris Creek and east along its banks. Hydraulic mining on the west bank removed about 800 cubic metres of channel material. Between 1936 and 1945, 14150 grams of placer gold were produced (Bulletin 28, page 63). In 1978, Union Oil Co. of Canada Ltd. explored the sediments for uranium. Geological mapping, hydrogeochemical, soil geochemical and radiometric programs were conducted.

BIBLIOGRAPHY

- EMPR AR *1936-D43,44,45,46
- EMPR ASS RPT *6812
- EMPR BULL *28, p. 62
- EMPR EXPL 1978-E89,90
- EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
- EMPR MAP 7216G, 8512G
- EMPR OF 1989-5, 1990-30

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 462
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM *296, p. 138
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW092**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARY ELLEN**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 08 00 N
LONGITUDE: 119 26 34 W
ELEVATION: 460 Metres

NORTHING: 5556313
EASTING: 325427

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol #324 (Geological Survey of Canada Open File 637).

COMMODITIES: Thorium Uranium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Mary Ellen showing is located on the east side of Okanagan Lake, near the road, about 16 kilometres southwest of Vernon.

The area is underlain by Middle Jurassic quartz diorite of the informally named Terrace Creek batholith.

The showing is plotted as #324 on the Geological Survey of Canada Open File Map 637. There is no other information on it.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54
EMPR MAP 7216G
EMPR OF 1989-5, 1990-30, *1990-32
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF *637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1987/03/26

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW093**

NATIONAL MINERAL INVENTORY:

NAME(S): **WINFIELD**, ELEY, HALL

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 17 N
LONGITUDE: 119 21 25 W
ELEVATION: 950 Metres

NORTHING: 5547376
EASTING: 331285

LOCATION ACCURACY: Within 500M

COMMENTS: Adits (Assessment Report 7700).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Garnet Magnetite
MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: C01 Surficial placers
SHAPE: Tabular

DIMENSION: 5000 x 1500 x 60 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Dimensions are the estimated extent of the fluvial deposits including 082LSW019, 72 and 142).

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Quartz Pebble Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Winfield prospect is located 24 kilometres south-southwest of Vernon, between Wood Lake and Clark Creek.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks. Middle Jurassic granitic rocks of the informally named Terrace Creek batholith intrude the older rocks. Eocene Penticton Group and Miocene Chilcotin Group volcanic and sedimentary rocks cap areas of older rock.

The basal, partly cemented, well-rounded, quartz pebble gravels of Miocene fluvial deposits host placer gold mineralization. The fluvial deposits unconformably overlie gneissic rocks, amphibolite, granitic rocks and/or Early Tertiary volcanic rocks. The Miocene sediments are commonly overlain by Miocene plateau basalt flows. The gold is pure (850 fine), of a reddish colour, and is found as flattened pellets up to 2 millimetres in size, with some very fine gold reported. Garnet and a little magnetite occur with the gold. The fluvial deposits, including 082LSW019, 72 and 142, are estimated to cover a 5000 by 1550 by 60 metre area.

By 1936, exploration drifts of 107 and 52 metres had been completed. Between 1933 and 1945, a total of 2330 grams of placer gold production was reported from the Winfield camp (includes 082LSW019, 082LSW072 and 082LSW142) (Bulletin 28). In 1977-79, Union Oil Company explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical, radiometric, airborne magnetometer and drill programs were conducted.

BIBLIOGRAPHY

EMPR AR *1933-A197,198; 1934-D34; 1935-D15; *1936-D46,47,48
EMPR ASS RPT 6631, 6944, *7700
EMPR BULL 28, p. 62,63
EMPR EXPL 1977-E77; 1978-E90; 1979-98
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 465
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM *296, p. 137
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
Canadian Journal of Earth Sciences V. 25, No. 5, pp. 725-731

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW094**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAVINGTON LIMESTONE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 51 N
LONGITUDE: 119 05 42 W
ELEVATION: 762 Metres

NORTHING: 5564543
EASTING: 350532

LOCATION ACCURACY: Within 5 KM

COMMENTS: Centre of surface trace of limestone band south of Lavington
(Minister of Mines Annual Report 1961 p. 145).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Silica
MINERALIZATION AGE: Permian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Fossils

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
DIMENSION: 3800 x 150 Metres
COMMENTS: Bedding attitude near the west end of the band. Dimensions of the limestone band.

Massive
Industrial Min.

STRIKE/DIP: 084/53S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
DATING METHOD: Fossil
MATERIAL DATED: Fossils

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Argillite
Chert
Volcanic
Gneiss

HOSTROCK COMMENTS: Limestones of the Devonian to Triassic Harper Ranch Group are Permian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY

YEAR: 1961

GRADE

Limestone 33.8000 Per cent

COMMENTS: Sample taken across 152 metres of limestone. The grade is for CaO.
REFERENCE: Minister of Mines Annual Report 1961, page 148 (Sample 9).

CAPSULE GEOLOGY

A 150-metre wide band of Permian limestone extends westward along the north side of Blue Nose Mountain for 3.8 kilometres, 1.5 kilometres south of Lavington and 13 kilometres east of Vernon.

The band lies within a sequence of argillite and chert of the Devonian to Triassic Harper Ranch Group. To the east and west, the band is truncated by faults that bring volcanics and gneiss in contact with the limestone. Bedding strikes 080 to 088 degrees and dips 40 to 65 degrees south.

The band is comprised of white and grey streaked, coarse-grained siliceous limestone with abundant volcanic inclusions and knots and lenses of light colored chert.

A sample of chips taken at 3.0 metre intervals for 152 metres along a road cut contained 33.8 per cent CaO, 2.66 per cent MgO, 22.39 per cent insolubles, 10.96 per cent R2O3, 3.36 per cent Fe2O3, 0.06 per cent MnO, 0.05 per cent P2O5, trace sulphur, 28.18 per cent

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 467
REPORT: RGEN0100

CAPSULE GEOLOGY

ignition loss and 0.19 per cent water (Minister of Mines Annual Report 1961, p. 148, Sample 9).

BIBLIOGRAPHY

EMPR AR *1961-145,147,148
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G
EMPR OF 1989-5, 1990-30, 1992-18
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296 pp. 38, 39, 42
GSC OF 481, 637, 736, 2167
GSC P 89-1E pp. 51-60

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

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW095**

NATIONAL MINERAL INVENTORY:

NAME(S): **SALMON RIVER NORTH**, FALKLAND

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 28 58 N
LONGITUDE: 119 41 11 W
ELEVATION: 880 Metres

NORTHING: 5595758
EASTING: 309422

LOCATION ACCURACY: Within 500M

COMMENTS: Knoll (Minister of Mines Annual Report 1961, page 144).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Silica Quartz
MINERALIZATION AGE: Permian

DEPOSIT

CHARACTER: Massive Layered
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
SHAPE: Tabular
DIMENSION: 1200 x 150 Metres STRIKE/DIP: 140/90 TREND/PLUNGE:
COMMENTS: Limestone lens.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Harper Ranch Undefined Formation

LITHOLOGY: Limestone
Chert
Argillite

HOSTROCK COMMENTS: Limestone of the Devonian to Triassic Harper Ranch Group is Permian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE:
COMMENTS: Harper Ranch regionally metamorphosed to prehnite-pumpellyite facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1961
SAMPLE TYPE: Chip
COMMODITY GRADE
Limestone 50.1300 Per cent
COMMENTS: Grade is for CaO.
REFERENCE: Minister of Mines Annual Report 1961, pages 144,148.

CAPSULE GEOLOGY

The Salmon River North showing is located 9 kilometres west of Falkland, north of the Salmon River.

In this area, sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Cretaceous granodiorite plugs of the Salmon Arm Intrusions intrude the Nicola Group rocks. Extensive Eocene Kamloops Group volcanic rocks cap the older rocks.

The Harper Ranch Group hosts a Permian limestone lens. The lens consists of vertical thick and thin beds of light grey limestone over a maximum thickness of 150 metres and an exposed strike of 1200 metres. The lens contains irregular zones and patches of chert, quartz and argillaceous material. Sampling returned 50.13 per cent CaO, 1.6 per cent MgO, 0.24 per cent Fe2O3 and insolubles at 6.5 per cent (Minister of Mines Annual Report 1961, pages 144, 148).

BIBLIOGRAPHY

EMPR AR *1961-144,145,148
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 469
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30, *1992-18, pp. 81, 83
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map B), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW096**

NATIONAL MINERAL INVENTORY:

NAME(S): **SALMON RIVER SOUTH**, FALKLAND

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5593722
EASTING: 310158

LATITUDE: 50 27 53 N
LONGITUDE: 119 40 30 W
ELEVATION: 671 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of limestone outcrop just south of the Salmon River
(Geological Survey of Canada Map 1059A).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Permian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Fossils

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
DIMENSION: 180 x 60

Industrial Min.

Metres

STRIKE/DIP: 152/55E

TREND/PLUNGE:

COMMENTS: General attitude of bedding. Dimensions of limestone band.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil
MATERIAL DATED: Fossils

LITHOLOGY: Limestone

HOSTROCK COMMENTS: Limestones of the Devonian to Triassic Harper Ranch Group are Permian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip

YEAR: 1961

COMMODITY

Limestone

GRADE

39.7600 Per cent

COMMENTS: Sample taken across 60 metres of limestone. The grade is for CaO.

REFERENCE: Minister of Mines Annual Report 1961, page 148 (Sample 2).

CAPSULE GEOLOGY

A band of Permian limestone of the Devonian to Triassic Harper Ranch Group is exposed for 60 metres along a road cut and continues for 180 metres southwest up the south side of the Salmon River valley, 10 kilometres southwest of Falkland.

The limestone is faulted, folded and intruded by narrow sheared dikes. Bedding generally strikes 152 degrees and dips 55 degrees northeast.

The deposit is comprised of black, fine-grained, thinly-bedded, impure limestone that is cut by narrow, white calcite veinlets.

A 60 metre long sample of chips taken along the road cut contained 39.76 per cent CaO, 0.82 per cent MgO, 25.26 per cent insolubles, 1.26 per cent R2O3, 0.97 per cent Fe2O3, 0.04 per cent MnO, 0.03 per cent P2O5, 0.06 per cent sulphur, 32.61 per cent ignition loss (Minister of Mines Annual Report 1961, p. 148, Sample 2).

BIBLIOGRAPHY

EMPR AR *1961-145,146,147
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G
EMPR OF 1989-5, 1990-30, 1992-18

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 471
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296 pp. 38, 39, 42
GSC OF 481, 637, 736, 2167
GSC P 89-1E pp. 51-60

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

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW097**

NATIONAL MINERAL INVENTORY:

NAME(S): **VERNON LIMESTONE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 43 N
LONGITUDE: 119 17 50 W
ELEVATION: 380 Metres

NORTHING: 5570280
EASTING: 336269

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Minister of Mines Annual Report 1961, page 147).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Quartz

MINERALIZATION AGE: Permian

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone

DIMENSION: 800 x 800 Metres

COMMENTS: Limestone mass is 800 metres in diameter.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic and the limestone is Permian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Harper Ranch

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1961

SAMPLE TYPE: Grab

COMMODITY

GRADE

Limestone

49.9200

Per cent

COMMENTS: Grade is for CaO.

REFERENCE: Minister of Mines Annual Report 1961, pages 147,148.

CAPSULE GEOLOGY

The Vernon Limestone deposit is located 2 kilometres west of Vernon.

Sedimentary rocks of the Devonian to Triassic Harper Ranch Group are in probable unconformable contact with Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. Middle Jurassic granitic plugs intrude these rocks. Outliers of Eocene Kamloops Group volcanic rocks occur.

The Harper Ranch Group hosts a Permian limestone lens which was quarried for industrial use. The lens comprises an 800 metre diameter mass of medium to dark grey, medium-grained limestone with veinlets and lenses of quartz and calcite. Sampling returned 49.9 per cent CaO, 2.2 per cent MgO, 0.62 per cent Fe₂O₃ and insolubles at 5.1 per cent (Minister of Mines Annual Report 1961, pp. 147-148).

Minor production for lime was discontinued due to the poor quality of the limestone.

BIBLIOGRAPHY

EMPR AR *1961-145,147

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363

EMPR MAP 7216G, 8513G

EMPR OF 1989-5, 1990-30, *1992-18, pp. 80, 82

EMPR PF (In 082LSW022 - Jones, W.C.(1959): Groundwater in the BX

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 473
REPORT: RGEN0100

BIBLIOGRAPHY

Creek area; In 082LSW General - Claim Map, 1966; sketch map)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map B), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW098**

NATIONAL MINERAL INVENTORY:

NAME(S): **MASON, KNOB HILL, ARMSTRONG LIMESTONE, MOUNT ROSE**

STATUS: Past Producer Open Pit
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 28 30 N
LONGITUDE: 119 13 50 W
ELEVATION: 470 Metres

NORTHING: 5593822
EASTING: 341731

LOCATION ACCURACY: Within 500M
COMMENTS: Quarry (Minister of Mines Annual Report 1961, page 146).

COMMODITIES: Limestone Marble

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Quartz Muscovite Pyrite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Cambrian-Ordovician

DEPOSIT

CHARACTER: Layered Stratiform
CLASSIFICATION: Sedimentary Metamorphic Industrial Min.
TYPE: R09 Limestone
SHAPE: Tabular
MODIFIER: Fractured
DIMENSION: STRIKE/DIP: 115/30S
COMMENTS: Attitude of marble beds.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian-Ordovician	Undefined Group	Tsalkom	

LITHOLOGY: Marble
Limestone
Schist
Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: ARMSTRONG LIMESTONE REPORT ON: Y
CATEGORY: Measured YEAR: 1971
QUANTITY: 998000 Tonnes
COMMODITY: Limestone GRADE: 55.3000 Per cent
COMMENTS: Block in the centre of the limestone mass. Grade given for CaO with a cutoff grade of 0.10 per cent Fe2O3.
REFERENCE: Industrial Mineral File - Kerr, J. 1971, pages 6-7.

CAPSULE GEOLOGY

The Mason showing is located 4 kilometres northwest of Armstrong.

In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granodiorite plugs of the Salmon Arm Intrusions intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

A marble unit in the Tsalkom Formation has been quarried for calcite for agricultural use and evaluated for other industrial potential. The unit comprises 5 to 15 centimetre beds of white to pink, bluish grey, and white and grey fine-to coarse-grained high-calcium marble, within a unit at least 55 metres thick. The

CAPSULE GEOLOGY

beds strike 115 degrees and dip 30 degrees south. Thin sheets of intercalated schist and occasional vertical igneous dikes are present. The marble is highly fractured. Muscovite, quartz, pyrite and limonite are occasionally present. Sampling of pure marble returned values of 98.3 per cent calcite, 0.10 per cent Fe₂O₃ and 1.1 per cent silica.

Earlier this century, the marble was quarried and burnt on site in a lime kiln. In 1970, Mount Rose Mining Co. Ltd. drilled 11 holes, followed in 1971 by an evaluation of the industrial potential of the deposit. Measured geological reserves are 998,000 tonnes grading 55.3 per cent CaO with a cutoff grade of 0.10 per cent Fe₂O₃ (Industrial Minerals File - Kerr, J. 1971).

BIBLIOGRAPHY

EMPR AR *1961-145,146,148
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30, *1992-18, p. 90, 91
EMPR PF (In 082LSW General - Claim Map, 1966; Report by J. Kerr, 1971)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map B), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, p. 99
CANMET RPT (Bureau of Mines) *811, p. 204, 205

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW099**

NATIONAL MINERAL INVENTORY:

NAME(S): **KENDRY CREEK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 29 N
LONGITUDE: 119 07 14 W

NORTHING: 5591710
EASTING: 349481

ELEVATION: 520 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry on the north bank of Kendry Creek on Lot 989 (Minister of Mines Annual Report 1961, page 146).

COMMODITIES: Limestone Marble

MINERALS

SIGNIFICANT: Calcite

ASSOCIATED: Pyrite

MINERALIZATION AGE: Cambrian-Ordovician

DEPOSIT

CHARACTER: Layered Stratiform
CLASSIFICATION: Sedimentary Metamorphic Industrial Min.

TYPE: R09 Limestone

SHAPE: Tabular

DIMENSION: 50 x 12 Metres

STRIKE/DIP: 075/75N TREND/PLUNGE:

COMMENTS: Marble lens.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian-Ordovician	Undefined Group	Tsalkom	

LITHOLOGY: Marble
Limestone
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1961

SAMPLE TYPE: Chip

COMMODITY GRADE

Limestone 53.0700 Per cent

COMMENTS: Limestone grade is for CaO, over 12 metre width.

REFERENCE: Minister of Mines Annual Report 1961, pages 146, 148.

CAPSULE GEOLOGY

The Kendry Creek deposit is located 5 kilometres east of Armstrong on the north side of Kendry Creek.

This area, east of the Okanagan Valley fault, is underlain by gneissic rocks of unknown age, metasedimentary rocks of the Proterozoic Silver Creek Formation and volcanic and sedimentary rocks of the Cambro-Ordovician Tsalkom Formation and the Upper Triassic to Lower Jurassic Nicola Group. All these units are probably in low-angle fault contact with each other. Intruding these rocks are Middle Jurassic granitic bodies. Pegmatite bodies of Mesozoic or Cenozoic age intrude the Silver Creek Formation.

A small marble lens within slates of the Tsalkom Formation has been a source of calcite for industrial use. The coarse-grained, grey marble is exposed over a 7 to 15-metre width and can be traced for a length of 50 metres, striking 075 degrees and dipping 75 degrees north. The individual beds are up to 0.5 metre thick with intercalated layers of calc-silicate minerals. Fine-grained crystalline pyrite is present in some areas. In 1944, sampling assayed 94.2 per cent calcite and 52.8 per cent CaO. Sampling in 1961 returned 53.1 per cent CaO, 0.30 per cent MgO, 0.40 per cent Fe2O3 and insolubles at 3.9 per cent (Minister of Mines Annual Report 1961, pp. 146, 148).

CAPSULE GEOLOGY

Earlier this century, the marble was quarried and burnt on site in a lime kiln. Later, Land Limes Ltd. operated a small quarry and crushing mill to produce pulverized limestone for agricultural purposes. In 1921, 308 tonnes of limestone were quarried.

BIBLIOGRAPHY

EMPR AR *1961-145-148
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30, 1992-18
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 1712A
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT 1931A, p. 99
CANMET RPT (Bureau of Mines) *811, p. 204,205

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW100**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONTE LAKE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 29 26 N
LONGITUDE: 119 50 00 W
ELEVATION: 700 Metres

NORTHING: 5597010
EASTING: 299032

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence exposed in a highway cut at the south end of Monte Lake
(Geological Survey of Canada, Miscellaneous Report 8, page 65).

COMMODITIES: Agate Zeolite Gemstones

MINERALS

SIGNIFICANT: Agate Zeolite

COMMENTS: Moss agate and ferrierite are reported.

MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratabound Disseminated Vein
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: Q03 Agate
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Overlap Assemblage

METAMORPHIC TYPE: Regional

Harper Ranch

RELATIONSHIP: Syn-mineralization

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Zeolite

CAPSULE GEOLOGY

The Monte Lake showing is located 20 kilometres west of Falkland, near the southeast corner of Monte Lake.

In this area, Upper Triassic to Lower Jurassic Nicola sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group volcanic flows host agate and ferrierite (zeolite) mineralization. Moss agate occurs as nodules, amygdules and veins in a gently dipping volcanic bed.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC MISC RPT *8 p. 65
GSC OF 637, 736, 2167
GSC P 72-53, pp. 22-23; 89-1E pp. 51-60
Canadian Rockhound Vol. 1, No. 4, p. 7 (1957)

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW101**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOUGLAS LAKE ROAD**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 23 30 N
LONGITUDE: 119 49 52 W
ELEVATION: 500 Metres

NORTHING: 5586011
EASTING: 298771

LOCATION ACCURACY: Within 1 KM

COMMENTS: Occurrences are in bluffs on the west side of the Douglas Lake road
11 km south of Westwold (Geological Survey of Canada, Miscellaneous
Report 8, page 65).

COMMODITIES: Agate

Gemstones

MINERALS

SIGNIFICANT: Agate
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: Q03 Agate

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Felsic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau
Harper Ranch
RELATIONSHIP: Syn-mineralization
GRADE: Zeolite

CAPSULE GEOLOGY

The Douglas Lake Road showing is located 23 kilometres southwest of Falkland, west of the Salmon River.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group grey, fine-grained felsic volcanic rocks host agate. The agate occurs as lumps and seams.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR P 1983-1, pp. 89-91
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC MISC RPT *8, p. 65
GSC OF 637, 736, 2167
GSC P 72-53, pp. 22-23; 81-1B, pp. 170-177; 89-1E pp. 51-60
Placer Dome File
Western Homes, October 1961, p. 22

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW102**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINAUS EAST**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 25 13 N
LONGITUDE: 119 34 23 W
ELEVATION: 1040 Metres

NORTHING: 5588525
EASTING: 317221

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Geological Survey of Canada, Paper 72-53, page 22).

COMMODITIES: Agate

Gemstones

MINERALS

SIGNIFICANT: Agate Jasper
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: Q03 Agate

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Eocene

GROUP

Kamloops

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Harper Ranch

RELATIONSHIP: Syn-mineralization

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Zeolite

CAPSULE GEOLOGY

The Pinaus East showing is located 9 kilometres south of Falkland, south of Pinaus Lake.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

The showing comprises jasper and agate hosted in Kamloops Group basalt flows.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P *72-53, p. 22-23; 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW103**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHITEMAN JASPER**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 51 N
LONGITUDE: 119 29 11 W
ELEVATION: 600 Metres

NORTHING: 5567255
EASTING: 322672

LOCATION ACCURACY: Within 500M

COMMENTS: Midpoint between 2 showings, 350 metres apart (Geological Survey of Canada Miscellaneous Report 8, page 79).

COMMODITIES: Gemstones

MINERALS

SIGNIFICANT: Jasper
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Quaternary

GROUP

Undefined Group

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Unconsolidated Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Whiteman Jasper showing is located 15 kilometres west-southwest of Vernon, on the south side of Whiteman Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Eocene Coryell granitic rocks intrude and are in fault contact with Middle Jurassic intrusions. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Unconsolidated Quaternary sediments along the creek host placer(?) jasper. The jasper is fine-grained and red.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC MISC RPT *8, pp. 78-79
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Western Homes and Living, October 1961, p. 22

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 482
REPORT: RGEN0100

MINFILE NUMBER: **082LSW104**

NATIONAL MINERAL INVENTORY:

NAME(S): **INGRAM**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 25 26 N
LONGITUDE: 119 41 24 W
ELEVATION: 1000 Metres

NORTHING: 5589221
EASTING: 308929

LOCATION ACCURACY: Within 5 KM

COMMENTS: Showing (Geological Survey of Canada, Paper 72-53, page 23).

COMMODITIES: Agate

Gemstones

MINERALS

SIGNIFICANT: Agate
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau
Harper Ranch
RELATIONSHIP: Syn-mineralization GRADE: Zeolite

CAPSULE GEOLOGY

The Ingram showing is located 13 kilometres southwest of Falkland, at the edge of the plateau near Ingram Creek. In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units. Kamloops Group basalt flows host agate. The agate comes in various shapes and colours.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P *72-53, p. 23; 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW104**

MINFILE NUMBER: **082LSW105**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLIZZARD**, BOULEAU LAKE

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 40 N
LONGITUDE: 119 38 36 W
ELEVATION: 1500 Metres

NORTHING: 5574711
EASTING: 311732

LOCATION ACCURACY: Within 1 KM

COMMENTS:

COMMODITIES: Opal Agate Gemstones

MINERALS

SIGNIFICANT: Agate Opal
COMMENTS: Black agate and common opal are reported.
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: Q11 Volcanic-hosted opal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Kamloops	Unnamed/Unknown Formation	

LITHOLOGY: Feldspar Porphyry Andesite
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Overlap Assemblage	Harper Ranch
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Zeolite

CAPSULE GEOLOGY

The Blizzard showing is located 26 kilometres west of Vernon, north of Bouleau Lake.
In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group and Penticton Group volcanic and sedimentary rocks overlie the older units.
Kamloops Group volcanic rocks host agate and opal. Black agate and common opal occur in feldspar-porphyry andesite flows.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P *72-53, p. 23; 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW106**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHORTS CREEK AGATE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 09 55 N
LONGITUDE: 119 35 29 W
ELEVATION: 1370 Metres

NORTHING: 5560222
EASTING: 314931

LOCATION ACCURACY: Within 5 KM

COMMENTS: Showing along a logging road leading to the plateau north of Shorts Creek (Geological Survey of Canada, Paper 72-53, page 23).

COMMODITIES: Agate Gemstones

MINERALS

SIGNIFICANT: Agate
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Penticton	Unnamed/Unknown Formation	

LITHOLOGY: Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Overlap Assemblage	Harper Ranch
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization
	GRADE: Zeolite

CAPSULE GEOLOGY

The Shorts Creek Agate showing is located 25 kilometres west-southwest of Vernon, north of Shorts Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Extensive Eocene Penticton Group volcanic and sedimentary rocks overlie the older units.

Penticton Group volcanic rocks host agates. Amygdules of agate were found along a logging road leading to the plateau north of Shorts Creek.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P *72-53, p. 23; 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW107**

NATIONAL MINERAL INVENTORY:

NAME(S): **ADELPHI**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 23 57 N
LONGITUDE: 119 47 26 W
ELEVATION: 1100 Metres

NORTHING: 5586736
EASTING: 301684

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing along the cliffs at the head of Adelphi Creek (Geological Survey of Canada, Paper 72-53, page 23).

COMMODITIES: Agate

Gemstones

MINERALS

SIGNIFICANT: Agate
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Eocene

GROUP

Kamloops

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Harper Ranch

RELATIONSHIP: Syn-mineralization

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Zeolite

CAPSULE GEOLOGY

The Adelphi showing is located 20 kilometres southwest of Falkland, near Adelphi Creek.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group volcanic flows host agate. The agate occurs as amygdules and veins.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P *72-53, p. 23; 89-1E pp. 51-60

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW108**

NATIONAL MINERAL INVENTORY:

NAME(S): **ARMSTRONG KYANITE**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 28 01 N
LONGITUDE: 119 05 56 W
ELEVATION: 980 Metres

NORTHING: 5592654
EASTING: 351047

LOCATION ACCURACY: Within 500M

COMMENTS: Showing on the ridge north of Glanzier Creek (Geological Survey of Canada, Summary Report 1931A, page 68).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.			Unnamed/Unknown Informal

LITHOLOGY: Mica Schist

HOSTROCK COMMENTS: Metasedimentary rocks of the Kootenay Terrane.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Armstrong Kyanite showing is located 6 kilometres east-northeast of Armstrong, on the ridge north of Glanzier Creek.

The area east of the Okanagan Valley fault is underlain by gneissic rocks of unknown age, metasedimentary rocks of the Proterozoic Silver Creek Formation, metasedimentary rocks of the Kootenay Assemblage including volcanic and sedimentary rocks of the Cambro- Ordovician Tsalkom Formation and the Upper Triassic to Lower Jurassic Nicola Group. All these units are probably in low-angle fault contact with each other. Middle Jurassic granitic plutons intrude these rocks. Mesozoic or Cenozoic pegmatite bodies intrude the Proterozoic Silver Creek Formation.

Mica schists of the Silver Creek Formation host abundant small kyanite crystals, formed during high grade metamorphism.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1988-26, p. 11, 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, p. 161
GSC MISC RPT 8, p. 79
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 68

DATE CODED: 1985/07/24
DATE REVISED: 1993/03/31

CODED BY: GSB
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW109**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARSWELL**, BOULEAU LAKE

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 25 N
LONGITUDE: 119 38 43 W
ELEVATION: 1420 Metres

NORTHING: 5574253
EASTING: 311577

LOCATION ACCURACY: Within 500M

COMMENTS: Showing on logging road south of creek crossing (Geological Survey of Canada Paper 72-53, p. 23).

COMMODITIES: Agate

Gemstones

MINERALS

SIGNIFICANT: Agate
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: O04 Feldspar-quartz pegmatite

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Eocene

GROUP

Kamloops

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Volcaniclastic Sandstone
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Harper Ranch
RELATIONSHIP: Syn-mineralization

PHYSIOGRAPHIC AREA: Thompson Plateau
GRADE: Zeolite

CAPSULE GEOLOGY

The Carswell showing is located 26 kilometres west of Vernon, north of Bouleau Lake.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Extensive Eocene Penticton Group and Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group volcaniclastic sandstone, between andesite flows, hosts agate.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P *72-53, p. 23; 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW110**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRETT, BRETT MAIN, BRETT 1,
BRETT 1-4, DISCOVERY, R.W.,
TR 1, MAIN SHEAR, WHITEMAN CREEK,
BONANZA**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:
LATITUDE: 50 13 57 N
LONGITUDE: 119 39 51 W
ELEVATION: 1340 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Main Shear zone (Assessment Report 19482).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5567878
EASTING: 310002

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT:	Electrum	Gold	Galena	Argentite
ASSOCIATED:	Quartz	Chalcedony	Pyrite	
ALTERATION:	Silica	Clay	Chlorite	Epidote Calcite
	Sericite	Hematite		
ALTERATION TYPE:	Silicific'n	Argillic		Oxidation
MINERALIZATION AGE:	Eocene			

DEPOSIT

CHARACTER: Vein Stockwork Breccia Shear
CLASSIFICATION: Epithermal
TYPE: H05 Epithermal Au-Ag: low sulphidation
DIMENSION: 1500 x 250 x 7 Metres STRIKE/DIP: 155/80W TREND/PLUNGE:
COMMENTS: Dimensions are of the Main Shear zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Penticton	Unnamed/Unknown Formation	Coryell Intrusions
Eocene			

LITHOLOGY: Trachyandesite Tuff
Feldspar Porphyry Dike

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage Plutonic Rocks
PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: BONANZA REPORT ON: Y
CATEGORY: Inferred YEAR: 1992
QUANTITY: 11970 Tonnes
COMMODITY GRADE
Gold 39.1200 Grams per tonne
COMMENTS: Along a 150-metre section in the Bonanza zone, within the Main Shear zone.
REFERENCE: Stockwatch, July 11, 1996.

CAPSULE GEOLOGY

The Brett prospect is located 28 kilometres west of Vernon, on the steep north slope of Whiteman Creek Valley. The prospect comprises the Main Shear zone which hosts the Discovery vein (part of the Bonanza zone), the R.W. vein and the TR-1 and TR-21 zones. In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Penticton Group or Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude these rocks. A shear zone within the Penticton Group volcanic rocks hosts gold and silver mineralization. The 1500 metre long shear strikes 155 degrees, dips 80 degrees west for at least 250 metres depth and is 2 to 15 metres wide. Mineralization occurs with quartz and chalcedony in veins, vein stockworks and brecciated veins, in fracture controlled zones near or within the shear zone, and in altered, more porous trachyandesite tuffs and flows adjoining the

CAPSULE GEOLOGY

shear. The veins have crustiform, banded and vuggy textures. Minor mineralization is present in a Coryell feldspar porphyry dike which fills much of the shear zone, however, most mineralization appears to pre-date the dike. Mineralization is largely structurally controlled but is, in part, lithologically controlled. Pyrite, gold, electrum and minor argentite occur.

Gold mineralization varies from very fine-grained in volcanic rocks to coarse flakes in quartz veining. Most of the gold seems to be concentrated within a 200-metre strike length, in the Bonanza zone and the R.W. vein; furthermore the best gold values appear to occur between the 1230-metre and 1240-metre elevations. Intense clay alteration is prominent in portions of the shear zone. The tuffs have suffered chlorite-epidote-calcite-hematite alteration changing to clay(illite)-sericite-silica alteration adjacent to the shear zone.

In 1988, a percussion-drill hole intersected a high grade zone which assayed 100 grams per tonne gold over 44 metres (Property File - Huntington Resources Inc., Statement of Material Facts, July 21, 1989). Average grades and true thickness are in the range of 4 grams per tonne gold over 2 metres, however no grade and tonnage figures are available. The R.W. vein is located 15 metres west of the Main Shear Zone and may be the northwest continuation/offset or an offshoot of the main vein which hosts the Bonanza Zone.

The Discovery vein and the Gossan zone (082LSW132) were discovered in 1984; the Main Shear zone and the R.W. vein were discovered in 1986. The New Discovery zone (082LSW131) was discovered in 1987 and the East zone (082LSW084) in 1988.

In 1984-89, Huntington Resources Ltd. carried out geological mapping, soil geochemistry, trenching and drilling. Similar exploration was continued by Corona Corporation during 1987-89. In 1990, Huntington carried out some drilling. Exploration was resumed in 1993.

Estimated reserves of the Bonanza zone (along a 150-metre section) are 11,970 tonnes grading 39.12 grams per tonne gold (Stockwatch, July 11, 1996).

During 1994-1995, Liquid Gold Resources Inc., under an option agreement with Huntington, completed a 240-metre long adit from the 1205-metre level under the Bonanza zone. An estimated 1090 tonnes of mineralized rock, averaging 5.76 grams per tonne gold were extracted and stockpiled outside the portal.

Huntington Resources Ltd. concentrated its 1995 work on mining in the high grade R.W. gold vein. Closely spaced sampling of the vein yielded an average grade of 34.35 grams per tonne gold over a strike length of 51.3 metres and across a true width of 0.44 metre. Drilling in previous programs has tested the vein over a vertical range of at least 25 metres. Mining began in August 1995 and continues on schedule; ore is being stockpiled. The 240-metre adit on the 1205-metre level has been rehabilitated and a 15-metre raise was driven in the Bonanza zone. Also in 1995, with support from the Explore B.C. Program, Huntington Resources successfully bypassed an underground caved area securing access to the Bonanza zone and collected a 250 tonne surface bulk sample of the R.W. vein which averaged 34.2 grams per tonne gold, confirming previous surface sampling of this vein (Explore B.C. Program 95/96 - M27).

On July 9, 1996, Huntington trucked approximately 225 tonnes of ore from the R.W. vein to Cominco's smelter at Trail for processing and sale. The anticipated grade is 34.18 grams per tonne gold and 63.43 grams per tonne silver. A second shipment of 275 tonnes, with an expected grade of 42.86 grams per tonne gold, will be shipped later in July.

BIBLIOGRAPHY

- EMPR ASS RPT *13469, *13471, *15564, *19482
EMPR EXPL 1984-100,101; 1985-A39,62; 1986-A28,64; 1987-A29,67,71,
*B15-22; 1988-A2,21,43; 1989-50; 1990-17,55
EMPR Explore B.C. Program 95/96 - M27
EMPR FIELDWORK 1987, pp. B15-22, 55-58; 1988, pp. 355-363
EMPR INF CIRC 1987-1, p. 21, 62; 1988-1, p. 26, 63, 67; 1989-1,
p. 26; 1993-13, p. 14; 1994-1, p. 14; 1994-19, pp. 12, 15; 1995-1,
pp. 12, 15; 1995-9, p. 17; 1996-1, p. 17; 1997-1, p. 22
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5; 1990-30; 1992-1; 1994-1
EMPR P 1989-1, pp. 97, 357
EMPR PF (In 082LSW General - Claim Map, 1966; *Huntington Resources
Inc., Statement of Material Facts, July 21, 1989; Geological notes
by R. Meyers, 1988)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 490
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 89-1E pp. 51-60
GCNL Aug.28, 1986; July 8, Sept.8,17, Nov.13, 1987; #16(Jan.24),
#80(Apr.26),#122(June 26),#133(July 12),#154(Aug.11),#194(Oct.10),
#224(Nov.22), 1989; #90(May 9), 1990; #243(Dec.19), 1991
N MINER Sept.21, 1987; Feb.6, 1989
V STOCKWATCH Sept.4,15, Oct.14, Nov.10, Dec.4, 1987; July 11, 1996
WWW <http://www.infomine.com/>

DATE CODED: 1985/12/05
DATE REVISED: 1996/07/16

CODED BY: AFW
REVISED BY: TGS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW111**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZUMAR, ZUMAR 2, ZUMAR GOLD,
ZUMAR 2-4**

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 00 37 N
LONGITUDE: 119 38 27 W
ELEVATION: 1150 Metres

NORTHING: 5543115
EASTING: 310791

LOCATION ACCURACY: Within 500M
COMMENTS: Vein (Assessment Report 16416).

COMMODITIES: Gold Silver Copper Zinc Lead

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz Pyrite
ALTERATION: Hematite Sericite Malachite Azurite
ALTERATION TYPE: Oxidation Sericitic
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 230 x 65 Metres
COMMENTS: Vein.
STRIKE/DIP: H05 100/80S Epithermal Au-Ag: low sulphidation
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic Harper Ranch Unnamed/Unknown Formation

LITHOLOGY: Andesite
Dike

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Harper Ranch shows some hornfelsing.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Bulk Sample
COMMODITY GRADE
Silver 42.0000 Grams per tonne
Gold 4.7000 Grams per tonne
Copper 0.0900 Per cent
Lead 0.1000 Per cent
Zinc 0.1000 Per cent
COMMENTS: Grades are from a 55.1 tonne hand-cobbed bulk sample.
REFERENCE: Assessment Report 21600.

CAPSULE GEOLOGY

The Zumar prospect is located 16 kilometres northwest of Kelowna, west of Terrace Creek. In this area, Devonian to Triassic Harper Ranch Group sedimentary and volcanic rocks have been intruded by Middle Jurassic granitic rocks. Outliers of Eocene Penticton Group volcanic and sedimentary rocks overlie the older units. A quartz vein in metamorphosed Harper Ranch Group basaltic to andesitic flows hosts gold, silver, lead, zinc and copper mineralization. Pyrite, some of which is coarse-grained, and minor chalcopyrite are irregularly disseminated in the vein. The 0.3 to 0.4 metre-thick, massive, occasionally vuggy, brecciated or shattered vein has a known strike length of 230 metres and a down dip extension of at least 65 metres. The vein is cut by an Eocene(?) dike. The wallrocks are strongly fractured, with heavy hematite coating of fractures, and exhibit pervasive sericitic alteration. In 1980, two

CAPSULE GEOLOGY

lots of hand-cobbed vein material (totalling 55.1 tonnes) were shipped as a bulk sample, returning an averaging gold grade of 4.7 grams per tonne, 42 grams per tonne silver, 0.09 per cent copper, 0.10 per cent lead and 0.10 per cent zinc (Assessment Report 21600).

In 1979-82, Zumar Resources Ltd. carried out trenching, bulk sampling and drilling. In 1986-87, Skyworld Resources and Development Ltd. conducted magnetometer, soil geochemistry, geological mapping, trenching and drilling programs.

BIBLIOGRAPHY

EMPR ASS RPT 15400, *16416, *18713, *21600
EMPR BC METAL MM00445
EMPR EXPL 1986-C100; 1987-C90
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR IR 1984-2 (1980), p. 103
EMPR MINING, Vol. 1, p. 75
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; *Barker, R.M.(1990):
Draft Property Description)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1988/03/21
DATE REVISED: 1993/03/31

CODED BY: GSA
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW112**

NATIONAL MINERAL INVENTORY:

NAME(S): **BALD RANGE** BALD RANGE CREEK, BLUE

STATUS: Developed Prospect

MINING DIVISION: Vernon

REGIONS: British Columbia

NTS MAP: 082L04E

BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 00 01 N

LONGITUDE: 119 34 10 W

ELEVATION: 970 Metres

NORTHING: 5541825

EASTING: 315867

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of the Blue claim.

COMMODITIES: Marble

Dimension Stone

Building Stone

MINERALS

SIGNIFICANT: Calcite

MINERALIZATION AGE: Triassic

DEPOSIT

CHARACTER: Layered

Stratiform

CLASSIFICATION: Metamorphic

Sedimentary

Industrial Min.

TYPE: R04

Dimension stone - marble

R09

Limestone

SHAPE: Tabular

DIMENSION: 1300 x 250

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Age of limestone recrystallization is probably Jurassic. Surface dimensions of the southern marble unit.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Marble

Limestone

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: The Harper Ranch is regionally metamorphosed to lower greenschist.

INVENTORY

ORE ZONE: SOUTH PART

REPORT ON: Y

CATEGORY: Unclassified

YEAR: 1989

QUANTITY: 198800 Tonnes

COMMODITY

GRADE

Marble

100.0000

Per cent

COMMENTS: Quantity derived from a volume of 2.6 million cubic feet.

REFERENCE: Industrial Mineral File - Standord, M.R., 1989, page 1.

CAPSULE GEOLOGY

The Bald Range deposit is located 16 kilometres north-northwest of Kelowna, west of Bald Range Creek.

In this area, Devonian to Triassic Harper Ranch Group sedimentary and volcanic rocks have been intruded by Middle Jurassic granitic rocks. Outliers of Eocene Pentiction Group volcanic and sedimentary rocks overlie the older units.

The Harper Ranch Group includes two marble units potentially suitable for industrial use. The southern unit comprises fine to medium-grained, recrystallized, grey, black, orange and bronze coloured marble. This unit is up to 250 metres thick dips steeply and extends along strike for at least 1300 metres. The more irregular northern unit comprises mainly white marble. The average calcite grade is reported at 93 per cent and the rock is reported to polish well and to display a high brightness. The southern unit has been estimated to contain about 198,800 tonnes of high quality marble (Industrial Mineral File - Stanford, M. R., 1989).

The unit was explored for marble in 1982-84 by D. Sandberg. After initially exploring for gold, Banbury Gold Mines Ltd. continued the marble exploration through geological mapping and drilling during 1988-89.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 494
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 19015
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (EMPR PF (In 082LSW General - Claim Map, 1966; *Stanford,
M.R. (1989): A Brief Summary Report on the Blue Claim Group
Marble Deposit; Letters by Z.D. Hora, Feb. and Oct. 1984)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map B), 736, 2167
GSC P 89-1E pp. 51-60
GCNL #71,#209 (1989)

DATE CODED: 1989/08/23
DATE REVISED: 1993/03/31

CODED BY: PSF
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW113**

NATIONAL MINERAL INVENTORY:

NAME(S): **OYAMA SHALE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 05 59 N
LONGITUDE: 119 23 52 W
ELEVATION: 460 Metres

NORTHING: 5552472
EASTING: 328523

LOCATION ACCURACY: Within 500M

COMMENTS: Pit in a talus slope.

COMMODITIES: Granite Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Orthoclase
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite
COMMENTS: The rock is highly fractured.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coryell Intrusions

LITHOLOGY: Orthoclase Granite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Oyama Shale showing is located 20 kilometres southwest of Vernon, west of the north end of Wood Lake.
In this area, Devonian to Triassic sediments of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. These are intruded by granite and hypabyssal equivalents of the Eocene Coryell Intrusions. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.
Intensely fractured Coryell granite in a talus slide has been quarried for industrial use (Personal Communication - Discovery Consultants, 1993).

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR OF 1989-5, 1990-30
EMPR MAP 7216G, 8512G
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/07/16

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW114**

NATIONAL MINERAL INVENTORY:

NAME(S): **REEF**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 50 N
LONGITUDE: 119 20 54 W
ELEVATION: 990 Metres

NORTHING: 5548376
EASTING: 331933

LOCATION ACCURACY: Within 500M

COMMENTS: Drillhole at the base of plateau basalts (Assessment Report 7700).

COMMODITIES: Agate Gemstones

MINERALS

SIGNIFICANT: Agate
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Exhalative Volcanogenic Industrial Min.
SHAPE: Tabular
DIMENSION: 600 x 300 x 5 Metres STRIKE/DIP:
COMMENTS: Dimensions of the extent of the host rock. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Penticton	Unnamed/Unknown Formation	

LITHOLOGY: Chalcedony Sinter
Pyroclastic Rhyolite

HOSTROCK COMMENTS: Hostrock is the informally named Trepanier Rhyolite.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage Plutonic Rocks
PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Reef showing is located 23 kilometres south-southwest of Vernon between Wood Lake and Clark Creek.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks. Middle Jurassic granitic plutons intrude Shuswap Terrane metamorphic rocks. Eocene Penticton Group and Miocene Chilcotin Group volcanic and sedimentary rocks cap areas of older rock.

In the Penticton Group, an agate-rhyolite bed contains abundant yellow-orange chalcedonic carnelian(?) agate within pyroclastic flow rocks, possibly representing a sinter. The bed is about 5 metres thick and extends over an area of at least 600 by 300 metres. The bed, part of the informally named Trepanier Rhyolite, unconformably overlies monzonite and granodiorite, and underlies Penticton Group felsic tuffs and Miocene fluvial sediments and basalt flows.

In 1977-79, Union Oil Company explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical, radiometric, airborne magnetometer and drill programs were conducted.

BIBLIOGRAPHY

EMPR ASS RPT 6631, 6944, *7700
EMPR EXPL 1979-98
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Falconbridge File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW115**

NATIONAL MINERAL INVENTORY: 082L3 Fsp1

NAME(S): **GREEN GABLES WEST**, WHITEMAN'S CREEK FLUORITE, BURSARY MOUNTAIN FLUORITE,
VIEW GROUP, LAKEVIEW, FLUORITE,
SPARITE, SPAR, AH,
JAC, QUARTZ REEF, REEF,
WHITE, HILLTOP

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:
LATITUDE: 50 13 20 N
LONGITUDE: 119 29 28 W
ELEVATION: 800 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Showing (Assessment Report 14308).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5566309
EASTING: 322304

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Stockwork Vein
CLASSIFICATION: Hydrothermal Epigenetic Industrial Min.
TYPE: I11 Barite-fluorite veins
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: 600 x 300 Metres STRIKE/DIP: 020/50E TREND/PLUNGE:
COMMENTS: Attitude of fracture zone. Surface dimensions of mineralized area.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite

HOSTROCK COMMENTS: Informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Green Gables West showing is located 16 kilometres west-southwest of Vernon, between lower Whiteman Creek and Okanagan Lake.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Feldspar porphyry dikes, of possible Tertiary age, cut the granitic rocks. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Altered and brecciated Middle Jurassic quartz monzonite hosts fluorite mineralization. Within a 600 by 300 metre area, fluorite occurs as: lenses and irregular masses in irregular drusy quartz veins, thin veins and films on fracture planes. The main showing is a fracture zone which dips 50 degrees east and strikes 020 degrees. The fluorite fracture fillings and veins generally range from 1 to 10 centimetres thick. The fluorite is coarsely crystalline with grains up to 2 to 3 centimetres across. It is usually pale green, with occasional white, yellow or purple varieties reported. Fluorite crystals are occasionally coated with silica.

In 1966, Canex Aerial Exploration Ltd. carried out trenching and drilling. In 1968, Kelter Mines Ltd. conducted geological mapping, trenching and drilling and in 1971 Cerro Mining Company of Canada Ltd. conducted geological mapping and a hydrogeochemical survey. In the 1980s the area was explored for gold mineralization.

BIBLIOGRAPHY

EMPR AR 1947-212; 1954-65; *1966-265,266; *1967-303,304,305;
1968-299,300

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 498
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *3393, *14308, 18736
EMPR EXPL 1985-C88,89
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363,
*479
EMPR GEM 1971-461
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30, *1992-16 p. 41
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
GCNL #124, 1992

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW116**

NATIONAL MINERAL INVENTORY:

NAME(S): **DAVE** DAVE 2

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 11 N
LONGITUDE: 119 31 46 W
ELEVATION: 880 Metres

NORTHING: 5575387
EASTING: 319875

LOCATION ACCURACY: Within 500M

COMMENTS: Showing adjacent to a pit (Assessment Report 19152).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz
ALTERATION: Hematite Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
SHAPE: Tabular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Tuff
Volcanic

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1988

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold

5.7300

Grams per tonne

COMMENTS: A 6.5-metre chip sample across vuggy vein.

REFERENCE: Assessment Report 19152.

CAPSULE GEOLOGY

The Dave showing is located 18 kilometres west-northwest of Vernon, north of Naswhite Creek.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Penticton Group volcanic and sedimentary rocks overlie the older units.

A quartz vein in Harper Ranch Group tuffs and volcanic rocks hosts gold mineralization. The vuggy vein is hematite and limonite stained. A 6.5-metre chip sample analysed 5.73 grams per tonne gold (5730 parts per billion) (Assessment Report 19152).

In 1988-89, Geotronic Surveys Ltd. carried out geological mapping.

BIBLIOGRAPHY

EMPR ASS RPT *19152
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363;
2000, pp. 191-222
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 500
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW117**

NATIONAL MINERAL INVENTORY:

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

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 00 39 N
LONGITUDE: 119 33 50 W
ELEVATION: 1050 Metres

NORTHING: 5542985
EASTING: 316305

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 12148).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz Pyrite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
SHAPE: Tabular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Chapperon	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Middle Jurassic			

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: The plutonic rocks are informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Quesnel
PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1985
SAMPLE TYPE: Grab	
COMMODITY	GRADE
Silver	7.0000 Grams per tonne
Gold	12.0000 Grams per tonne

COMMENTS: Samples from the 0.2 metre wide vein.
REFERENCE: Assessment Report 12148.

CAPSULE GEOLOGY

The Bond showing is located 15 kilometres north-northwest of Kelowna, west of Bald Range Creek. This area is underlain by the Permian and older Chapperon Group sedimentary and volcanic rocks intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Outliers of Eocene Penticton Group volcanic and sedimentary rocks overlie the older units. Quartz veins in a small quartz diorite plug host gold mineralization. Two narrow quartz veins carry fine-grained pyrite. The veins have a general east-west strike with moderate southerly dips. The surface outcrops are limonitic and leached of gold and silver values. Samples from the 0.2 metre wide vein assayed 12 grams per tonne gold and 7 grams per tonne silver and samples from the 0.5 metre vein assayed 4 grams per tonne gold (Assessment Report 12148). N. Lenard carried out geological mapping in 1983, conducted prospecting and sampling in 1985 and further geological mapping in 1987.

BIBLIOGRAPHY

EMPR ASS RPT *12148, 14511, 16027
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 502
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW118**

NATIONAL MINERAL INVENTORY:

NAME(S): **JACK**, JACK 2, NEWMAN

MINING DIVISION: Nicola

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 01 14 N
LONGITUDE: 119 49 54 W
ELEVATION: 1670 Metres

NORTHING: 5544758
EASTING: 297164

LOCATION ACCURACY: Within 500M

COMMENTS: Gold-bearing quartz vein (Assessment Report 19579).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Unknown

ASSOCIATED: Quartz

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Agglomerate

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

PHYSIOGRAPHIC AREA: Thompson Plateau

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

COMMENTS: The Harper Ranch is regionally metamorphosed to lower greenschist.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1989

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

2.7900

Grams per tonne

REFERENCE: Assessment Report 19579.

CAPSULE GEOLOGY

The Jack showing is located 28 kilometres west-northwest of Kelowna, south of Mount Eileen.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group and the Paleozoic Chapperon Group. These rocks have been intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith and ultramafic rocks. Volcanic and sedimentary outliers, of the Eocene Penticton Group, overlie the older units.

A quartz vein (Newman zone) in Harper Ranch Group agglomerate hosts gold mineralization. A sample analysed 2.79 grams per tonne gold (2790 parts per billion) (Assessment Report 19579).

In 1989 and 1990, Rea Gold Corporation carried out geological mapping, prospecting and soil geochemistry.

BIBLIOGRAPHY

EMPR ASS RPT 6791, *19579, 20918
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363; 2000, pp. 191-222
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 504
REPORT: RGEN0100

BIBLIOGRAPHY

WWW <http://www.infomine.com/>

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW119**

NATIONAL MINERAL INVENTORY:

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

MINING DIVISION: Nicola

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 01 11 N
LONGITUDE: 119 48 57 W
ELEVATION: 1720 Metres

NORTHING: 5544623
EASTING: 298294

LOCATION ACCURACY: Within 500M

COMMENTS: Center of mineralized area (Assessment Report 18724).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Rare molybdenite.
ASSOCIATED: Quartz Calcite Pyrite
ALTERATION: Chlorite
COMMENTS: Possibly epidote.
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
DIMENSION: 370 x 240 x 120 Metres STRIKE/DIP: 045/70S TREND/PLUNGE:
COMMENTS: Dimension and attitude of the stockwork zone.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Middle Jurassic			

LITHOLOGY: Agglomerate
Tuff
Porphyritic Quartz Feldspar Monzonite

HOSTROCK COMMENTS: Intrusive rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Drill Core
COMMODITY: Gold GRADE: 2.4000 Grams per tonne
COMMENTS: The grade is from a 5.5-metre drill intersection.
REFERENCE: Press Release - Rea Gold Corporation, 1988.

CAPSULE GEOLOGY

The Flap showing is located 27 kilometres northwest of Kelowna, east of Mount Eileen.
In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group and the Paleozoic Chapperon Group. These rocks have been intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith and ultramafic rocks. Outliers of Eocene Penticton Group volcanic and sedimentary rocks overlie the older units.
Harper Ranch Group agglomerate and tuff hosts a quartz ± calcite ± pyrite stockwork zone which carries erratic gold mineralization. Within the stockwork veins are up to 20 centimetres thick and average about 1-2 centimetres thick. The stockwork zone, about 120 metres thick, dips 70 degrees to the southeast and is at least 240 metres wide and 370 metres long. Minor chlorite and possible epidote alteration are associated with the veining. Rare molybdenite was noted in drillcore samples. A quartz-feldspar monzonitic porphyry of

CAPSULE GEOLOGY

Jurassic or Cenozoic age is spatially related to the area of the quartz stockwork. Gold and silver values are erratic with surface sampling values up to 26 grams per tonne gold and 55 grams per tonne silver. Drilling encountered values up to 55 grams per tonne gold and 270 grams per tonne silver over 0.9 metre. Grades of 2.4 grams per tonne gold over 5.5 metres are reported (Press Release - Rea Gold Corporation, 1988).

In 1988-89, Rea Gold Corporation carried out geological mapping, soil geochemistry and drilling.

The property is held by Verdstone Gold Corporation and Molycore Gold Corporation.

BIBLIOGRAPHY

EMPR ASS RPT *18723, *18724, 20918 (sheet 4)
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
N MINER Jan. 9, 1989, p. 25
PR REL Rea Gold Corporation, 1988
WWW <http://www.verdstonegroup.com>

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW120**

NATIONAL MINERAL INVENTORY:

NAME(S): **LAVINGTON**, LAV

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 15 57 N
LONGITUDE: 119 08 18 W
ELEVATION: 1270 Metres

NORTHING: 5570375
EASTING: 347605

LOCATION ACCURACY: Within 500M

COMMENTS: Drillhole 90-7 (Assessment Report 20334).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz Pyrite Chlorite
ALTERATION: Tourmaline Mariposite Sericite
ALTERATION TYPE: Oxidation Sericitic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Stratabound Concordant Disseminated
CLASSIFICATION: Unknown
SHAPE: Tabular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

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

LITHOLOGY: Pyritic Sericitic Schist
Graphitic Argillite
Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1990

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Gold

0.5000

Grams per tonne

COMMENTS: From drillhole 90-7 across a 34 metre section.

REFERENCE: Assessment Report 20334.

CAPSULE GEOLOGY

The Lavington showing is located 10 kilometres east of Vernon, east of Vernon Hill.

In this area, east of the Okanagan Valley fault, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlies Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. These units are faulted over gneissic rocks of unknown age and metasedimentary rocks of the Proterozoic Silver Creek Formation. Middle Jurassic granitic rocks cut all of the above rocks. Outliers of Eocene Kamloops Group volcanic and sedimentary rocks cap the older units.

A 180-metre thick pyritic and sericitic schist carries low grade but persistent gold mineralization. Disseminated pyrite is accompanied by quartz, chlorite, tourmaline and mariposite. The schist is probably a felsic metavolcanic unit within the Nicola Group. The unit is gradational to the southwest with graphitic argillite and to the northeast with a quartz-feldspar porphyry. The schist contains gold values throughout and a 34-metre section analysed 0.5 gram per tonne gold (Assessment Report 20334).

In 1988-90, BP Resources Canada Ltd. carried out soil geochemistry, geological mapping and drilling.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 508
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 19126, 19578, *20334
EMPR EXPL 1989-22,50; 1990-55
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW121**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

Open Pit

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 09 17 N
LONGITUDE: 119 26 20 W
ELEVATION: 730 Metres

NORTHING: 5558681
EASTING: 325783

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of the Pink claim.

COMMODITIES: Granite Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Orthoclase
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R03 Dimension stone - granite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coryell Intrusions

LITHOLOGY: Orthoclase Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Pink deposit is located 17 kilometres southwest of Vernon, on the steep slopes east of Okanagan Lake.
In this area, Devonian to Triassic sediments of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks, which are intruded in turn by granite and hypabyssal equivalents of the Eocene Coryell Intrusions. Patches of Eocene Pentiction Group volcanic rocks overlie the older rocks.
Eocene orthoclase granite has been quarried for industrial use.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP *46-7, 48-4A, 1712A
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW122**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINAUS WEST**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

MINING DIVISION: Kamloops
Vernon
UTM ZONE: 11 (NAD 83)

LATITUDE: 50 25 21 N
LONGITUDE: 119 36 31 W
ELEVATION: 1100 Metres

NORTHING: 5588860
EASTING: 314704

LOCATION ACCURACY: Within 500M

COMMENTS: Middle point between 2 showings 500 metres apart (Geological Survey of Canada, Miscellaneous Report 8, page 67).

COMMODITIES: Agate Gemstones

MINERALS

SIGNIFICANT: Jasper Agate
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Overlap Assemblage	Harper Ranch
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization
	GRADE: Zeolite

CAPSULE GEOLOGY

The Pinaus West showing is located 9 kilometres south-southwest of Falkland, south of Pinaus Lake.

Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group basalt flows host jasper and agate. The jasper varies from brown to black and includes yellow and green shades.

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC MISC RPT *8, p. 65, 67
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW123**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEYSTONE-2**, KEYSTONE

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 45 N
LONGITUDE: 119 17 47 W
ELEVATION: 620 Metres

NORTHING: 5575899
EASTING: 336502

LOCATION ACCURACY: Within 500M

COMMENTS: Showing 430 metres northeast of Keystone 1 (082LSW021) (Geological Survey of Canada, Summary Report, 1931A, page 83).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Quesnel	
METAMORPHIC TYPE: Regional	RELATIONSHIP: GRADE: Greenschist
COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.	

CAPSULE GEOLOGY

The Keystone-2 showing is located 6 kilometres north-northwest of Vernon, between Swan and Okanagan Lakes.
In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.
A quartz vein within argillaceous rocks of the Nicola Group hosts zinc mineralization. The 0.9-metre thick vein is heavily mineralized with pyrite and carries minor sphalerite.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 146
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 77, 83

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW124**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEYSTONE-3**, KEYSTONE

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 48 N
LONGITUDE: 119 17 41 W
ELEVATION: 609 Metres

NORTHING: 5575988
EASTING: 336623

LOCATION ACCURACY: Within 500M

COMMENTS: Inclined shaft, 150 metres northeast of Keystone-2 (082LSW123)
(Geological Survey of Canada Summary Report 1931A, page 83).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Pyrite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

SHAPE: Tabular

DIMENSION:

STRIKE/DIP: 035/30E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane

TERRANE: Quesnel

METAMORPHIC TYPE: Regional

RELATIONSHIP:

COMMENTS: The Nicola is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Greenschist

CAPSULE GEOLOGY

The Keystone-3 showing is located 6 kilometres north-northwest of Vernon, between Swan and Okanagan Lakes.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

A quartz vein within argillaceous rocks of the Nicola Group hosts lead mineralization. The vein is up to 0.9 metre thick and carries minor pyrite and galena. The vein strikes 035 degrees and dips 30 degrees east.

By 1931, an open cut and a short inclined shaft had been completed.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 146
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 77, 83

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW125**

NATIONAL MINERAL INVENTORY:

NAME(S): **KLINKER**, OKANAGAN OPAL, KLINKER OPAL

STATUS: Developed Prospect Open Pit

MINING DIVISION: Vernon

REGIONS: British Columbia

NTS MAP: 082L05E

BC MAP:

LATITUDE: 50 21 31 N

LONGITUDE: 119 33 51 W

ELEVATION: 1460 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Showing located 23 kilometres west-northwest of Vernon, north of McGregor Creek (Statement of Work on Klinker #1 & #2 claims, June 29, 1992).

UTM ZONE: 11 (NAD 83)

NORTHING: 5581648

EASTING: 317616

COMMODITIES: Opal Gemstones Agate

MINERALS

SIGNIFICANT: Opal Agate
ASSOCIATED: Quartz Zeolite Celadonite Clinoptilolite Heulandite
Stilbite Jarosite Bentonite

COMMENTS: Opal and agate occur as vesicles and fracture fillings over an area of 200 by 100 metres.

ALTERATION: Zeolite

ALTERATION TYPE: Zeolitic

MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Vein Disseminated Podiform Stratabound
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: Q11 Volcanic-hosted opal
DIMENSION: 200 x 100 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Eocene Kamloops Undefined Formation

LITHOLOGY: Volcanic Breccia
Lahar
Lapilli Tuff
Andesite
Basalt

HOSTROCK COMMENTS: This location has been mapped as being underlain by Eocene Penticton Group rocks.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Overlap Assemblage Harper Ranch
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Zeolite

CAPSULE GEOLOGY

The Klinker showing is located 23 kilometres west-northwest of Vernon, north of McGregor Creek.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group and Penticton Group volcanic and sedimentary rocks overlie the older units.

The Klinker property covers several concentrations of precious opal developed in the basal 100 metres of the Kamloops Group. The hostrock is a volcanic breccia-lahar complex composed of angular to rounded clasts of andesite and basalt ranging from 0.2 to 0.6 metre in diameter in a lapilli tuff matrix. In the lahar, the tuff has bedding which swirls around the clasts. Lapilli tuff lenses up to 5 metres thick develop locally and indicate that the volcanic succession dips 20 to 30 degrees to the west. Thin andesite or basalt flows and intrusions up to 4 metres thick are scattered throughout. On McGregor Creek Forestry Access Road, about 500 metres east of the discovery pit, outcrops of grey-green meta-andesite flows and lapilli tuffs of probable Late Paleozoic age form the basement which dips gently westward and underlies the valley bottom of Ewer Creek north of the property.

On the property, precious opal, agate and common opal fill fractures in the Eocene rocks and permeate podiform rock masses which

CAPSULE GEOLOGY

are up to 0.5 metre in diameter in the lahars. The rock masses are smaller in the lapilli tuffs and absent in the flows or intrusions. Precious opal-filled fractures preferentially develop in sets with the following three preferred strikes: 025 +/- 10 degrees, 070 +/- 10 degrees and 330 +/- 15 degrees; all sets have steep dips. The podiform rock masses commonly form beside or across opal-filled fractures. In the masses, precious opal fills voids developed during the formation of the hostrock, and later openings apparently formed by local dissolution of the host. Here and there the precious opal, agate and common opal have layering which is subhorizontal even in subvertically oriented fracture fillings. The presence of this subhorizontal layering in these materials, which is not subparallel to the orientation of the gently west-dipping lapilli tuff, implies that the precious opal, agate and common opal precipitated after the beds were tilted.

Of the six shallow pits exposing the precious opal on the Klinker property, the discovery pit is the largest at 2100 square metres, and together with the smaller Bluebird pit, probably the richest because of subequally developed podiform masses and fracture fillings. A right-lateral strike-slip fault dips 80 degrees northwest (slickensides trend/plunge 195/25S), passes along the eastern side of the pit, and offsets the lahars an indeterminate amount. In the other shallow pits, the Tripod, Red Rock and the Caramel and its extension, podiform masses in the lahars developed at the expense of fracture fillings. A lapilli tuff underlies the eastern side of the Caramel pit. Outside the pit areas, the primary openings of the rock are either mostly empty or less commonly filled with agate, common opal, chabazite - a highly hydrated zeolite, and other unidentified zeolites (P. Read, personal communication, 1995).

The opal is white, orange or red, with some fire-green and fire-orange opal reported. Most of the precious opal is described as having a light orange base, is clear and full of colour. At surface the opal is hydrophane, but becomes more solid at shallow depths. The banded agate has grey, white and clear bands. The opal was discovered in 1991.

Besides precious opal, common opal and agate at the Klinker deposit, there are other fracture-fill minerals which include non-precious facet-grade opal, quartz, celadonite, amorphous manganese oxides, clinoptilolite, heulandite, stilbite, jarosite, clays and rarely, clacite. Non-precious, facet-grade opal is typically orange and honey coloured, similar to Mexican "fire opal". Common opals occur as transparent, translucent and opaque types in white, honey, brown, amber, orange and grey colours. Quartz can occur as small, inward facing, terminated crystals within vugs. X-ray diffraction analysis notes that kutnahorite and saponite co-exist with opal. Opal from the Klinker property is classified as opal-CT, using Jones and Segnit's (1971) grade classification. Most stones from deposits with precious and common opal are classified as opal-A (Frye, 1981).

Okanagan Opal Inc. conducted test pitting and some rockhound sales transpired (Information Circular 1996-1, page 20).

There was enough volume of commercial grade opal excavated during the 1994 season's bulk sampling program to provide the raw material necessary to start a small scale gemstone cutting and retail sales business. Sorting, grading and cutting of finished gemstones began on a limited scale in November 1994 and continued through to late December 1994. This program re-commenced in January 1, 1995 and is scheduled to produce sufficient quality and quantity of finished 'opal product' to commence a local retail sales operation by May 1, 1995 (Assessment Report 24606).

Small scale test mining and market was ongoing in 1996. Okanagan took a 316.5-tonne bulk sample of opal-bearing material from test pits. The company has set up a workshop and retail outlet at Vernon where opal jewellery and specimens are produced and sold.

BIBLIOGRAPHY

- EM EXPL 1996-A24,D5,D7; 1997-40
- EMPR ASS RPT 24370, *24606
- EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363; *1997, pp. 321-327; 1998-1, p. 24
- EMPR INF CIRC 1995-9, p. 20; 1996-1, p. 20; 1997-1, p. 23
- EMPR MAP 37; 5214G; 7216G
- EMPR OF 1989-5; 1990-30
- EMPR PF (In 082LSW General - Claim Map, 1966; Cab & Crystal article "We truly can be thankful" by R.W. Yorke-Hardy, Vol. 3 Number 6, 1991; *Property description, P. Read, 1995; Gem & Mineral Federation of Canada Newsletter, Spring 1999, Vol.18, No.2, pp. 10-12; Okanagan Opal Inc. Website (Feb. 1999): Company History & Information, 5 p.; Yorke-Hardy, Bob (Spring 2000)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 515
REPORT: RGEN0100

BIBLIOGRAPHY

Okanagan Opal - Successful development at the Klinker Opal Deposit,
Volume 1, Number 2, 3 pages; Yorke-Hardy, Bob (Winter/Spring 1999):
Precious Opals in Canada, Volume 3, Number 1, 3 pages)
EMPR RGS 1976
GSC MEM 296
GSC OF 637; 736; 2167
GSC P 89-1E, pp. 51-60
CIM '97 Vancouver Program, April 27-30, 1997, p. 61
WWW <http://www.opalscanada.com>; <http://www.gemnews.net>;
<http://www.canadianrockhound.com>
Lapidary Journal *February 1993, pp. 63-66

DATE CODED: 1993/03/31
DATE REVISED: 1997/03/13

CODED BY: DISC
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW126**

NATIONAL MINERAL INVENTORY:

NAME(S): **SARAH**, MORNING GLORY

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 35 N
LONGITUDE: 119 24 36 W
ELEVATION: 460 Metres

NORTHING: 5568434
EASTING: 328164

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing (Minister of Mines Annual Report, 1897, page 608).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Sediment/Sedimentary

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau	
TERRANE: Plutonic Rocks	Harper Ranch	
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE: Greenschist
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.		

CAPSULE GEOLOGY

The Sarah showing is located 11 kilometres west-southwest of Vernon, east of Okanagan Lake.
In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Patches of Eocene Kamloops Group volcanic rocks overlie the older rocks.
A quartz vein in sedimentary(?) rocks of the Harper Ranch Group hosts gold mineralization. The narrow vein, about 0.3 metre thick, carries pyrite and spectacular but spotty free gold.
A 9-metre tunnel had been driven by 1897.

BIBLIOGRAPHY

EMPR AR *1897-608; 1901-1125; 1902-189
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 77

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW127**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHITEMAN**, WHIT, PAT

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 02 N
LONGITUDE: 119 36 41 W
ELEVATION: 1082 Metres

NORTHING: 5566046
EASTING: 313706

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 6572).

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
ASSOCIATED: Pyrite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene			Coryell Intrusions

LITHOLOGY: Rhyodacite Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Whiteman showing is located 25 kilometres west-southwest of Vernon, on the steep south side of Whiteman Creek valley.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. An Eocene Coryell rhyodacite porphyry to syenite, high-level plug intrudes and is in fault contact with the Middle Jurassic intrusions. Eocene Penticton Group or Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks.

An unaltered, pyritic and limonitic rhyodacite porphyry hosts copper and molybdenum mineralization. Chalcopyrite and molybdenite are reported.

During 1975-77, Canadian Occidental Petroleum Ltd. carried out uranium exploration in the area. In 1978-79, Kennco Explorations Ltd. conducted geological mapping and soil geochemistry surveys.

BIBLIOGRAPHY

EMPR ASS RPT *6572, 6738, 7397, 7811, 8146, 21546
EMPR EXPL 1975-E51,52; 1976-E54; 1978-E93; 1979-101
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW128**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOCH**, LOCH 5, WHIT

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 26 N
LONGITUDE: 119 34 57 W
ELEVATION: 1160 Metres

NORTHING: 5564863
EASTING: 315728

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of 3 showings (Assessment Report 7811).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
ALTERATION: Sericite Chlorite Kaolin Epidote
ALTERATION TYPE: Sericitic Chloritic Argillic Epidote
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry
SHAPE: Irregular
MODIFIER: Fractured
DIMENSION: 400 x 200 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Surface area of mineralization.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite

HOSTROCK COMMENTS: Plutonic rocks are informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Loch showing is located 23 kilometres west-southwest of Vernon, on the steep south side of Whiteman Creek Valley. In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. An Eocene Coryell quartz latite porphyry to syenite, high-level plug intrudes and is in fault contact with the Middle Jurassic intrusions. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks. Altered Middle Jurassic quartz monzonite hosts molybdenum mineralization. Molybdenite occurs with pyrite in fractures and quartz veinlets (1 to 5 centimetres) in a 400 by 200 metre area. Alteration minerals include sericite, chlorite, kaolin and epidote. In 1979-80, Cominco Ltd. carried out geological mapping and soil geochemistry.

BIBLIOGRAPHY

EMPR ASS RPT *7811, 8905, 11936
EMPR EXPL *1979-100; 1980-132,133; 1983-145
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW129**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHAPPERON**

MINING DIVISION: Nicola

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 03 N
LONGITUDE: 119 59 33 W
ELEVATION: 1040 Metres

NORTHING: 5565247
EASTING: 286448

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing (Geological Survey of Canada, Paper 72-53, page 22).

COMMODITIES: Agate Gemstones

MINERALS

SIGNIFICANT: Silica Agate
COMMENTS: Petrified wood (silicified) with agate is reported.
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Replacement Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP: Harper Ranch
GRADE: Zeolite

CAPSULE GEOLOGY

The Chapperon showing is located 52 kilometres west of Vernon, south of Chapperon Creek.

In this area, Devonian to Triassic volcanic and sedimentary rocks of the Harper Ranch Group and the Permian and older Chapperon Group are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group sediments host petrified (silicified) wood and agate.

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167
GSC P *72-53, p. 22; 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW130**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLD STAR**, SUNDAY, BORDER,
CENTRAL

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 03 N
LONGITUDE: 119 40 49 W
ELEVATION: 1235 Metres

NORTHING: 5568105
EASTING: 308860

LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole 165-8 (Assessment Report 19797).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Pyrite
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epithermal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE: Eocene
GROUP: Penticton

FORMATION: Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Thompson Plateau

GRADE: Zeolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY:

YEAR: 1987

COMMODITY	GRADE	
Silver	16.0000	Grams per tonne
Gold	2.1500	Grams per tonne

COMMENTS: Sample over 3.0 metres.
REFERENCE: Assessment Report 19797.

CAPSULE GEOLOGY

The Gold Star showing is located 29 kilometres west of Vernon, on the steep north slope of Whiteman Creek Valley. The area is underlain by Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group which have been intruded by Middle Jurassic granitic rocks. Eocene Penticton Group and Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude these rocks. Penticton Group pyritic tuffaceous rocks host gold mineralization. Samples from drilling analysed 2.15 grams per tonne gold and 16 grams per tonne silver over 3.0 metres (Assessment Report 19797). In 1984-87, Brican Resources Ltd. carried out geological mapping, soil geochemistry, VLF-EM surveys, trenching and drilling.

BIBLIOGRAPHY

EMPR ASS RPT 12854, 15394, *19797
EMPR EXPL 1983-101,102; 1986-C99; 1987-A29; 1988-A21,43
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR INF CIRC 1988-1, p. 26, 67; 1989-1, p. 26
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; Statement of Material Facts, Sept. 1988, Brican??)
EMPR RGS 1976
GSC MEM 296

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 521
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
GCNL #182, #212, 1987
V STOCKWATCH Sept. 17, Nov. 4, 1987
WWW <http://www.infomine.com/>

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **082LSW131**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRETT NEW**, BRETT 1, NEW DISCOVERY

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 52 N
LONGITUDE: 119 39 30 W
ELEVATION: 1220 Metres

NORTHING: 5567709
EASTING: 310412

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 19482).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Silica Pyrite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epithermal

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Penticton	Undefined Formation	

LITHOLOGY: Trachyandesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
Plutonic Rocks
RELATIONSHIP:
PHYSIOGRAPHIC AREA: Thompson Plateau
GRADE: Zeolite

INVENTORY

ORE ZONE: DRILLHOLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
YEAR: 1989
COMMODITY: Gold
GRADE: 4.2500 Grams per tonne
COMMENTS: From drillhole 88-74, 1.49 metre intersection.
REFERENCE: Property File - Huntington Resources Inc., July 21, 1989.

CAPSULE GEOLOGY

The Brett New showing is located 28 kilometres west of Vernon, on the steep north slope of Whiteman Creek Valley. In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Eocene Penticton Group and Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude these rocks. The New Discovery zone is 400 metres east of the Main Shear Zone (082LSW110) on the steep eastern bank of Brett Creek. Penticton Group trachyandesite flows host gold mineralization. A bleached, silicified and pyritized zone hosts disseminated native gold. A 1.49 metre intersection from drillhole 88-74 assayed 4.25 grams per tonne gold (Property File - Huntington Resources Inc., Statement of Material Facts, July 21, 1989). In 1984-86, Huntington Resources Ltd. carried out geological mapping and soil geochemistry. During 1987-89, Corona Corporation carried out additional exploration including drilling.

BIBLIOGRAPHY

EMPR ASS RPT *13469, *13471, *15564, *19482
EMPR EXPL 1984-100,101; 1985-A39,62; 1986-A28,64; 1987-A29,67,71, B15-22; 1988-A2,21,43
EMPR FIELDWORK 1987, pp. B15-22, 55-58; 1988, pp. 355-363
EMPR INF CIRC 1988-1, p. 26
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 523
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (In 082LSW General - Claim Map, 1966; In 082LSW110 -
*Huntington Resources Inc., Statement of Material Facts, July 21,
1989)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Placer Dome File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW132**

NATIONAL MINERAL INVENTORY:

NAME(S): **BRETT GOSSAN**, BRETT 1

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 12 N
LONGITUDE: 119 39 07 W
ELEVATION: 1360 Metres

NORTHING: 5568310
EASTING: 310890

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 19482).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Quartz Pyrite
ALTERATION: Silica Feldspar Clay Limonite
ALTERATION TYPE: Silicific'n Oxidation Potassic Argillic
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Breccia Stockwork Disseminated
CLASSIFICATION: Epithermal
DIMENSION: 350 x 50 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: The zone strikes north and dips moderately westward. Dimensions are length by thickness.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Penticton	Undefined Formation	

LITHOLOGY: Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional
Plutonic Rocks
RELATIONSHIP:
PHYSIOGRAPHIC AREA: Thompson Plateau
GRADE: Zeolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1989
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 9.9000 Grams per tonne
Gold 6.0000 Grams per tonne

COMMENTS: Highest values from surface sampling of the siliceous breccia.
REFERENCE: Property File - Huntington Resources Inc., July, 1989.

CAPSULE GEOLOGY

The Brett Gossan showing is located 28 kilometres west of Vernon, on the steep north slope of Whiteman Creek Valley. In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Eocene Penticton Group or Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude these rocks. A large structurally controlled silicified zone in andesite of the Penticton Group hosts gold and silver mineralization. The 300-metre long by 50-metre thick zone strikes northerly and dips moderately westward. The zone lies just west of Middle Jurassic granitic rocks. Finely disseminated pyrite, oxidized to limonite, occurs in the silicified, feldspathized and clay altered zone. Surface sampling of siliceous breccia cut by a vuggy quartz vein stockwork assayed up to 6 grams per tonne gold and 9.9 grams per tonne silver, although the average grade is much lower (Property File - Huntington Resources Inc., Statement of Material Facts, July 21, 1989). In 1984-86, Huntington Resources Ltd. carried out geological mapping and soil geochemistry. In 1987-89, Corona Corporation continued exploration including drilling.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 525
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *13469, *13471, *15564, *19482
EMPR EXPL 1984-100,101; 1985-A39,62; 1986-A28,64; 1987-A29,67,71,
B15-22; 1988-A2,21,43; 1989-50; 1990-17,55
EMPR FIELDWORK 1987, pp. B15-22, 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; In 082LSW110 -
*Huntington Resources Inc., Statement of Material Facts, July 21,
1989)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Placer Dome File

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW133**

NATIONAL MINERAL INVENTORY:

NAME(S): **HUN**, HUN 1, HUN 2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03E
BC MAP:

MINING DIVISION: Vernon

LATITUDE: 50 06 34 N
LONGITUDE: 119 06 31 W
ELEVATION: 1280 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5552928
EASTING: 349231

LOCATION ACCURACY: Within 5 KM

COMMENTS: Showing (Assessment Report 11960).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Unknown
ASSOCIATED: Quartz Pyrite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Jurassic			Nelson Intrusions

LITHOLOGY: Porphyritic Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Okanagan Highland

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Gold
GRADE: 2.0000 Grams per tonne

YEAR: 1985

COMMENTS: Sample from a quartz vein with oxidized pyrite.
REFERENCE: Assessment Report 11960.

CAPSULE GEOLOGY

The Hun showing is located 21 kilometres southeast of Vernon, west of Aberdeen Lake. In this area, metamorphic rocks of the Shuswap Terrane are intruded by the Jurassic Nelson Intrusions. Eocene and Miocene Chilcotin Group volcanic and sedimentary rocks cap the older rocks. Porphyritic diorite hosts gold mineralization in zones of irregular quartz veins and quartz-filled fractures. A sample of a quartz vein with oxidized pyrite assayed 2 grams per tonne gold (Assessment Report 11960). Prospecting was carried out in the mid-1980s.

BIBLIOGRAPHY

EMPR ASS RPT *11960, 12721, 14041, 15291
EMPR EXPL 1983-145; 1984-100; 1985-C88; 1986-C98
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: / /

CODED BY: DISC
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW134**

NATIONAL MINERAL INVENTORY:

NAME(S): **ASH 2**, ASH, HUDSON BAY

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 14 N
LONGITUDE: 119 45 29 W
ELEVATION: 1660 Metres

NORTHING: 5563088
EASTING: 303121

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 9487).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry Igneous-contact

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Middle Jurassic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Argillite
K-Feldspar Porphyry Granite

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic. The plutonic rocks are informally named the Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch

Plutonic Rocks

PHYSIOGRAPHIC AREA: Thompson Plateau

METAMORPHIC TYPE: Regional

RELATIONSHIP: Pre-mineralization

GRADE: Greenschist

COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Ash 2 showing is located 36 kilometres west-southwest of Vernon, west of Hudson Bay Lake.

In this area, Middle Jurassic porphyritic granite of the informally named Terrace Creek batholith intrudes sediments of the Devonian to Triassic Harper Ranch Group. Much of the surrounding area is underlain by Eocene volcanic, tuffaceous and sedimentary rocks of the Penticton Group and by Miocene Chilcotin Group olivine basalts.

Argillites of the Harper Ranch Group host low grade, molybdenite and pyrite mineralization. The, possibly Jurassic, mineralization is disseminated and fracture-controlled. Molybdenite mineralization also occurs in quartz veins in the adjoining K-feldspar porphyry granite.

In 1980, Brenda Mines Ltd. carried out geological mapping and soil geochemistry.

BIBLIOGRAPHY

EMPR ASS RPT *9487
EMPR EXPL 1980-131,132
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **082LSW135**

NATIONAL MINERAL INVENTORY:

NAME(S): **RIM ROCKS**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 27 N
LONGITUDE: 119 08 23 W
ELEVATION: 1040 Metres

NORTHING: 5562040
EASTING: 347267

LOCATION ACCURACY: Within 500M

COMMENTS: Old workings (Assessment Report 6483).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
SHAPE: Tabular

DIMENSION: 4000 x 800 x 50 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Dimensions are the estimated extent of the fluvial deposits including 082LSW090 and 136.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Miocene

Chilcotin

Undefined Formation

LITHOLOGY: Quartz Pebble Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Rim Rocks showing is located 12 kilometres southeast of Vernon, west of Brewer Creek.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks of the Shuswap Terrane. Middle Jurassic granitic plutons intrude the older rocks. Eocene Penticton Group and Miocene volcanic and sedimentary rocks cap areas of older rock.

Basal, partly cemented, well-rounded, quartz pebble gravels, of Miocene fluvial deposits, host placer gold mineralization. The fluvial deposits extend over a 4000 by 800 by 50 metre area and include the King Edward (082LSW090) and Deer (082LSW136) showings.

The fluvial deposits unconformably overlie argillites of the Harper Ranch Group and Middle Jurassic granitic rocks and pegmatite, and are generally overlain by Miocene basalts.

Two prospect shafts are located below the Miocene basalts. In 1977, Kerr Addison Mines Ltd. explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical and drill programs were conducted. In 1978-79, Banqwest Resources Ltd. carried out geological mapping, hydrogeochemical, soil geochemical, radiometric, and trenching programs.

BIBLIOGRAPHY

EMPR ASS RPT *6483
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Canadian Journal of Earth Sciences, V. 25, No. 5, pp. 725-731

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW135**

MINFILE NUMBER: **082LSW136**

NATIONAL MINERAL INVENTORY:

NAME(S): **DEER**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 11 27 N
LONGITUDE: 119 11 35 W
ELEVATION: 990 Metres

NORTHING: 5562151
EASTING: 343460

LOCATION ACCURACY: Within 500M
COMMENTS: Workings (Assessment 6483).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
SHAPE: Tabular
DIMENSION: 4000 x 800 x 50 Metres
COMMENTS: Dimensions are the estimated extent of the fluvial deposits including 082LSW090 and 135.

STRIKE/DIP: _____
TREND/PLUNGE: _____

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Miocene	Chilcotin	Undefined Formation	

LITHOLOGY: Quartz Pebble Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Okanagan Highland
Undivided Metamorphic Assembl.

CAPSULE GEOLOGY

The Deer showing is located 10 kilometres southeast of Vernon, west of Deer Creek.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks of the Shuswap Terrane. Middle Jurassic granite plutons intrude the older rocks. Eocene Penticton Group and Miocene Chilcotin Group volcanic and sedimentary rocks cap areas of older rock.

The basal, partly cemented, well-rounded, quartz pebble gravels of Miocene fluvial deposits host placer gold mineralization. The fluvial deposits extend over a 4000 by 800 by 50 metre area and include the Rim Rocks (082LSW135) and King Edward (082LSW090) showings.

The fluvial deposits, unconformably overlying metamorphic rocks and Middle Jurassic granitic rocks and pegmatite, are generally overlain by Miocene basalts.

Two exploration adits are located at the base of the Miocene sediments. In 1977, Kerr Addison Mines Ltd. explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical and drill programs were conducted. In 1978-79, Banqwest Resources Ltd. carried out geological mapping, hydrogeochemical, soil geochemical, radiometric and trenching programs.

BIBLIOGRAPHY

EMPR ASS RPT *6483, 6914, 7666
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Canadian Journal of Earth Sciences, V. 25, No. 5, pp. 725-731

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW136**

MINFILE NUMBER: **082LSW137**

NATIONAL MINERAL INVENTORY:

NAME(S): **TAD 3 WEST**, NIGHT OWL, DOBBIN

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 00 57 N
LONGITUDE: 119 46 30 W
ELEVATION: 1740 Metres

NORTHING: 5544081
EASTING: 301203

LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole 80-32 (Assessment Report 8456).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite Magnetite
ALTERATION: Epidote
ALTERATION TYPE: Epidote
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Middle Jurassic			

LITHOLOGY: Biotite Pyroxenite

HOSTROCK COMMENTS: Intrusive rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Quesnel
PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Grab
COMMODITY: Copper GRADE: 0.0180 Per cent
COMMENTS: Over 8 metres.
REFERENCE: Assessment Report 8456.

CAPSULE GEOLOGY

The Tad 3 West showing is located 25 kilometres northwest of Kelowna, west of Whiterocks Mountain.
In this area, Devonian to Triassic Harper Ranch Group argillaceous rocks, basalt tuffs and flows, and minor rhyolite and limestone are intruded by Eocene granitic rocks. The Harper Ranch Group is, in places, intruded by Middle Jurassic ultramafic/monzonite and calc-alkaline complexes of the informally named Terrace Creek batholith. The diverse alkaline ultramafic/monzonite complex comprises hornblende, gabbro, quartz monzonite, mafic monzonite, porphyritic monzonite, biotite pyroxenite and hornblende pyroxenite.
Biotite pyroxenite hosts copper mineralization. Traces of disseminated pyrite, magnetite and chalcopyrite, associated with epidote alteration, occur in outcrop and in a drillhole. Samples assayed 0.018 per cent copper over 8 metres (Assessment Report 8456).
In 1977-80, Cominco Ltd. carried out geological mapping, magnetometer and drill programs.

BIBLIOGRAPHY

EMPR ASS RPT *6732, 7596, *8456
EMPR EXPL 1977-E79,80; 1978-E93; 1979-9,101
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363; 2000, pp. 191-222
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 531
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
WWW <http://www.infomine.com/>

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW138**

NATIONAL MINERAL INVENTORY:

NAME(S): **TAD 3 EAST**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 00 33 N
LONGITUDE: 119 45 45 W
ELEVATION: 1820 Metres

NORTHING: 5543307
EASTING: 302071

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of three showings (Assessment Report 7269).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Middle Jurassic

GROUP

Harper Ranch

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Hornblende Pyroxenite
Biotite Pyroxenite

HOSTROCK COMMENTS: Intrusive rocks of the informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Tad 3 East is 25 kilometres northwest of Kelowna, west of Whiterocks Mountain.

In this area, Devonian to Triassic Harper Ranch Group argillaceous rocks, basalt tuffs and flows, and minor rhyolite and limestone are intruded, in places by Middle Jurassic ultramafic/monzonite and calc-alkaline complexes of the informally named Terrace Creek batholith. The diverse alkaline ultramafic/monzonite complex comprises hornblende, gabbro, quartz monzonite, mafic monzonite, porphyritic monzonite, biotite pyroxenite and hornblende pyroxenite.

Hornblende pyroxenite and biotite pyroxenite plugs and dikes host copper mineralization. There are 3 showings consisting of pyrite and chalcopyrite.

In 1977-79, Cominco Ltd. carried out geological mapping.

Biotite pyroxenite hosts copper mineralization. Traces of disseminated pyrite, magnetite and chalcopyrite, associated with epidote alteration, occur in outcrop and in a drillhole. Samples assayed 0.018 per cent copper over 8 metres (Assessment Report 8456).

In 1977-80, Cominco Ltd. carried out geological mapping, magnetometer and drill programs.

BIBLIOGRAPHY

EMPR ASS RPT *6732, *7269, 7596
EMPR EXPL 1977-E79,80; 1978-E93; 1979-9,101
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
WWW <http://www.infomine.com/>

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW138**

MINFILE NUMBER: **082LSW139**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAW**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 29 13 N
LONGITUDE: 119 15 09 W
ELEVATION: 620 Metres

NORTHING: 5595197
EASTING: 340214

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone is exposed in a cliff (CANMET Report 811, page 204).

COMMODITIES: Limestone Marble

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Silica
MINERALIZATION AGE: Cambrian-Ordovician

DEPOSIT

CHARACTER: Massive Layered Stratiform
CLASSIFICATION: Sedimentary Metamorphic Industrial Min.
TYPE: R09 Limestone
SHAPE: Tabular
COMMENTS: The age of the limestone recrystallization is unknown.
The beds are flat-lying.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian-Ordovician	Undefined Group	Tsalkom	

LITHOLOGY: Marble
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Greenschist
COMMENTS: The Tsalkom is regionally metamorphosed to lower greenschist facies.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1944
SAMPLE TYPE: Chip
COMMODITY: Limestone GRADE: 54.4400 Per cent

COMMENTS: Limestone grade is for CaO.
Samples were collected at 9-metre intervals over a 370-metre length.
REFERENCE: Minister of Mines Annual Report 1961, pages 146,148.

CAPSULE GEOLOGY

The Maw showing is located on a cliff 5 kilometres northwest of Armstrong.

In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south, the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. Cretaceous granodiorite plugs of the Salmon Arm Intrusions intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

A marble unit in the Tsalkom Formation comprises blue and white medium-grained calcium marble. The unit has a massive appearance, but is thin-bedded and up to 15 metres thick. Thin schistose sheets occur between some of the beds. Scattered siliceous stringers and inclusions stand out on weathered surfaces.

Sampling of marble in 1944 returned values of 94.2 per cent calcite, with a CaO grade of 52.8 per cent. Sampling in 1961 assayed 54.4 per cent CaO, 0.23 per cent MgO, 0.09 per cent Fe₂O₃ and insolubles at 1.6 per cent (Minister of Mines Annual Report 1961, pp. 146, 148).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 534
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1961-145,146,148
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30, 1992-18
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map B), 736, 2167
GSC P 89-1E pp. 51-60
CANMET RPT (Bureau of Mines) *811, p. 204, 205

DATE CODED: 1993/03/31
DATE REVISED: / /

CODED BY: DISC
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW140**

NATIONAL MINERAL INVENTORY:

NAME(S): **ESPERON 17**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 22 N
LONGITUDE: 119 40 55 W
ELEVATION: 1420 Metres

NORTHING: 5548315
EASTING: 308029

LOCATION ACCURACY: Within 500M

COMMENTS: Showing (Assessment Report 7753).

COMMODITIES: Molybdenum Zinc

MINERALS

SIGNIFICANT: Molybdenite Sphalerite
ASSOCIATED: Quartz Pyrite
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Stockwork Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Monzonite
 Porphyritic Quartz Monzonite

HOSTROCK COMMENTS: Informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Esperon 17 showing is located 23 kilometres north-northwest of Kelowna, south of Esperon Creek.

In this area, Middle Jurassic quartz monzonite of the informally named Terrace Creek batholith intrudes argillaceous and calcareous sediments of the Devonian to Triassic Harper Ranch Group. The stock is cut by plugs and dikes of diorite which are intruded by quartz monzonite and aplite dikes. The intrusive rocks are cut by Tertiary basalt dikes related to volcanic rocks which overlie the older rocks.

Chloritized and sericitized quartz monzonite hosts molybdenum and zinc mineralization. Quartz veinlets carry disseminated molybdenite and pyrite.

About 1000 metres to the west, quartz veinlets carrying pyrite and trace sphalerite occur in a porphyritic quartz monzonite.

In 1979-80, Cominco Ltd. carried out geological mapping, induced polarization and magnetometer surveys.

BIBLIOGRAPHY

- EMPR ASS RPT *7753, 8664
- EMPR EXPL 1979-99,100; 1980-131
- EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
- EMPR MAP 37, 5207G, 7216G
- EMPR OF 1989-5, 1990-30
- EMPR PF (In 082LSW General - Claim Map, 1966)
- EMPR RGS 1976
- GSC MEM 296
- GSC OF 736, 2167
- GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: / /

CODED BY: DISC
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW141**

NATIONAL MINERAL INVENTORY:

NAME(S): **ESPERON 11**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 10 N
LONGITUDE: 119 44 42 W
ELEVATION: 1650 Metres

NORTHING: 5548109
EASTING: 303502

LOCATION ACCURACY: Within 500M
COMMENTS: Showing (Assessment Report 7753).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
ASSOCIATED: Pyrite
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Igneous-contact Porphyry

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Middle Jurassic	Harper Ranch	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Limestone
Monzonite Quartz

HOSTROCK COMMENTS: Informally named Terrace Creek batholith. Limestone of the Devonian to Triassic Harper Ranch Group is Permian.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Esperon 11 showing is located 25 kilometres northwest of Kelowna, near the headwaters of Sandberg Creek.

In this area, Eocene quartz monzonite intrudes argillaceous and calcareous sediments of the Devonian to Triassic Harper Ranch Group. The stock is cut by plugs and dikes of diorite which are intruded by quartz monzonite and aplite dikes. The intrusive rocks are cut by Tertiary basalt dikes related to overlying volcanic rocks.

Harper Ranch Group limestone hosts trace amounts of molybdenite and pyrite.

In 1979-80, Cominco Ltd. carried out geological mapping, induced polarization and magnetometer surveys.

BIBLIOGRAPHY

EMPR ASS RPT 7596, *7753, 8664
EMPR EXPL 1979-99,100; 1980-131
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1994/01/11

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW142**

NATIONAL MINERAL INVENTORY:

NAME(S): **AITKENS/STABLES**, WINFIELD

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 04 44 N
LONGITUDE: 119 20 29 W
ELEVATION: 1040 Metres

NORTHING: 5550028
EASTING: 332482

LOCATION ACCURACY: Within 500M

COMMENTS: Workings (Assessment Report 7700).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
ASSOCIATED: Garnet Magnetite
MINERALIZATION AGE: Miocene

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer

SHAPE: Tabular

DIMENSION: 5000 x 1500 x 60 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Dimensions are the estimated extent of the fluvial deposits including 082LSW019, 72 and 93.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Miocene

GROUP

Chilcotin

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Pebble Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Overlap Assemblage

Plutonic Rocks

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

The Aitkens/Stable showing is located 21 kilometres south-west of Vernon, between Ribbleworth and Clark creeks.

In this area, east of the Okanagan Valley fault zone, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are in probable fault contact with metamorphic rocks of the Shuswap Terrane. Middle Jurassic granitic plutons intrude the older rocks. Eocene Pentiction Group and Miocene Chilcotin Group volcanic and sedimentary rocks cap areas of older rock.

Basal, partly cemented, well-rounded, quartz pebble gravels of Miocene fluvial deposits host placer gold mineralization. The fluvial deposits unconformably overlie gneissic rocks containing amphibolite and/or volcanic rocks of the Pentiction Group. The fluvial deposits extend over a 5000 by 1500 by 60 metre area and includes the Ribbleworth (082LSW019), Stuart (082LSW072) and Winfield (082LSW093) showings. The Miocene sediments are commonly overlain by Miocene plateau basalt flows. The gold is pure (850 fine), of a reddish colour, and is found as flattened pellets up to 2 millimetres in size, with some very fine gold reported. Garnet and a little magnetite occur with the gold.

By 1936, an exploration drift had been completed. A total of 2330 grams of placer gold production, between 1933 and 1945, has been reported from the Winfield camp. In 1977-79, Union Oil Company explored the Miocene sediments for uranium. Geological mapping, hydrogeochemical, radiometric, airborne magnetometer and drill programs were conducted.

BIBLIOGRAPHY

EMPR AR *1933-A197,198; 1934-D34; *1936-D46,47,48
EMPR ASS RPT 6631, 6944, *7700
EMPR BULL 28, p. 62, 63
EMPR EXPL 1977-E77; 1978-E90; 1979-98
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 538
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR RGS 1976
GSC MEM *296, p. 137
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60
Canadian Journal of Earth Sciences, V. 25, No. 5, pp. 725-731

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW143**

NATIONAL MINERAL INVENTORY:

NAME(S): **GLENEMMA**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 29 09 N
LONGITUDE: 119 16 30 W
ELEVATION: 520 Metres

NORTHING: 5595123
EASTING: 338614

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of limestone bluffs (Minister of Mines Annual Report 1961, page 146).

COMMODITIES: Limestone Marble

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Cambrian-Ordovician

DEPOSIT

CHARACTER: Layered Stratiform
CLASSIFICATION: Sedimentary Metamorphic Industrial Min.
TYPE: R09 Limestone
DIMENSION: 300 x 25 Metres
COMMENTS: Dimensions (length x width) of the marble unit.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian-Ordovician	Undefined Group	Tsalkom	

LITHOLOGY: Marble
Limestone

HOSTROCK COMMENTS: The age of the limestone recrystallization is unknown.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Greenschist
COMMENTS: The Tsalkom is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Glenemma showing is located 5 kilometres northwest of Armstrong. The occurrence is a 300-metre long, 25-metre high bluff north of the Armstrong-Glenemma road.

In this area, sedimentary and volcanic rocks of the Upper Triassic to Lower Jurassic Nicola Group are in fault contact to the north with Cambrian-Ordovician volcanic (Tsalkom Formation) and sedimentary (Sicamous Formation) rocks. To the south, the Nicola Group is in probable unconformable contact with Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group to the south. Cretaceous granodiorite plugs of the Salmon Arm Intrusions intrude the Nicola, Sicamous and Tsalkom rocks. Outliers of Eocene Kamloops Group volcanic rocks are present in the area.

A marble unit in the Tsalkom Formation comprises white to grey streaked, medium to coarse-grained calcium marble. About 800 metres to the west and south of the road, similar limestone has been quarried from a small pit.

BIBLIOGRAPHY

EMPR AR *1961, p. 145,146
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30, 1992-18
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map B), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: / /

CODED BY: DISC
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW144**

NATIONAL MINERAL INVENTORY:

NAME(S): **RUBINCA MINE**, BOULEAU LAKE

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 26 N
LONGITUDE: 119 39 08 W
ELEVATION: 1430 Metres

NORTHING: 5574302
EASTING: 311083

LOCATION ACCURACY: Within 500M

COMMENTS: Workings are 200 metres from lakeshore.

COMMODITIES: Agate

Gemstones

MINERALS

SIGNIFICANT: Jasper Agate
MINERALIZATION AGE: Tertiary

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Feldspar Porphyry Andesite

HOSTROCK COMMENTS: Mapped as Pentiction Group.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage
METAMORPHIC TYPE: Regional

Harper Ranch
PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP: Syn-mineralization
GRADE: Zeolite

CAPSULE GEOLOGY

The Rubinca mine is located 27 kilometres west of Vernon, north of Bouleau Lake.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Extensive Eocene Pentiction Group and Kamloops Group volcanic and sedimentary rocks overlie the older units.

Kamloops Group feldspar-porphyry andesite flows host jasper and agate (Personal Communication - R. Gay, Vernon).

BIBLIOGRAPHY

EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P *72-73, pp. 22-23; 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW145**

NATIONAL MINERAL INVENTORY:

NAME(S): **JEWEL EAST**

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 54 N
LONGITUDE: 119 39 00 W
ELEVATION: 750 Metres

NORTHING: 5593689
EASTING: 311933

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of a drilled area (Assessment Report 20203).

COMMODITIES: Copper Gold Silver Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite
ASSOCIATED: Quartz Arsenopyrite Pyrite
ALTERATION: Azurite Malachite Silica Chlorite
ALTERATION TYPE: Silicific'n Oxidation Chloritic
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated Vein Podiform
CLASSIFICATION: Porphyry
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic-Mesozoic
Middle Jurassic

GROUP

Harper Ranch

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Siliceous Siltstone
Quartz Diorite Dike

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Regional
COMMENTS: Harper Ranch regionally metamorphosed to prehnite-pumpellyite facies.

PHYSIOGRAPHIC AREA: Thompson Plateau

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1989

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Copper

0.1900

Per cent

COMMENTS: Grade is from an 18-metre drill intersection.

REFERENCE: Assessment Report 20203.

CAPSULE GEOLOGY

The Jewel East showing is located 8 kilometres southwest of Falkland, on the south slope of the Salmon River Valley.

In this area, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Quartz diorite dikes and quartz veins, cut Harper Ranch Group siltstones. The siltstones host copper, gold, silver and zinc mineralization. The mineralization is associated with two quartz diorite dikes, dipping 70 degrees to the northeast. Siltstones on the hangingwall of the upper dike host gold mineralization (0.8 gram per tonne over 1.3 metres). On the hangingwall of the lower dike, silicified and chloritic siltstones host copper mineralization. Disseminated and fracture-controlled chalcopyrite, arsenopyrite, malachite and azurite occur with or without quartz. An 18-metre drill section assayed 0.19 per cent copper (Assessment Report 20203). There are also 0.3 to 1-metre zones of semi-massive sulphides both within the dike and the siltstone that carry copper, zinc, gold and silver mineralization. These zones may be structurally controlled.

CAPSULE GEOLOGY

Chalcopyrite, sphalerite and pyrite assayed up to 7.6 per cent copper, 2.0 per cent zinc, 1.7 grams per tonne gold and 125 grams per tonne silver (Assessment Report 20203).

In 1988-90, Corona Corporation carried out geological mapping, soil geochemistry, trenching, VLF-EM and magnetic surveys and drilling.

BIBLIOGRAPHY

EMPR ASS RPT *18968, *20203
EMPR EXPL 1988-55,56; 1989-22,50; 1990-18,55
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MAP 1059A, 1712A
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/09/21

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW146**

NATIONAL MINERAL INVENTORY:

NAME(S): **MISSION HILL WEST**, MISSION HILL

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L03W
BC MAP:

MINING DIVISION: Vernon

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 12 14 N
LONGITUDE: 119 19 28 W
ELEVATION: 560 Metres

NORTHING: 5563886
EASTING: 334128

LOCATION ACCURACY: Within 1 KM

COMMENTS: Showing (Geological Survey of Canada, Summary Report 1931A).

COMMODITIES: Silver Lead Gold

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Mesothermal
SHAPE: Tabular
DIMENSION:
COMMENTS: Vein.

STRIKE/DIP: 125/60E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Jurassic			Unnamed/Unknown Informal

LITHOLOGY: Quartz Diorite

HOSTROCK COMMENTS: Informally named Terrace Creek batholith.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

Harper Ranch

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Mission Hill West showing is located 8 kilometres south-southwest of Vernon, west of Kalamalka Lake.

In this area, west of the Okanagan Valley fault zone, volcanic and sedimentary rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Granitic Coryell rocks of Eocene age intrude the Paleozoic and Mesozoic rocks. Patches of Eocene Penticton Group volcanic rocks overlie the older rocks.

A quartz vein in quartz diorite hosts silver, lead and gold mineralization. A 2-metre thick quartz vein carries sparse disseminations of pyrite and galena. The vein strikes at 125 degrees azimuth and dips 60 degrees to the northeast.

BIBLIOGRAPHY

EMPR AR *1928-221
EMPR FIELDWORK 1982, pp. 33-36; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 7216G, 8512G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296, p. 147
GSC OF 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, p. 77, 84

DATE CODED: 1993/03/31
DATE REVISED: 1993/05/17

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW147**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER STREAK**, MOUNT VERNON, VK

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 03 N
LONGITUDE: 119 10 26 W
ELEVATION: 1160 Metres

NORTHING: 5572487
EASTING: 345131

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein in a trench (Assessment Report 5830).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

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

LITHOLOGY: Quartz Feldspar Biotite Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Silver Streak showing is located 7 kilometres east-northeast of Vernon, on the north side of Vernon Hill.

In this area, east of the Okanagan Valley fault, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. These Paleozoic and Mesozoic units are faulted over gneissic rocks of unknown age and metasedimentary rocks of the Proterozoic Silver Creek Formation. Jurassic granitic rocks cut all of the above rocks. Outliers of Eocene Kamloops Group volcanic and sedimentary rocks cap the older units.

A quartz vein in quartz-feldspar biotite gneiss of Mesozoic-Cenozoic(?) age contains chalcopyrite.

In 1968-74, King Graybarr Mines Ltd. carried out trenching, geological mapping, airborne magnetometer and drilling programs. In 1975 Canadian Superior Exploration Ltd. conducted a program of geological mapping and drilling.

BIBLIOGRAPHY

- EMPR AR 1968-223
- EMPR ASS RPT 2000, 5003, 5432, *5830, 12097
- EMPR EXPL 1975-E53; 1978-E95,96; 1983-146
- EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
- EMPR GEM 1969-298; 1971-432,433; 1972-80; 1973-101; 1974-90
- EMPR MAP 7216G, 8513G
- EMPR OF 1989-5, 1990-30
- EMPR PF (In 082LSW General - Claim Map, 1966)
- EMPR RGS 1976
- GSC MEM 296
- GSC OF 637, 736, 2167
- GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW148**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT VERNON COPPER**, MOUNT VERNON, SILVER STREAK,
VK, VI

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:
LATITUDE: 50 17 13 N
LONGITUDE: 119 10 10 W
ELEVATION: 1100 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole 75-1 (Assessment Report 5830).

MINING DIVISION: Vernon
UTM ZONE: 11 (NAD 83)
NORTHING: 5572786
EASTING: 345456

COMMODITIES: Copper Gold Silver Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Chalcocite
ASSOCIATED: Quartz Pyrite
ALTERATION: Sericite Kaolin Malachite Chalcocite Silica
ALTERATION TYPE: Sericitic Silicific'n Oxidation
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated Vein
CLASSIFICATION: Porphyry
SHAPE: Regular
MODIFIER: Sheared Faulted
DIMENSION: 600 x 30 Metres
COMMENTS: Mineralized dike (length x thickness).
STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Triassic-Jurassic
Mesozoic-Cenozoic

GROUP
Nicola

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Quartz Feldspar Porphyry Dike
Quartz Feldspar Biotite Gneiss
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

Quesnel

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1975
SAMPLE TYPE: Drill Core
COMMODITY: Molybdenum GRADE: 0.0370 Per cent
COMMENTS: Grade is per cent molybdenite from 6 metres of percussion drill cuttings.
REFERENCE: Assessment Report 5830.

CAPSULE GEOLOGY

The Mount Vernon Copper showing is located 8 kilometres east-northeast of Vernon, north of Vernon Hill.
In this area, east of the Okanagan Valley fault, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. These units are faulted over gneissic rocks of unknown age and metasedimentary rocks of the Proterozoic Silver Creek Formation. Jurassic granitic rocks cut all of the above rocks. Outliers of Eocene Kamloops Group volcanic and sedimentary rocks cap the older units.
A porphyritic dike that cuts quartz-feldspar biotite gneiss and Nicola Group argillites hosts copper, gold, silver and molybdenum mineralization. A silicified quartz feldspar porphyry dike, 600 metres long and up to 30 metres thick, strikes generally east-west. It is sheared, faulted and diffuse, and in places appears as an alteration zone along a shear. Pyrite and chalcopyrite occur as disseminations, on fractures and in quartz stringers. Some supergene chalcocite occurs. Minor molybdenite is also reported from quartz

CAPSULE GEOLOGY

veinlets. Sericitic alteration occurs and kaolin is present along shears. Drillhole 74-1, near the west end of the zone contains many short mineralized intersections. One of the better examples is 0.3 metres of 0.20 per cent copper, 1.4 grams per tonne gold and 52 grams per tonne silver from a high sulphide zone. Hole 75-1, near the east end of the zone assayed 6 metres of 0.037 per cent molybdenite (Assessment Report 5830).

In 1968-74, King Graybarr Mines Ltd. carried out trenching, geological mapping, airborne magnetometer and drilling programs. In 1975 Canadian Superior Exploration Ltd. conducted a program of geological mapping and drilling.

BIBLIOGRAPHY

EMPR AR 1968-223
EMPR ASS RPT 2000, *5003, 5432, *5830, 12097
EMPR EXPL 1975-E53; 1978-E95,96; 1983-146
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-298; 1971-432,433; 1972-80; 1973-101; 1974-90
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW149**

NATIONAL MINERAL INVENTORY:

NAME(S): **DCK**, MOUNT VERNON, VJ

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 17 16 N
LONGITUDE: 119 09 45 W
ELEVATION: 1050 Metres

NORTHING: 5572865
EASTING: 345954

LOCATION ACCURACY: Within 500M
COMMENTS: Trench (Assessment Report 5830).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Triassic-Jurassic

GROUP

Nicola

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Dck showing is located 8 kilometres east-northeast of Vernon, on the north side of Vernon Hill.

In this area, east of the Okanagan Valley fault, Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks unconformably overlie Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. These units are faulted over gneissic rocks of unknown age and metasedimentary rocks of the Proterozoic Silver Creek Formation. Middle Jurassic granitic rocks cut all of the above rocks. Outliers of Eocene Kamloops Group volcanic and sedimentary rocks cap the older units.

Metamorphosed volcanic rocks (chlorite schist) of the Nicola Group host copper mineralization. Disseminated pyrite and chalcopyrite occur in a trench and 130 metres to the east in volcanic rocks, probably associated with shearing. A 0.3-metre thick massive pyrite vein was also noted.

From 1968-1974, King Graybarr Mines Ltd. carried out trenching, geological mapping, airborne magnetometer and drilling programs. In 1975 Canadian Superior Exploration Ltd. conducted a program of geological mapping and drilling.

BIBLIOGRAPHY

EMPR AR 1968-223
EMPR ASS PRT 2000, 5003, 5432, *5830, 12097
EMPR EXPL 1975-E53; 1978-E95,96; 1983-146
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-298; 1971-432,433; 1972-80; 1973-101; 1974-90
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW150**

NATIONAL MINERAL INVENTORY:

NAME(S): **TUK**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 29 19 N
LONGITUDE: 119 34 28 W
ELEVATION: 700 Metres

NORTHING: 5596125
EASTING: 317385

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Mesozoic-Cenozoic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal

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: Augite Porphyry Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau	
TERRANE: Quesnel		
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE:
COMMENTS: The Nicola is regionally metamorphosed to prehnite-pumpellyite facies.		

CAPSULE GEOLOGY

The Tuk showing is located 2 kilometres southwest of Falkland, at the base of Tuktakamin Mountain.

In this area, Upper Triassic to Lower Jurassic Nicola sedimentary and volcanic rocks unconformably overlie Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group. These units are intruded by Middle Jurassic granitic rocks. Extensive Eocene Kamloops Group volcanic and sedimentary rocks overlie the older units.

Nicola Group volcanic rocks host copper mineralization. Minor disseminated chalcopyrite occurs in augite porphyry andesite.

In 1982, Noranda carried out geological mapping, soil geochemistry and magnetic and electromagnetic surveys.

BIBLIOGRAPHY

EMPR ASS PRT *10594
EMPR FIELDWORK 1982, pp. 89-92; 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5214G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/06/03

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 549
REPORT: RGEN0100

MINFILE NUMBER: **082LSW151**

NATIONAL MINERAL INVENTORY:

NAME(S): **UPPER WHITEMAN CREEK**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 13 28 N
LONGITUDE: 119 39 08 W
ELEVATION: 990 Metres

NORTHING: 5566952
EASTING: 310822

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence (Assessment Report 13469).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
MINERALIZATION AGE: Cenozoic

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cenozoic	Undefined Group	Undefined Formation	

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Overlap Assemblage

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The Upper Whiteman Creek showing is located 28 kilometres west of Vernon, on the south side of Whiteman Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are intruded by Middle Jurassic granitic rocks. Eocene Penticton Group or Kamloops Group volcanic rocks overlie the igneous and sedimentary rocks. Eocene Coryell rhyodacite porphyry to syenite plugs and dikes intrude these rocks.

Quaternary or older fluvial gravels host placer gold mineralization. Well-worn flake gold was panned from a partly consolidated paleochannel about 20 metres above the present creek level.

BIBLIOGRAPHY

EMPR ASS RPT *13469
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR MAP 37, 5207G, 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/07/07

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW151**

MINFILE NUMBER: **082LSW152**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOODENOUGH B**, HUGAL, GOODENOUGH SOUTH,
PORTEOUS, NOVA, WIN ART,
BR

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W

UTM ZONE: 11 (NAD 83)

BC MAP:
LATITUDE: 50 17 59 N
LONGITUDE: 119 27 44 W
ELEVATION: 690 Metres

NORTHING: 5574856
EASTING: 324649

LOCATION ACCURACY: Within 500M
COMMENTS: Trench (Assessment Report 6404).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite
COMMENTS: Mineralization associated with calc-silicates.
COMMENTS: Calc-silicate alteration.
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Paleozoic-Mesozoic

DEPOSIT

CHARACTER: Disseminated Stockwork
CLASSIFICATION: Skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Calc-silicate Skarn
Volcaniclastic

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch
METAMORPHIC TYPE: Contact
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP:
GRADE: Hornfels

CAPSULE GEOLOGY

The Goodenough B showing is located 14 kilometres west-northwest of Vernon, north of Naswhito Creek.

In this area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Altered volcaniclastic rocks of the Harper Ranch Group host copper mineralization. Disseminated and veined chalcopyrite and pyrite mineralization occurs within calc-silicate skarn.

In 1963-64, Empire Development Co. Ltd. conducted geological mapping, soil geochemistry, magnetometer and self-potential surveys and a drilling program. In 1969-75, Hudson Bay Exploration and Development Co. Ltd. carried out an induced polarization survey and drilling. In 1977-78, Cominco Ltd. carried out geological mapping and magnetometer and induced polarization surveys. In 1985-88, Brican Resources Ltd. conducted trenching and drilling programs.

BIBLIOGRAPHY

EMPR AR 1962-66; 1964-104
EMPR ASS RPT 2042, *6404, 6947, 18179
EMPR EXPL 1977-E80; 1978-E95; 1988-C56
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-299,357
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; *Barker, R.G. (1990):
Draft Property Descriptions)
EMPR RGS 1976

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 551
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 144
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 91-92

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082LSW153**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOODENOUGH PORPHYRY**, GOODENOUGH, HUGAL,
SUPER

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 18 42 N
LONGITUDE: 119 28 28 W
ELEVATION: 950 Metres

NORTHING: 5576213
EASTING: 323823

LOCATION ACCURACY: Within 500M
COMMENTS: Trench (Assessment Report 6404).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Jurassic

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Porphyry

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic-Mesozoic Middle Jurassic	Harper Ranch	Unnamed/Unknown Formation	Unnamed/Unknown Informal

LITHOLOGY: Porphyritic Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane	PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch	
METAMORPHIC TYPE: Regional	RELATIONSHIP: GRADE: Greenschist
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.	

CAPSULE GEOLOGY

The Goodenough Porphyry showing is located 15 kilometres west-northwest of Vernon, north of Naswhito Creek.

In this area, Devonian to Triassic sedimentary and volcanic rocks of the Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Porphyritic quartz diorite hosts copper mineralization. Minor chalcopyrite occurs in the highly pyritic, sericitized quartz diorite.

In 1969, Hudson Bay Exploration and Development conducted magnetometer and induced polarization surveys. In 1977-78, Cominco Ltd. carried out geological mapping and magnetometer and induced polarization surveys.

BIBLIOGRAPHY

EMPR ASS RPT 2042, *6404, 6947, 18179
EMPR EXPL 1977-E80; 1978-E95; 1988-C56
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54
EMPR GEM 1969-299,357
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 637, 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW154**

NATIONAL MINERAL INVENTORY:

NAME(S): **OYAMA 2**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 03 10 N
LONGITUDE: 119 35 19 W
ELEVATION: 1410 Metres

NORTHING: 5547709
EASTING: 314696

LOCATION ACCURACY: Within 1 KM

COMMENTS: Sampled outcrop (Assessment Report 6727).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Uraninite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary
COMMENTS: Basal sandstone in paleo-channel.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Eocene
Middle Jurassic

GROUP

Penticton

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Sandstone
Conglomerate
Andesite
Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Harper Ranch

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1975

SAMPLE TYPE: Chip

COMMODITY

GRADE

Uranium

0.0148

Per cent

COMMENTS: Chip sample across 0.5 metre assayed 0.017 per cent U3O8.

REFERENCE: Assessment Report 6727.

CAPSULE GEOLOGY

The Oyama 2 showing is located on the west side of Okanagan Lake about 8 kilometres west of Okanagan Centre.

The area is underlain by Eocene volcanic and sedimentary rocks of the Penticton Group and Middle Jurassic granitic rocks. These comprise andesite, sandstone, conglomerate, argillite and quartz monzonite and granodiorite.

The Eocene sediments are slightly enriched with uranium mineralization. One 0.5-metre chip sample from an outcrop assayed 0.017 per cent U3O8 (Assessment Report 6727). A percussion drill-hole, entirely in volcanic rocks, recovered no radioactive rock chips.

Mapping, sampling and one drillhole were completed in 1978 by Du Pont of Canada Exploration Ltd.

BIBLIOGRAPHY

EMPR ASS RPT *6727
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54
EMPR MAP 7216G
EMPR OF 1989-5, 1990-30, 1990-32
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 554
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 89-1E pp. 51-60

DATE CODED: 1993/09/08
DATE REVISED: 1993/09/10

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW155**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOODENOUGH A.** GOODENOUGH SOUTHEAST, NOVA,
HUGEL, PORTEOUS, WIN ART,
BR

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W

UTM ZONE: 11 (NAD 83)

BC MAP:
LATITUDE: 50 18 16 N
LONGITUDE: 119 27 30 W
ELEVATION: 650 Metres

NORTHING: 5575372
EASTING: 324943

LOCATION ACCURACY: Within 500M
COMMENTS: Pit and trenches (Assessment Report 6947).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Pyrite Pyrrhotite
COMMENTS: Calc-silicates are associated with the mineralization.
COMMENTS: Calc-silicate skarn alteration.
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Paleozoic-Mesozoic

DEPOSIT

CHARACTER: Stratabound Massive Podiform
CLASSIFICATION: Skarn

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic-Mesozoic	Harper Ranch	Undefined Formation	

LITHOLOGY: Calc-silicate Skarn
Volcaniclastic

HOSTROCK COMMENTS: The Harper Ranch Group is Devonian to Triassic.

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane PHYSIOGRAPHIC AREA: Thompson Plateau
TERRANE: Harper Ranch
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels
COMMENTS: Harper Ranch is regionally metamorphosed to lower greenschist facies.

CAPSULE GEOLOGY

The Goodenough A showing is located 14 kilometres west-northwest of Vernon, north of Naswhito Creek.

In this area, sedimentary and volcanic rocks of the Devonian to Triassic Harper Ranch Group are unconformably overlain by Upper Triassic to Lower Jurassic Nicola Group sedimentary and volcanic rocks. These units are intruded by Middle Jurassic granitic rocks of the informally named Terrace Creek batholith. Eocene Penticton Group volcanic rocks overlie the igneous and sedimentary rocks.

Altered volcaniclastic rocks of the Harper Ranch Group host copper mineralization. A 1.5-metre thick lens of massive pyrite and pyrrhotite with disseminated chalcopyrite blebs is associated with a calc-silicate skarn.

In 1963-64, Empire Development Co. Ltd. conducted geological mapping, soil geochemistry, magnetometer and self-potential surveys and drilling programs. In 1969-75, Hudson Bay Exploration and Development Co. Ltd. carried out an induced polarization survey and drilling. In 1977-78, Cominco Ltd. carried out geological mapping and magnetometer and induced polarization surveys. In 1985-88, Brican Resources Ltd. conducted trenching and drilling programs.

BIBLIOGRAPHY

EMPR AR 1962-66; 1964-104
EMPR ASS RPT 2042, *6404, *6947, 18179
EMPR EXPL 1977-E80; 1978-E95; 1988-C56
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 355-363
EMPR GEM 1969-299,357
EMPR MAP 7216G, 8513G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966; *Barker, R.G. (1990):
Draft Property Descriptions)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 556
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR RGS 1976
GSC MAP 46-7, 48-4A, 1059A, 1712A
GSC MEM 296, p. 144
GSC OF 637 (Map C), 736, 2167
GSC P 89-1E pp. 51-60
GSC SUM RPT *1931A, pp. 91-92

DATE CODED: 1993/03/31
DATE REVISED: 1993/03/31

CODED BY: DISC
REVISED BY: DISC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082LSW156**

NATIONAL MINERAL INVENTORY:

NAME(S): **IRISH 2**, GAN, EQUESIS

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L06W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 23 50 N
LONGITUDE: 119 23 20 W
ELEVATION: 1220 Metres

NORTHING: 5585525
EASTING: 330219

LOCATION ACCURACY: Within 1 KM

COMMENTS: Trench T-27 (Assessment Report 18717, samples EQW004-014).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrite
ASSOCIATED: Quartz
ALTERATION: Carbonate Fuchsite Carbon
ALTERATION TYPE: Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Triassic-Jurassic
Tertiary

GROUP

Nicola

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Andesite
Shale
Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1987

SAMPLE TYPE: Chip

COMMODITY

GRADE

Gold 3.2000 Grams per tonne

COMMENTS: Highest value from quartz veins (trench 87-27, sample CS-163).

REFERENCE: Assessment Report 17167.

CAPSULE GEOLOGY

The Irish 2 showing is located 15 kilometres northwest of Vernon, between Equesis Creek and Highway 97.

The area is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. These comprise andesite and shale which have been intruded by Tertiary monzonite dikes and plugs.

Quartz veins occur in carbonate altered, fuchsitic andesites and strongly sheared shales. The veins contain pyrite and sporadic gold values over narrow widths. The andesite also contains wispy black carbon. In the shales, the generally narrow veins pinch and swell and are highly irregular. The veins in the andesites are larger and occur as stockworks.

A sample (CS-163) from trench 87-27 assayed 3.2 grams per tonne gold (Assessment Report 17167). The highest value from sampling in 1988 was 1.55 grams per tonne gold over 1 metre (Assessment Report 18717, sample EQW011). The sample contained quartz fragments in a highly deformed matrix of shale and andesite. Quartz veining is believed to have preferentially occurred at the intersection of two structures.

In 1983, Minequest Exploration performed stream sediment sampling, soil sampling, prospecting, rock chip sampling and heavy mineral sampling. In 1984, prospecting and geological mapping was conducted on the claims. In 1987-88, soil sampling, trenching and geophysics were completed.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 558
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 12313, 13749, 16039, *17167, *18717
EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54
EMPR MAP 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167
GSC P 89-1E pp. 51-60

DATE CODED: 1993/09/09
DATE REVISED: 1993/09/09

CODED BY: DEJ
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW157**

NATIONAL MINERAL INVENTORY:

NAME(S): **WHY 2**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 14 46 N
LONGITUDE: 119 37 41 W
ELEVATION: 1620 Metres

NORTHING: 5569300
EASTING: 312630

LOCATION ACCURACY: Within 500M

COMMENTS: Vein at northwest corner of the Why 2 claim (Assessment Report 18865, sample Z-88-R-801).

COMMODITIES: Gold Silver

MINERALS

SIGNIFICANT: Unknown
COMMENTS: Similar to the Boul (082LSW069) showing, electrum is likely present.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Eocene	Penticton	Unnamed/Unknown Formation	
Middle Jurassic			Unnamed/Unknown Informal
Eocene			Coryell Intrusions

LITHOLOGY: Granodiorite
Andesite
Syenite
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1988
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 1.9000 Grams per tonne
Gold 2.4900 Grams per tonne
COMMENTS: Sample from 25 centimetre vein.
REFERENCE: Assessment Report 18865, sample Z-88-R-801.

CAPSULE GEOLOGY

The Why 2 showing is located 13 kilometres west of Okanagan Lake and 25 kilometres west of Vernon adjacent to the Brett prospect (082LSW084).

The area is underlain by Middle Jurassic granodiorite and remnant andesitic rocks of the Eocene Penticton Group which have been intruded by Eocene Coryell granites and syenites.

Mineralization consists of gold values in narrow quartz veins. The veins occur in granodiorite near the base of the Tertiary. The veins, up to 25 centimetres wide, and wallrocks are anomalous in gold. One 25 centimetre vein assayed 2.49 grams per tonne gold and 1.9 grams per tonne silver (Assessment Report 18865, sample Z-88-R-801). The best sample from trenching assayed 0.209 gram per tonne gold over 6 metres in trench 4 (Assessment Report 18865). This showing is probably the southerly extension of the Boul showing (082LSW069).

Mapping, sampling, geochemical and geophysical surveys and trenching were carried out in 1988 for Atlanta Gold Corp. by Discovery Consultants.

BIBLIOGRAPHY

EMPR ASS RPT 18799, *18865

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 560
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1987, pp. 55-58; 1988, pp. 49-54
EMPR MAP 7216G
EMPR OF 1989-5, 1990-30
EMPR PF (In 082LSW General - Claim Map, 1966)
EMPR RGS 1976
GSC MEM 296
GSC OF 736, 2167
GSC P 89-1E pp. 51-60
WWW <http://www.infomine.com/>

DATE CODED: 1993/09/10
DATE REVISED: / /

CODED BY: DEJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082LSW158**

NATIONAL MINERAL INVENTORY:

NAME(S): **WILL**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 27 39 N
LONGITUDE: 119 40 59 W
ELEVATION: 635 Metres

NORTHING: 5593310
EASTING: 309571

LOCATION ACCURACY: Within 500M

COMMENTS: Location given is road ditch outcrop.

COMMODITIES: Kaolinite

MINERALS

SIGNIFICANT: Kaolinite
ASSOCIATED: Quartz Biotite
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Syngenetic Industrial Min.
TYPE: B05 Residual kaolin
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Eocene	Kamloops	Undefined Formation	

LITHOLOGY: Kaolinite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Thompson Plateau
RELATIONSHIP: Syn-mineralization
GRADE: Zeolite

CAPSULE GEOLOGY

The Will showing is a road ditch outcrop at the base of outcrop on the south side of the Salmon River valley. It probably is the basal part of the Eocene Kamloops Group. Extensive overburden does not allow any assessment of the extent of the kaolinite-bearing rocks. The kaolinite was identified by x-ray diffraction of untreated and heated samples (1 hour @ 550 degrees Celsius).

BIBLIOGRAPHY

GSC MEM 296
GSC OF 481; 637
GSC P 89-1E, pp. 51-60

DATE CODED: 1995/03/07
DATE REVISED: 1995/03/07

CODED BY: PBR
REVISED BY: PBR

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **082LSW159**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINAUS**

MINING DIVISION: Vernon

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082L05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 23 41 N
LONGITUDE: 119 36 45 W
ELEVATION: 1335 Metres

NORTHING: 5585782
EASTING: 314319

LOCATION ACCURACY: Within 500M

COMMENTS: Location given is centred on a roadcut of diatomaceous sediments.

COMMODITIES: Diatomite

MINERALS

SIGNIFICANT: Diatomite
ASSOCIATED: Quartz Feldspar
ALTERATION: Montmorillonite
MINERALIZATION AGE: Eocene

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Syngenetic Industrial Min.
TYPE: F06 Lacustrine diatomite
SHAPE: Tabular
DIMENSION: 1900 x 2 Metres
COMMENTS: Flat lying.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Miocene	Chilcotin	Undefined Formation	

LITHOLOGY: Diatomite
Rhyolite Ash
Tuffaceous Shale
Rhyolite
Siltstone
Rhyolite Tephra
Rhyolite Flow

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

PHYSIOGRAPHIC AREA: Okanagan Highland

CAPSULE GEOLOGY

At the Pinaus showing, waterlain, tuffaceous (rhyolite ash) shale and siltstone lie at the base of a rhyolite succession which passes upwards into rhyolite tephra and flows. The diatomaceous earth locally develops at the base of this succession.

These diatomaceous rocks are absorbant, light in colour and weight, and contain a mixture of tuffaceous debris and diatom filaments. The age of these rocks appears to be Miocene based on preliminary evaluations of well preserved fossil leaves and pollen grains (personal communication in 1996 with L. Donaldson, Okanagan College). This would make the rhyolitic succession part of the Miocene Chilcotin Group.

BIBLIOGRAPHY

GSC MEM 296
GSC OF 481; 637
GSC P 89-1E pp. 51-60
Church, B.N. (1996): The Geological Setting of Industrial Minerals, Precious Stones and Au-Ag Veins in Tertiary Outliers of the Okanagan-Boundary District (82E, 82L) (in press).

DATE CODED: 1995/03/07
DATE REVISED: 1996/01/01

CODED BY: PBR
REVISED BY: BNC

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **082LSW160**

NATIONAL MINERAL INVENTORY:

NAME(S): **TERRACE MOUNTAIN**

MINING DIVISION: Vernon

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082L04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 50 06 00 N
LONGITUDE: 119 38 04 W
ELEVATION: Metres

NORTHING: 5553073
EASTING: 311601

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Perlite

MINERALS

SIGNIFICANT: Perlite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown	Penticton	Bouleau Lake	

LITHOLOGY: Rhyodacite

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane
TERRANE: Quesnel

CAPSULE GEOLOGY

Perlitic rock covers several square kilometres on the upper slopes of Terrace Mountain. It is grey on fresh surfaces, alters to light brown and is characterized by fractured, unaltered plagioclase phenocrysts (2 to 7 mm in diameter), comprising about 15 per cent of the rock. Accessory biotite, usually less than 3 millimetres in size is also set in a greenish grey glassy matrix. Anhedral olivine crystals less than 0.5 millimetres across, iron oxide (0.5 mm) and pyrite (0.5 mm) are trace components disseminated through the glass matrix. Perlitic onion skin and arcuate fractures are visible throughout the glass, which is, in places, partially converted to palagonite. The degree of palagonitization varies through the deposit, but is generally minor.

BIBLIOGRAPHY

EMPR FIELDWORK 1995, Paper 1996-1, pp. 223-226

DATE CODED: 1996/04/20
DATE REVISED: 1996/04/20

CODED BY: BNC
REVISED BY: BNC

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **082M 001**

NATIONAL MINERAL INVENTORY: 082M1 Zn2

NAME(S): **RIVER JORDAN**, JORDAN RIVER, KING FISSURE,
COPELAND, DEBY

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:
LATITUDE: 51 07 30 N
LONGITUDE: 118 24 44 W
ELEVATION: 2133 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of sulphide layer on south limb of Copeland synform
(Bulletin 57).

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)
NORTHING: 5664674
EASTING: 401174

COMMODITIES: Zinc Lead Silver

MINERALS

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

DEPOSIT

CHARACTER: Stratabound Disseminated Massive
CLASSIFICATION: Sedimentary Syngenetic Exhalative
TYPE: S01 Broken Hill-type Pb-Zn-Ag±Cu E14 Sedimentary exhalative Zn-Pb-Ag
E13 Irish-type carbonate-hosted Zn-Pb
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 2500 x 750 x 6 Metres STRIKE/DIP: TREND/PLUNGE: 150/15
COMMENTS: A 1 to 6 metre thick sulphide layer in the limbs and hinge of the
tight, south to southeast plunging Copeland synform is exposed over
a 2500 by 750 metre area.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Quartzite
Marble
Mica Schist
Pelitic Gneiss

HOSTROCK COMMENTS: Cover rocks of Frenchman Cap area.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SOUTH LIMB (NO.1 LODGE) REPORT ON: Y
CATEGORY: Measured YEAR: 1961
QUANTITY: 2605826 Tonnes
COMMODITY GRADE
Silver 37.7000 Grams per tonne
Lead 5.1000 Per cent
Zinc 5.6000 Per cent

COMMENTS: Ten per cent dilution. A deep drillhole since this calculation was
made indicates a much greater potential (Bulletin 57, page 48).
REFERENCE: CIM Transactions 1961, page 272.

CAPSULE GEOLOGY

The River Jordan deposit lies on the southern flank of the Frenchman Cap Dome which is part of a series of gneissic domal structures along the eastern margin of the Shuswap Metamorphic Complex. The core granite gneiss rocks are overlain by a heterogeneous paragneiss assemblage of calc-silicate gneiss, pelitic gneiss, quartzite and marble of probable Proterozoic or lower Paleozoic age. The paragneiss succession hosts the stratabound deposit.

The deposit consists of a layer of sulphides less than a metre to 6 metres in thickness within the calc-silicate gneiss. The

CAPSULE GEOLOGY

sulphide-rich layer consists most commonly of a fine-grained intimate mixture of sphalerite and pyrrhotite with conspicuous eye-shaped lenses of grey, watery quartz and scattered grains of pyrite and galena. Locally it is well layered and includes minor pods and lenses of calc-silicate gneiss, schist, marble or barite (Hoy, 1982). The layers are folded and metamorphosed along with the country rock.

Resampling of the No. 1 zone (1989), returned average values of 8.5 per cent zinc, 8.2 per cent lead, and 72 grams per tonne silver from 18 samples (George Cross News Letter #226, 1989).

Measured geological reserves are 2,605,826 tonnes grading 37.7 grams per tonne silver, 5.1 per cent lead and 5.6 per cent zinc at ten per cent dilution (Canadian Institute of Mining and Metallurgy Transactions 1961, page 272). A deep drillhole since this calculation was made indicates a much greater potential (Bulletin 57, page 48).

BIBLIOGRAPHY

- EMPR AR 1895-691; 1896-537; 1898-1060; 1956-114; 1958-53; 1963-86;
1965-204; 1966-229; 1968-262
EMPR ASS RPT 1788, 8752, 20513, 22029
EMPR BULL *57, pp. 7-10,28-30,40-48; 80, p. 85
EMPR EXPL 1980-137,138
EMPR FIELDWORK 1978, pp. 27-30; 2000, pp. 85-114
EMPR MAP 43; 65 (1989)
EMPR OF 1992-1; 1998-10; 2000-22
EMPR PF (Fyles, J.T.; McCammon, J.W. (1969): Mineral Resources -
Revelstoke Area in T. Hoy, Pers. Files, pp. 2,8; Statement of
Material Facts, Aug. 16, 1988, First Standard Mining Ltd.)
EMR MIN BULL MR 223 B.C. 68
EMR MP CORPFILE (Bralorne Resources Limited; Pacific Petroleum Ltd.;
The Bunker Hill Company; Pioneer Gold Mines of B.C., Limited;
Golden Standard Mines Limited; American Standard Mines Ltd.;
Consolidated Standard Mines Ltd.; Bralorne Pioneer Mine Ltd.)
GSC BULL 265, Fig. 14
GSC EC GEOL 1, p. 506
GSC MAP 4404G; 12-1964
GSC P 64-32, pp. 5,29; 81-1A, pp. 33-36
CANMET IR May 1961, No. 61-40 (Flotation of Silver-Lead-Zinc Ore from
Jordan River Mines Property for Bralorne Pioneer Mines Limited)
CIM Special Volume *64, pp. 268-272 (Riley, C. 1961); Special Volume
8, pp. 231-237 (Fyles, J.T. 1966)
CIM *Vol.75, No.840, pp. 115,119,121-123 (Hoy, T. 1982)
ECON GEOL Vol.79, No.5, pp. 790,791 (Hoy, T., Gibson, G. and Berg,
N.W. 1984)
GAC Special Paper 6, pp. 87-98 (Fyles, J.T. 1970)
GCNL #68(Apr.10),#226, 1989; #226(Nov.22), 1990; #63(Apr.2), 1991
W MINER Oct. 1956, Vol.29, p. 128
WWW <http://www.infomine.com/>
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 002**

NATIONAL MINERAL INVENTORY: 082M1 Mo1

NAME(S): **MOUNT COPELAND**, JOAN, KNOX,
GLACIER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 07 50 N
LONGITUDE: 118 27 39 W
ELEVATION: 2033 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5665358
EASTING: 397784

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit portal to the Glacier zone (Bulletin 57).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite

ASSOCIATED: Calcite Sericite K-Feldspar Biotite Pyrrhotite
Pyrite Ilmenite Magnetite

COMMENTS: Also zircon, fluorite, apatite and sphene; rare chalcopyrite and quartz.

ALTERATION: Kaolinite Sericite Calcite Epidote Chlorite
K-Feldspar

ALTERATION TYPE: Skarn

Argillic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

Massive

Stockwork

CLASSIFICATION: Skarn

TYPE: * Unknown

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 121 x 3

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Glacier zone.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER
Shuswap Metamorphic Complex

Proterozoic-Paleoz.

ISOTOPIC AGE: 773 Ma

DATING METHOD: Zircon

MATERIAL DATED: Zircons

Unknown

Unnamed/Unknown Informal

LITHOLOGY: Syenite Pegmatite
Syenite Aplite
Nepheline Syenite Gneiss
Syenite Gneiss
Calc-silicate Gneiss
Marble
Biotite Schist
Quartzite

HOSTROCK COMMENTS: Dating by Okulitch, et. al., 1981.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Monashee

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite
Greenschist

CAPSULE GEOLOGY

The Mount Copeland deposit lies within metamorphic rocks flanking the southern margin of Frenchman Cap Dome. The Frenchman Cap Dome is one of a series of gneiss domes that occur along the eastern border of the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex which is a narrow belt of high-grade metamorphic rocks in the Columbian orogen of southeastern British Columbia. This dome, which is centred 32 kilometres northwest of Revelstoke, has a core zone of migmatite and a fringing zone of metasedimentary rocks.

The metasedimentary rocks comprises a series of mappable units of biotite schist and grey schist, white quartzite, calc-silicate gneiss and marble, and grey gneiss. Concordant bodies of nepheline syenite gneiss occur with the calc-silicate gneiss and marble unit. Field, petrographic, and to a lesser extent, chemical evidence suggest the syenitic gneisses were emplaced as sills, and that these

CAPSULE GEOLOGY

sills were emplaced before Shuswap deformation and metamorphism (Fyles, 1970; McMillan, 1974). The margins of the syenite bodies are nepheline-free, which may be the result of reaction with enclosing rocks.

The rocks have been metamorphosed and subjected to three phases of deformation. The oldest folds are recumbent and isoclinal with deformed axial surfaces and shallow easterly or westerly plunging axes. Second phase folds have overturned axial surfaces which dip steeply to the southwest and south. The broad curvature of the foliation around the southwest corner of the dome is referred to as a phase 3 fold.

Lenses of syenite pegmatite or syenite aplite are common along the northern border of the nepheline syenite unit and, because of their concentrations of molybdenite, are the focus of economic interest. Characteristically they lie parallel to foliation but they cross it locally. Massive disseminated molybdenite occurs randomly in the aplite and pegmatite lenses and to a lesser extent in calc-silicate gneisses adjacent to the syenite gneiss contact. During the life of the Mount Copeland mine, almost all production was from these aplite-pegmatite bodies within the syenite gneisses; more specifically the Glacier zone, which is up to 3 metres thick and exposed for 121 metres along strike.

The Glacier zone occurs in a digitation which is either a fold limb or a sill of syenite gneiss in the calc-silicate gneiss unit. In this digitation, the syenite gneiss appears to be free of nepheline. Calcite is commonly present in small amounts and locally is prominent in the syenite gneiss. Minor constituents of the rock include zircon, sphene, apatite and magnetite. Some samples also contain fluorite, some pyrite and/or pyrrhotite, and some molybdenite. The lens has been folded into tightly compressed, overturned (phase 2) folds (Fyles, 1970) that plunge 15 degrees southeastward. The axial surfaces of the folds dip at moderate angles towards the south. In detail, the aplite-pegmatite zones are irregular and molybdenite distribution is highly variable. Contacts between the aplites, pegmatites, and syenites may be either sharp or gradational.

The pegmatites and aplites have similar mineralogies. Both are leucocratic relative to the enclosing gneisses but both have local mafic-rich folia and lenses. Potassium feldspar is the dominant mineral. Locally the pegmatite matrix consists of masses of calcite that contain clusters of biotite, pyrrhotite, pyrite and ilmenite. Minor amounts of zircon are present; quartz is rare but occurs interstitially or as vug fillings. The oxide minerals, magnetite and ilmenite, are fairly common and locally form equant blobs up to 2 centimetres across. Sulphide minerals present include pyrite, pyrrhotite, molybdenite, and rare chalcopyrite. Sulphides fill cracks in the oxide minerals and apparently post-date them.

Molybdenite has a number of habits; it may be disseminated, form clumps and rosettes of crystals along hairline cracks, fill vugs, or occur as intergrowths with calcite, sericite, and potassium feldspar. Large crystals of molybdenite contain inclusions of potassium feldspar, calcite and zircon. However, molybdenite also occurs in potassium feldspar crystals and commonly is concentrated around potassium feldspar megacrysts in the pegmatites. Pyrrhotite and pyrite are also distributed as disseminations, fracture fillings, and line or fill vugs.

In the syenite gneisses, feldspars are clouded by kaolinite alteration or stained pink by sericite-calcite alteration. Biotite is locally chloritized. The pegmatite-aplite zones are similarly altered. Epidote and chlorite coat late-stage fractures in the rocks. Veinlets commonly consist of calcite, potassium feldspar, chlorite, or rarely, quartz.

Molybdenite showings on the north flank of Copeland Ridge were discovered in 1964. Underground exploration commenced in September of 1967. A decision to go into production was made in 1969 and installation of a 180-tonne-per-day crusher and concentrator was completed in February 1970. Development work was underway simultaneously and production officially began on July 1, 1970. At that time, reserves were 163,278 tonnes grading 1.82 per cent MoS₂ (Geology, Exploration and Mining in British Columbia 1973). Production ceased in July 1974 and the mine was officially closed in October 1974.

BIBLIOGRAPHY

- EMPR AR 1965-205; 1966-228,229; *1967-261-263; 1968-262; 1971-28,435
EMPR ASS RPT *679, *776, 1788, 8752
EMPR BULL *57, pp. 22,40,58-61
EMPR EXPL 1978-100,101; 1980-137,138

BIBLIOGRAPHY

EMPR FIELDWORK 1985, p. 255
EMPR GEM 1969-338; 1970-464-465; 1971-28,435,436; 1972-22,84,
85; *1973-104-113
EMPR MAP 43; 65 (1989)
EMPR OF 1992-1
EMPR P 1991-4, pp. 231,232
EMPR PF (Fyles, J.T. and McCammon, J.W. (1969): Mineral Resources-
Revelstoke Area in T. Hoy Pers. Files, pp. 1-3,10; *Numerous plan
sections, longitudinal sections of underground workings, geology
maps; Photographs; Geological notes; Comments on hand specimens in
the mine office, 1973 field season; Plan maps of Levels 6550,
6600; Memorandum from J.T. Fyles and W.J. McMillan, 1973)
EMR MP CORPFILE (King Resources Company)
GSC BULL 265, p. 28; 239, p. 175
GSC MAP 12-1964; 4404G
GSC P 81-1A, pp. 33-36
CIM Special Volume 15, 1976, pp. 418-420 (Soregaroli, A.E. and
Sutherland Brown, A. 1976)
CJES Vol.11, p. 304 (McMillan, W.J. and Moore Jr. J.M. 1974)
CMH 1972-1973, p. 180; 1973-1974, p. 186
GAC Special Paper No.6, pp. 87-98 (Fyles, J.T. 1970)
N MINER March 7, 1968; June 25, July 9, 1970
W MINER July 1970, Vol. 43
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1997/05/02

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 569
REPORT: RGEN0100

MINFILE NUMBER: **082M 003**

NATIONAL MINERAL INVENTORY: 082M8 Zn1

NAME(S): **J & L, MCKINNON CREEK, VIEW FRACTION,**
RAINDOR, 98, ANNIE M,
GOAT (L.14821), EQUINOX, YELLOWJACKET,
J&L, N.W. EXTENSION

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 17 10 N
LONGITUDE: 118 07 19 W
ELEVATION: 830 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5682240
EASTING: 421760

LOCATION ACCURACY: Within 500M

COMMENTS: Location of adit 1, near the confluence of Carnes and McKinnon
creeks, approximately 32 kilometres north of Revelstoke (Exploration
in British Columbia 1989).

COMMODITIES: Gold Silver Zinc Lead Arsenic
Antimony

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Sphalerite Galena Chalcopyrite
Pyrrhotite Tetrahedrite

COMMENTS: Also silver-lead-antimony and lead-antimony sulphosalts.

ASSOCIATED: Fluorite

ALTERATION: Sericite Chlorite Silica

COMMENTS: Iron staining.

ALTERATION TYPE: Sericitic Chloritic Silicific'n Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive Stockwork Disseminated
CLASSIFICATION: Sedimentary Syngenetic Exhalative Industrial Min.
TYPE: E13 Irish-type carbonate-hosted Zn-Pb E14 Sedimentary exhalative Zn-Pb-Ag
I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Tabular

MODIFIER: Folded Sheared

DIMENSION: 800 x 2 Metres

COMMENTS: Main mineralized zone traced underground; true width is 1.6 metres.
The deposit classification may also be an epigenetic complex vein
system within a shear zone.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Chloritic Phyllite
Sericitic Phyllite
Chlorite Quartz Mica Schist
Sericite Quartz Mica Schist
Quartzite
Limestone
Chert
Graphitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Selkirk Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: YELLOWJACKET

REPORT ON: Y

CATEGORY: Combined
QUANTITY: 1030000 Tonnes

YEAR: 1991

COMMODITY GRADE
Silver 52.5000 Grams per tonne
Lead 2.4700 Per cent
Zinc 7.0900 Per cent

COMMENTS: Reported as probable and possible reserve. Original source of this
inventory is reported to be an Equinox Resources Ltd. program report
from 1991.

REFERENCE: WWW <http://www.weymin.com/projects.htm>.

MINFILE NUMBER: **082M 003**

INVENTORY

ORE ZONE: YELLOWJACKET REPORT ON: Y
 CATEGORY: Inferred YEAR: 1991
 QUANTITY: 337000 Tonnes
 COMMODITY GRADE
 Silver 53.1000 Grams per tonne
 Lead 2.5000 Per cent
 Zinc 7.1500 Per cent
 COMMENTS: Reported as a possible reserve. The original source of this inventory value is reported to be from a 1991 Equinox Resources Ltd. program report.
 REFERENCE: Weymin Mining Corporation, Prospectus, February 27, 1997.

ORE ZONE: YELLOWJACKET REPORT ON: Y
 CATEGORY: Indicated YEAR: 1991
 QUANTITY: 693000 Tonnes
 COMMODITY GRADE
 Silver 52.3000 Grams per tonne
 Lead 2.4500 Per cent
 Zinc 7.0600 Per cent
 COMMENTS: Reported as a probable reserve. Original source of this inventory is reported to be an Equinox Resources Ltd. program report from 1991.
 REFERENCE: Weymin Mining Corporation, Prospectus, February 27, 1997.

ORE ZONE: MAIN REPORT ON: Y
 CATEGORY: Combined YEAR: 1991
 QUANTITY: 3607000 Tonnes
 COMMODITY GRADE
 Silver 81.0000 Grams per tonne
 Gold 7.2400 Grams per tonne
 Lead 3.0000 Per cent
 Zinc 3.9300 Per cent
 COMMENTS: Reported as proven, probable and possible. The original source of this resource inventory is reported to be from a 1991 program report by Equinox Resources Ltd.
 REFERENCE: WWW <http://www.weymin.com/projects.htm>.

ORE ZONE: MAIN REPORT ON: Y
 CATEGORY: Inferred YEAR: 1991
 QUANTITY: 1907000 Tonnes
 COMMODITY GRADE
 Silver 85.5000 Grams per tonne
 Gold 7.1200 Grams per tonne
 Lead 3.3200 Per cent
 Zinc 3.4800 Per cent
 COMMENTS: Reported as a possible reserve. The original source of this inventory is reported to be a 1991 program report by Equinox Resources Ltd.
 REFERENCE: Weymin Mining Corporation, Prospectus, February 27, 1997.

ORE ZONE: MAIN REPORT ON: Y
 CATEGORY: Indicated YEAR: 1991
 QUANTITY: 1700000 Tonnes
 COMMODITY GRADE
 Silver 75.9000 Grams per tonne
 Gold 7.3800 Grams per tonne
 Lead 2.6400 Per cent
 Zinc 4.4300 Per cent
 COMMENTS: Reported as a proven and probable reserve. The original source of this resource inventory is reported to be from a 1991 program report by Equinox Resources Ltd.
 REFERENCE: Weymin Mining Corporation, Prospectus, February 27, 1997.

CAPSULE GEOLOGY

The J & L property is located at the confluence of Carnes and Mckinnon creeks. Prior exploration work between 1983 and 1993 was directed towards the exploration for gold, and was conducted by Pan American Minerals, BP Selco, Equinox Resources Ltd., and Cheni Gold Mines Inc. In 1997, Weymin Mining Corporation issued a prospectus on the J & L property. The J & L adits are located at 830 metres and 986 metres elevation and are accessible by road and trail, respectively.

The J & L property lies near the north end of the Kootenay Arc, a northerly trending belt of Late Proterozoic to Late Paleozoic

CAPSULE GEOLOGY

metasedimentary and metavolcanic rocks that are characterized by tight to isoclinal folds and generally west verging thrust faults. Lowermost within this assemblage is the Hadrynian Horsethief Creek Group (Windermere Supergroup), which is overlain by a Hadrynian to Lower Cambrian succession that includes the Hamill Group, the Mohican Formation, the Badshot Formation and the Lower Cambrian and younger Lardeau Group. The Hamill Group is the host to sulphide mineralization at J & L.

Structurally the area has undergone at least two phases of folding. The earliest phase was pre to synregional metamorphism and formed large nappe-like structures overturned to the southwest, with second phase tight to isoclinal folds developed in the overturned limbs.

The main zones of mineralization on the J & L property are hosted by Hamill Group metasedimentary and metavolcanic rocks. These rocks are interlayered, or in possible fault contact elsewhere on the property, with the Early Cambrian Mohican and Badshot formations and the Lower and Upper Index formations of the Cambrian and younger Lardeau Group. Minor diorite, lamprophyre and amphibolite intrusive rocks are also present.

The Hamill Group consists of impure quartzites, limestone, phyllites, chloritic and sericitic quartz-mica schists, minor chert and graphitic schists. Chloritic and sericitic phyllites are developed throughout the sequence and constitute the bulk of the lithologic sequence hosting the deposit. They are gradational in composition both laterally and vertically from chlorite-rich to sericite-rich, making subdivision difficult. Quartz-rich and quartz-poor mica schists are also highly variable in composition and are prominent in the hanging wall. Sericite and quartz-sericite schists are associated with most mineralized zones. Iron staining is common in sections adjacent to mineralization and forms a narrow alteration envelope with sericite, chlorite and sulphides.

A typical section in the footwall of the main sulphide zone comprises quartz-chlorite and quartz-sericite phyllites and schists, quartzites and limestone. In the immediate footwall of the massive sulphides, the quartzites and pelitic rocks are usually overlain by two distinct carbonate units. The lower unit is a massive banded medium to dark grey limestone, which ranges in thickness from a few metres to more than 20 metres and contains little or no mineralization. It is overlain by a dark grey graphitic or carbonaceous limestone, which averages between 1 and 2 metres in thickness and contains discontinuous wispy laminations of yellowish brown crystalline sphalerite. The unit is locally silicified, has a cherty texture and is commonly cut by irregular and deformed carbonate veins and minor quartz veinlets, which may also transect the adjacent massive sulphides.

In the hanging wall, the sulphide body is normally in contact with sulphide-rich sericitic schists or phyllites of variable thickness; locally it may contact sphalerite-pyrite bearing carbonaceous limestone. Further into the hanging wall, quartzite or micaceous rocks may be interlayered with minor limestone and disseminated sulphides, which gradually decrease in abundance, giving way to phyllitic rocks with only trace amounts of disseminated pyrite.

The rocks within the main zone of the deposit are extensively deformed. They generally strike northwesterly 320-325 degrees, with an average dip of about 55 degrees to the northeast. The entire sequence is strongly to intensely sheared and most individual units are transposed. Sulphides exhibit sheared, cataclastic and weak mylonitic textures. Detailed underground mapping suggests that four or possibly five phases of deformation have affected the main zone sulphide sequence. The most prominent folds are tight to isoclinal, generally upright, with variable plunges trending northwesterly, parallel to regional structural trends. Stratigraphic and structural studies of the main zone suggest that the deposit has a moderate plunge to the southeast.

The J & L deposit is stratiform and generally conforms to the host stratigraphy, which strikes northwest and dips about 55 degrees east. The Main zone, which lies south of McKinnon Creek, has been traced on surface for approximately 1.85 kilometres and over 800 metres underground, and has an average true width of 1.6 metres. Forty sulphide occurrences containing arsenopyrite and pyrite, with variable amounts of zinc and lead, occur on the north side of McKinnon Creek and form the North zone in 4 parallel subzones. This zone was traced 1.54 kilometres along strike northwest of the Main zone and is possibly an extension of the Main zone.

The Main zone is a complex tabular or sheet-like body that tends to follow the limestone-phyllite/schist contact and, in places, splits into multiple semiparallel sheets or branches. The most

CAPSULE GEOLOGY

abundant metallic minerals in the zone include pyrite, arsenopyrite, sphalerite and galena, with lesser amounts of chalcopyrite, pyrrhotite, tetrahedrite, silver-lead-antimony sulphosalts and lead-antimony sulphosalts.

The deposit consists of nearly continuous, but structurally deformed zones of massive sulphides, flanked or locally enveloped by disseminated and stringer sulphide zones, which are most prominent in the hanging wall. The lowermost section of sulphides usually forms a sharp contact with the footwall limestone. Massive sulphide sections vary, from pyrite and arsenopyrite rich to sphalerite +/- galena rich. Increasing sphalerite usually coincides with a notable decrease in arsenopyrite. Sulphide content and composition is highly variable laterally and vertically, with massive, banded and disseminated zones of contrasting composition being complexly interleaved or interfingered, possibly due to shearing. The overall thickness of the sulphide zone tends to follow the thickness of the footwall carbonaceous limestone, such that the thickness of the zone increases with increased thickness of the limestone and is usually accompanied with increases in sphalerite and galena content.

Detailed studies generally indicate that the lowermost massive zone tends to be pyrite-rich, with or without arsenopyrite and sphalerite, and has a weakly to moderately developed banded texture. It is overlain by a gold-rich arsenopyrite-pyrite zone, with laminated sphalerite +/- galena, progressing upwards to a "disseminated" sulphide zone with laminated or intrafolial sphalerite and arsenopyrite. Hanging wall sulphides tend to be more arsenic, with arsenopyrite +/- pyrite exhibiting a coarse grained, "milled", mylonitic texture near the zone margins. Laterally, some zones are sphalerite-rich, arsenopyrite (and gold)-poor and vice-versa. In sections where there are overlying massive sulphide layers, they are commonly separated by up to 10 metres of sericitic schist, that is rich in disseminated sulphides. Although they tend to be restricted in size, some hanging wall disseminated zones are zinc-rich, low in arsenopyrite and may be sufficiently concentrated, in places, to be classed as ore grade material.

Analytical data indicate that gold is most strongly associated with arsenopyrite and silver occurs with galena.

The following reserves, published in a prospectus by Weymin Mining Corporation dated February 27, 1997, are reported to be the most up-to-date and had as their source two Equinox Resources Ltd. exploration program reports from 1991. The indicated (proven and probable) resource in the Main zone is 1,700,000 tonnes grading 2.64 per cent lead, 4.43 per cent zinc, 7.38 grams per tonne gold and 75.9 grams per tonne silver. The inferred (possible) resource in the Main zone is 1,907,000 tonnes grading 7.12 grams per tonne gold, 85.5 grams per tonne silver, 3.32 per cent lead and 3.48 per cent zinc. Total for the Main zone is 3,607,000 tonnes grading 7.24 grams per tonne gold, 81.0 grams per tonne silver, 3.00 per cent lead and 3.93 per cent zinc (WWW <http://www.weymin.com/projects.htm>). The indicated (probable) resource in the Yellowjacket zone 693,000 tonnes grading 52.3 grams per tonne silver, 2.45 per cent lead and 7.06 zinc. The inferred (possible) resource for the Yellowjacket zone is reported at 337,000 tonnes grading 53.1 grams per tonne silver, 2.5 per cent lead and 7.15 per cent zinc. Total for the Yellowjacket zone is 1,030,000 tonnes grading 52.5 grams per tonne silver, 2.47 per cent lead and 7.09 per cent zinc. The lead-zinc-silver mineralization at the Yellowjacket zone is hosted in a quartzite/limestone sequence and differs from the Main zone in that it contains no arsenic.

Extensive and intense deformation of the J & L deposit has distorted or destroyed most original ore textures and ore-wallrock relationships. Most textures now observed result from an overprinted tectonic fabric, making interpretation of the timing and environment of deposition difficult, at best. There are two schools of thought on the deposit classification. Early interpretations classed the deposit as an epigenetic shear zone replacement, or vein deposit. Other proponents support a syngenetic sedimentary-exhalative origin. The deposit exhibits characteristics of both models and the dispute continues.

The J & L area has undergone a long history of exploration dating back to 1865. The main J & L zone was discovered in 1912 and development to date over several work periods includes approximately 1900 metres of underground drifts, crosscuts, raises and shafts. Several bulk samples have also been extracted for metallurgical testing and pilot milling in order to resolve the problems due to the high arsenical content of the ore.

Prior exploration work between 1983 and 1993 was directed towards the exploration for gold, and was conducted by Pan American Minerals, BP Selco, Equinox Resources Ltd., and Cheni Gold Mines Inc. In 1997, Weymin Mining Corporation issued a prospectus on the J & L

CAPSULE GEOLOGY

property. They drilled 3 holes totalling 503 metres, to expand the Yellowjacket and Main zones. A June 11, 1998 press release describes metallurgical test results on a bulk sample (GCNL #115(June 16), 1998).

BIBLIOGRAPHY

- EMPR AR 1905-148,150; 1912-144; 1915-117; 1916-193; 1922-215; 1923-232; 1924-204; 1925-258; 1926-269; 1927-290; 1946-174; 1965-204; 1966-227
- EMPR ASS RPT 10664, *10939, *12616, 12634, *14405, 19469, 20716
- EMPR BULL 1, p. 119
- EMPR EXPL 1982-118; 1983-162, xxxiii; 1986-C121; *1989-81-89; 1997-39-40; 1998-64
- EMPR FIELDWORK *1984, pp. 101-104
- EMPR INF CIRC 1985-1, p. 38; 1986-1, p. 52; 1999-1, pp. 5-6, 11
- EMPR MAP 65 (1989)
- EMPR OF 1992-1; 1999-2; 1999-14
- EMPR PF (Starr, C.C. (1925): Report of Preliminary Examination of the J. and L. Mine, 8 p.; Starr, C.C. (1928): Report of Examination of the J&L Mine, 7 p.; Letter to Frank Eichelbergen, 1930; Sketch Map of J. and L. Group, 1925; *Kidd, D.F. (1942): Report on the J & L Property, Carnes Creek Revelstoke Mining Division, British Columbia, unpublished report; Hopkins, P.E. (1929): Report on J & L Property, Carnes Creek Revelstoke Mining Division, unpublished report; Starr, C.C. (1928): Report of Examination of the J & L Mine, Revelstoke, B.C., unpublished report; BP-Selco-Pan American Report, 1985; Starr, C.C. (1926): Preliminary Report on J & L Property, Carnes Creek, unpublished report; Weymin Mining Corporation, Prospectus, February 27, 1997; 1990 Snapshot Review Form; Notes from MEG talk, Mar.21, 1984; Hoy, T. (undated): J & L, A stratabound gold-arsenic deposit, southeastern British Columbia; Weymin Mining Corporation Website (Apr. 1998); McKinnon Creek Project, 5 p.; Timmins, W.G. (1979): Geological Report on the J & L Property; Wright, J.H., Weicker, R. (June 19, 1989): Completion report on Phase 1 exploration program, J & L Property, British Columbia for Equinox Resources, 50 pages, maps and appendices - 1 cerlox book; Pegg, R. (December 1985): A summary report on the J & L mineral option, lead-zinc-gold-silver prospect, British Columbia, NTS: 082M/8E for Selco Division - B.P. Resources Limited, 55 pages and plans - 1 cerlox book; Pegg, R. and Grant, B. (February 27, 1985): A summary report on the J & L mineral option, lead-zinc-gold-silver prospect, British Columbia, NTS: 082M/8E for Selco Division - BP Resources Canada Limited, 66 pages, plates, appendices and plans - 4 cerlox books; Pegg, R. and Grant, B. (March 1984): A summary report on the J & L mineral option, lead-zinc-gold-silver prospect, British Columbia, NTS: 082M/8E for Selco - BP Exploration Canada Limited, 72 pages, plates, appendices and plans - 6 cerlox books; Pegg, R. (January 1983): A summary report on the J & L mineral option, lead-zinc-gold-silver prospect, Revelstoke Mining Division, British Columbia, NTS: 082M/8E for Selco Inc., 160 pages, plates, appendices and maps - 2 cerlox books)
- EMR MIN BULL MR 223 B.C. 75
- EMR MP CORPFILE (Porcupine Goldfields Development and Finance Co.; Raindor Gold Mines Ltd.; Consolidated Raindor Mines Limited; Westairs Mines Limited; Quebec Gold Mining Corporation; Pan American Energy Corporation; BP Canada Inc.)
- GSC EC GEOL 4, pp. 77-79
- GSC MAP 7219G; 12-1964
- GSC P *64-32, pp. 30-31
- GSC SUM RPT 1928 Part A, pp. 165-171
- CANMET IR 1926, No.243, pp. 13-15
- CIM District 6 Meeting - Kamloops, (*Grant, B. (1984): The J & L Deposit, Abstract, p. 23)
- GCNL Mar.17, 1981; Apr.14, 1982; Feb.17, 1983; Jan.18, July 10, Sept.10, Nov.26, 1984; Feb.21, July 30, 1985; #206, 1988; #16,#36,#51(Mar.14),#60,#111,#167,#64(Apr.4), 1989; #25(Feb.5), #171,#192(Oct.3),#218,#232(Nov.30),#236(Dec.6), 1990; #8(Jan.11), #23(Feb.1),#47(Mar.7),#65(Apr.4),#66,#98(May22),#147(Jul.31), #212(Nov.4), 1991; #32(Feb.14), 1992; #64(Apr.3), #135(Jul.15), #198(Oct.15), #221(Nov.18), #229(Nov.28), 1997; #16(Jan.23), #115(June 16), #208(Oct.29), 1998; #71(Apr.14), 1999
- MIN REV May/June 1984: Selco Division of BP Explorations of Canada Limited, p. 82
- N MINER Apr.29, 1982; Sept.1, 1983; Jan.26, Dec.6, 1984; Feb.28, Mar.14, 1985; Feb.13, Apr.10, Sept.11, 1989; Oct.15, Dec.10, 1990; Jan.21, Mar.25, Apr.8, Aug.5, 1991; Mar.15, 1993; May 4, 1998
- PR REL Weymin Mining Corporation, Jan.20, June 11, Oct.26, 1998

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 574
REPORT: RGEN0100

BIBLIOGRAPHY

WWW <http://www.infomine.com/>
Placer Dome File
EMPR OF 1998-10
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1997/09/02

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **COPPER QUEEN**, S, CC9

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 14 30 N
LONGITUDE: 118 12 04 W
ELEVATION: 1100 Metres

NORTHING: 5677385
EASTING: 416158

LOCATION ACCURACY: Within 500M

COMMENTS: Assessment Report 6235, Map No. 3.

COMMODITIES: Copper Zinc Silver

MINERALS

SIGNIFICANT: Chalcopyrite Sphalerite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular
DIMENSION: 0600 x 0006 Metres
COMMENTS: Length is defined by geochemistry.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Undefined Formation	

LITHOLOGY: Amphibolite
Chlorite Schist
Limestone
Quartz Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by a sericitic quartz-feldspathic rock, overlain by a succession of metamorphic volcanic rocks that include amphibolite, chlorite schist with interbedded thin beds of limestone. Overlying the meta-volcanic sequence are quartz-sericite schist, sericite schist and quartzite. A small plug of porphyritic biotite hornblende quartz monzonite intrudes the metamorphic rocks. Chalcopyrite, sphalerite and pyrite occurs as disseminations and lenses in the schistose limy meta-volcanics near the contact with the overlying quartz-sericite schist. The mineralization conforms to the schistosity which trends northwest and dips 22 to 26 degrees northeast.

BIBLIOGRAPHY

EMPR AR 1966-228
EMPR ASS RPT *6235
EMPR EXPL 1976-58; 1977-86,87
EMPR OF 1999-2
GSC MAP 12-1964
GSC P 64-32
WWW <http://www.orphanboy.com/cqueen.html>

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/26

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 005**

NATIONAL MINERAL INVENTORY: 082M1 Zn1

NAME(S): **MASTODON**, MASTADON, ERIC (L.15617)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 14 30 N
LONGITUDE: 118 07 14 W
ELEVATION: 1680 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5677296
EASTING: 421781

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol 5, Map 12-1964, GSC Paper 64-32, pp. 29-30, 35.

COMMODITIES: Zinc Lead Cadmium Silver Gold
Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Tetrahedrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Breccia Massive Disseminated

CLASSIFICATION: Replacement

TYPE: E12 Mississippi Valley-type Pb-Zn E13 Irish-type carbonate-hosted Zn-Pb

SHAPE: Tabular

MODIFIER: Folded Sheared

DIMENSION: 90 x 60 x 3 Metres STRIKE/DIP: 330/50E TREND/PLUNGE:

COMMENTS: Dimension describes maximum extent of largest orebody.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Undefined Group

FORMATION

Badshot

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Dolomite
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Selkirk Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The orebodies lie on the west side of a lenticular mass of Lower Cambrian limestone and dolomite of the Badshot Formation in contact, both east and west, with dark-grey and green phyllites of the Lower Cambrian and younger Lardeau Group. The rocks are isoclinally folded and strongly sheared. Several strike faults cut the rocks trending northwest and dipping at moderate angles to the northeast parallel to foliation. The strike faults appear to be the primary control for zinc mineralization.

The mineralized zones are replacements of limestone, dolomite and phyllite mainly by sphalerite and occasionally galena and grey copper. The sphalerite, ranging in colour from light yellowish-brown to dark brown, is disseminated and massive within the limestone and occurs as the matrix of breccia associated with the strike faults. Some mineralized zones are in folds or in banding related to cleavage, both of which are cut by the faults. The orebodies dip to the northeast and rake to the north. They are tabular or lenticular and commonly split or branch.

BIBLIOGRAPHY

EMPR AR 1898-1060; 1899-672; 1900-809; 1916-192; 1917-150-152,
181; 1918-155,189; 1924-204; 1933-212,229; 1935-G51; 1936-
E53; 1946-175; 1949-208; *1950-159-166; 1951-193; 1952-43,
205; 1953-157; *1959-106-117; 1960-86

EMPR ASS RPT *5724, *6522

EMPR EXPL 1975-56; 1977-86

EMPR INDEX 3-206; 4-123

EMPR PF (Air photos)

EMR MP CORPFILE (Fawn Mining Company, Limited; Golden Maniton Mines,
Limited; Mastodon-Highland Bell Mines Limited; Le Mans Resources
Ltd.)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 577
REPORT: RGEN0100

BIBLIOGRAPHY

GSC BULL 14, pp. 5-10
GSC MAP 4404G; 12-1964
GSC P 64-32, pp. 29-30,35
CANMET IR 1951, NO. MD 2759 (Investigations in Ore Dressing and
Metallurgy)
CIM BULL Vol.75, No.842, pp. 119,124 (Hoy, T. 1982); *July 1953, pp.
403-410 (Pike, A.E. 1953)
GCNL Nov.14, 1975
WWW <http://www.infomine.com/>
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/26

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 006**

NATIONAL MINERAL INVENTORY: 082M1 Zn3

NAME(S): **LITTLE SLIDE**, MCCALLUM

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 13 10 N
LONGITUDE: 118 03 54 W
ELEVATION: 1740 Metres

NORTHING: 5674767
EASTING: 425623

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol 7 Map 12-1964, GSC Paper 84-32, p. 30.

COMMODITIES: Zinc Lead Silver Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

DIMENSION: 0015 x 0003 Metres

STRIKE/DIP: 025/85W

TREND/PLUNGE:

COMMENTS: Largest vein.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Badshot	

LITHOLOGY: Phyllite
Limestone
Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The showing is underlain by grey-banded limestone, light-grey massive dolomite and green and grey phyllite.

Five or six white quartz veins, 6 to 9 metres apart, are mineralized with galena, sphalerite and small amounts of chalcopyrite. The veins transect the calcareous rocks and strike northeasterly with steep dips to the northwest. The largest is 3 metres thick at the widest point thinning in both directions to a lens 15 metres long.

BIBLIOGRAPHY

EMPR AR 1900-809; 1917-151-152; *1959-118
EMPR ASS RPT 5724, 6522
EMPR EXPL 1975-E56; 1977-E86
GSC MAP 12-1964
GSC P 84-32, p. 30
GSC SUM RPT 1929, Part A, p. 190

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/28

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 007**

NATIONAL MINERAL INVENTORY: 082M12 Fsp1

NAME(S): **SPAR, CLEARWATER, SMUGGLER,
BIRCH ISLAND, REXSPAR**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 51 33 50 N
LONGITUDE: 119 54 24 W
ELEVATION: 1190 Metres

NORTHING: 5716539
EASTING: 298542

LOCATION ACCURACY: Within 500M
COMMENTS: Fluorite zone. See Rexspar (082M 021) for nearby uranium zone.

COMMODITIES: Fluorite Strontium Silver Molybdenum Gold
Copper Lead Zinc

MINERALS

SIGNIFICANT: Fluorite Celestite Pyrite Bastnaesite
ASSOCIATED: Feldspar Mica Bastnaesite Albite Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min.
TYPE: D06 Volcanic-hosted U
SHAPE: Tabular
DIMENSION: 350 x 300 x 50 Metres STRIKE/DIP: 035/40W TREND/PLUNGE:
COMMENTS: Fluorite zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian-Mississipp. Undefined Group Eagle Bay

LITHOLOGY: Lithic Tuff
Tuff
Trachyte
Breccia
Trachytic Breccia
Porphyry Breccia
Feldspar Porphyry
Rhyolite Pyrite Schist
Quartz Sericite Schist
Chlorite Schist

HOSTROCK COMMENTS: Unit EBft of the Lower Cambrian to Mississippian Eagle Bay assemblage (Paper 1987-2).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: FLUORITE REPORT ON: Y
CATEGORY: Measured YEAR: 1975
QUANTITY: 1360000 Tonnes
COMMODITY GRADE
Silver 4.1000 Grams per tonne
Fluorite 23.5000 Per cent
Molybdenum 0.0500 Per cent
Lead 0.1700 Per cent
Strontium 2.4800 Per cent
Zinc 0.0800 Per cent

COMMENTS: Grade given for strontium was 5.2 per cent SrSO4. Conversion factor used is 2.0963 to obtain Sr. Also 0.01% copper, 0.06 g/t gold.

REFERENCE: Property File - Wright Engineers Ltd., 1975.

CAPSULE GEOLOGY

The area is underlain by northeast striking, moderately northwest dipping felsic to intermediate metavolcanics and minor interlayered metasediments considered to be of Devonian to Mississippian age (unit EBft, Paper 1987-2), within the Lower Cambrian to Mississippian Eagle Bay assemblage. The rocks hosting

CAPSULE GEOLOGY

the fluorite deposit consist of a deformed and metamorphosed pile of alkali feldspar porphyry, porphyry breccia, lithic tuff and breccia of trachytic composition, with occasional pyritic schist of rhyolitic composition. Rocks of this trachyte unit are light grey in colour and stained rusty brown or yellow due to widespread pyrite. They may be massive, brecciated, or markedly schistose and lineated.

Fractured and sheared crystals of potash feldspar and albitic plagioclase, and rock chips of trachytic composition, occur in a fine-grained groundmass of feldspar and sericite. The trachyte unit, which is 15 to 120 metres thick, is apparently a mixture of intrusive porphyry and its extrusive equivalent tuffs and tuff breccias. It is likely related to a volcanic centre or vent.

The above unit is structurally underlain by quartz-sericite schist, chlorite schist and dacitic and andesitic volcanic breccia, with interlayers of grey phyllite, slate, chert and sericitic quartzite.

The prominent schistosity, which is parallel to the compositional layering and was probably produced during the first phase of deformation, is deformed by tight, recumbent, east-trending second-phase folds. These structures are refolded by upright third-phase, north to northeast trending structures. Subsequent late kinks, and prominent north-trending tension fractures, are commonly followed by post-tectonic felsic and mafic dykes of Cretaceous or later age. High-angle, north-trending faults sharply control the distribution of the trachyte unit.

The fluorite zone occurs as a concordant, tabular body, largely in lithic tuff and tuff breccia of the trachyte unit. The zone, which on average strikes 035 degrees and dips 40 degrees northwest, is about 300 metres long, up to 50 metres wide and extends over 350 metres down dip. Within the zone, the fluorite occurs as massive lenses up to 1 metre wide, small irregular streaks parallel to foliation, scattered hairline veinlets and disseminations with other minerals.

Minerals associated with the fluorite include celestite, pyrite, feldspar, mica and minor amounts of minerals containing rare earths. In the more massive lenses, the fluorite forms a dark-purple to blackish matrix surrounding the other minerals. In other lenses, evenly distributed fine-grained fluorite gives a purple colouration to the host rock. Celestite, at times as abundant as fluorite, occurs as small crystals around the fluorite grains and fractures within them. Bastnaesite is irregularly distributed with the fluorite and celestite and strontium, cesium, lanthanum, ytterbium and yttrium are associated with the fluorite. Radioactivity is weak to moderate in the fluorite zone. Uranium zones, such as the Rexspar (082M 021), occur nearby.

The geological setting and presence of pyrite-mica zones suggest that the mineralized zone was formed by deuteric, volatile-rich fluids during a late stage in the formation of the trachyte unit. The fluorite is likely syngenetic with the host rock and thus of volcanogenic origin.

Measured recoverable reserves in 1975 were 1.36 million tonnes grading 23.5 per cent fluorite, 5.2 per cent SrSO₄, 4.1 grams per tonne silver, 0.05 per cent molybdenum, 0.01 per cent copper, 0.06 grams per tonne gold, 0.17 per cent lead and 0.08 per cent zinc (Property File - Wright Engineers Ltd., 1975).

In 1926 Smuggler Hill Development Company was formed to explore and develop silver and lead deposits (Smuggler, 082M 023 and Foghorn, 082M 029), which were originally staked in 1918 by A.G. McDonald. The results of this early exploration activity were reported by H.G. Nicol, 1926 and D.B. Starrett, 1930. A manganese occurrence was examined by W. Elliot and N.C. Stines in 1929 (Smuggler Manganese, 082M 158). Further geological examinations of fluorite occurrences were reported on by D.B. Starrett, R.P.D. Graham and M.R. Wilson in the early 1940's.

The presence of uranium mineralization became known in late 1949. Dr. F.R. Joubin studied and reported on the mineral occurrences during 1950 and 1951. Rexspar Uranium, later reorganized as Consolidated Rexspar Minerals and Chemicals Ltd., acquired the rights to mineral claims incorporating the uranium bearing zones and delineated three uranium deposits in the late 1950's. However, the deposits were not brought into production. Denison Mines Ltd. resampled and undertook an economic feasibility study in 1969. Exploration programs and geological reviews were conducted in 1969-1972, directed mainly at determining fluorite reserves. Additional diamond drilling of the uranium bearing zones was carried out in 1976 and the drill core was used in a metallurgical test program undertaken to establish process flowsheets.

The Fluorite deposit and the three uranium deposits have been outlined by fairly close spaced diamond drilling and by surface

CAPSULE GEOLOGY

sampling. A total of 368 surface and underground holes have been drilled from 1943 to 1976, for a total of approximately 17,280 metres. Of these, 121 holes were on the "A" deposit, 81 on the "B" deposit, 125 on the "BD" deposit and most of the others on the fluorite deposit. Drifts, cross cuts and raises for a total of 664 metres were driven in the "A" and "BD" uranium zones. The property has been prospected several times over the years. Geological mapping, radiometric surveying, soil sampling and metallurgical testing have also been performed. Work conducted by Placer Development Ltd. during October, 1981, included ground magnetometer and VLF - EM surveys.

In 1987, Consolidated Rexspar changed its name to Conrex Corporation and sold the property in 1988 to Gold Ventures Limited. American Bullion Minerals Ltd. attempted to get a permit to do exploration on the main fluorite zone in the early 1990's.

BIBLIOGRAPHY

- EMPR AR 1930-193; 1931-107; 1949-250-255; 1954-108-111; 1957-31-32; 1959-39; 1962-61; *1963-141-143; 1968-164
EMPR ASS RPT 1737, 1912, 1913, 2337-2340, *4957, 8066, 10207, 10934
EMPR EXPL 1982-122-123
EMPR FIELDWORK 1977, pp. 19-22; 1985, p. 93; *1988, pp. 475-477
EMPR GEM 1969-229; 1970-301-302; 1972-92; 1973-117
EMPR GEOL 1977-1981, pp. 44-56
EMPR MAP 53; 56
EMPR OF 1986-5; 1992-16
EMPR P 1987-2
EMPR PF (In 082M 021 - Wright Engineers Ltd., Reports, March 1975; A.T. Avison (Drilling and Metallurgical), March 1977; *Kilborn Engineering (B.C.) Ltd. and B.C. Research (Environmental), March 1977; P. Pisani, Drill Sections and maps, January 1970; Consolidated Rexspar Minerals & Chemicals Limited, Annual Reports 1975-1977 and Prospectus 1976; S.S. Gandhi, circa 1970's, Kilborn Engineering; Letters to the Ministry)
EMR MIN BULL MR 223 (1989) B.C. 78
EMR MP CORPFILE (Consolidated Rexspar Minerals & Chemicals Limited; Denison Mines Limited)
GSC EC GEOL *Series #6 pp. 21-22
GSC MAP 48-1963
GSC P *78-1B, pp. 137-140
GSC SUM RPT *1930, pp. 148-150
CANMET IR #4501, 1945; #2437, 1948; #63-33, 1963
CANMET RPT 570, 1922, p. 85
CIM BULL *Dec. 1978, pp. 82-88
CIM Congress Volume, pp. 85-88 (Joubin, F.R., and James, D.H. 1957)
CIM Spec. Vol. *33, pp. 305-308 (Descarreau, J. 1986)
CMJ 77(7), 1956, p. 59
Dickie, G.J., V.A. Preto and P. Schiarizza (in preparation): Mineral Deposits of the Adams Plateau-Clearwater area.
IAEA 1985, Vol. ST1/PUB/690 - Uranium in Volcanic Rocks, pp. 321-325
Munition Resources Commission, Canada, 1920, pp. 49-52
Placer Dome File
Preto, V.A. and P. Schiarizza (1985): Geology and Mineral Deposits of the Adams Plateau and Clearwater Region in GSA Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11.
Chevron File
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1991/03/12

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 008**

NATIONAL MINERAL INVENTORY: 082M12 Cu2

NAME(S): **FH, LYDIA**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5712091
EASTING: 297593

LATITUDE: 51 31 25 N
LONGITUDE: 119 55 04 W
ELEVATION: 1820 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Upper adit, Dwg. 193-4 (Assessment Report 7758).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Arsenopyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite Malachite Azurite
ALTERATION TYPE: Silicific'n Chloritic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
DIMENSION: 0350 x 0002 Metres STRIKE/DIP: 040/50W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Quartzite
Phyllite
Gneiss
Hornfels
Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Drill Core
COMMODITY
Silver 1.3500 Grams per tonne
Copper 0.3000 Per cent
REFERENCE: Assessment Report 7758.

CAPSULE GEOLOGY

The area is underlain by the Devonian part of the Eagle Bay rocks consisting of quartz-chlorite-sericite schist, quartzite and hornfels. They strike northeast and dip moderately to the northwest. A northwest trending 20 metre wide quartz feldspar porphyry cuts the metavolcanics.

Chalcopyrite, pyrite and pyrrhotite occur as disseminations and massive bands and blebs concordant with foliation and bedding. Chalcopyrite also occurs in quartz veins and fractures. The mineralized zone which is about 350 metres long and 2 metres thick, trends roughly 040 degrees and dips 50 degrees northwest. A drill hole intersected 4.6 metres of 0.3 per cent copper and 1.35 grams per tonne silver (Assessment Report 7758).

BIBLIOGRAPHY

EMPR AR 1915-212; *221-222; 1917-236; 1918-234; *1923-154-155;
1924-152; 1929-224; 1968-164
EMPR ASS RPT 1597, 1624, 1924, *3820, 7404, *7758
EMPR FIELDWORK 1984, pp. 67-76; 1985, pp. 89-94

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 583
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1969-230; 1970-302-303; 1972-92-93
EMPR GEOL 1977-1981, p. 55, Fig. 18
EMPR MAP 53; 56
EMPR OF 1986-5; 1999-2
EMPR PF (Geology Map by P. Pisani, 1970)
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT *1930, pp. 144-145
Dickie, G.J., V.A. Preto and P. Schiarizza (in preparation): Mineral
Deposits of the Adams Plateau-Clearwater area
Preto, V.A. and P. Schiarizza (1985): Geology and Mineral Deposits of
the Adams Plateau and Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11.

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/08

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 009**

NATIONAL MINERAL INVENTORY: 082M12 Cu1

NAME(S): **HARPER CREEK**, HAIL-HARPER CREEK

STATUS: Developed Prospect

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082M12W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 51 31 10 N

NORTHING: 5711356

LONGITUDE: 119 49 04 W

EASTING: 304511

ELEVATION: 1610 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of deposit (Property File - Belik, 1973).

COMMODITIES: Copper Silver Gold Titanium Zinc
 Lead Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite Sphene Sphalerite

 Galena Molybdenite Tetrahedrite Bornite Cubanite

ASSOCIATED: Quartz Carbonate Magnetite Arsenopyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Stockwork Vein

CLASSIFICATION: Volcanogenic

TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

SHAPE: Tabular

MODIFIER: Faulted Fractured

DIMENSION: 1800 x 600 x 100 Metres STRIKE/DIP: 090/25N TREND/PLUNGE:

COMMENTS: Main mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Quartz Sericite Phyllite
 Chloritic Phyllite
 Carbonaceous Phyllite
 Sericitic Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: EAST REPORT ON: Y

CATEGORY: Indicated YEAR: 1987

QUANTITY: 53000000 Tonnes

COMMODITY GRADE

Molybdenum 0.0160 Per cent

Copper 0.3700 Per cent

COMMENTS: Open pitted. Bench-scale tests indicate 2.8 grams per tonne gold.

REFERENCE: Application for Listing 14/87, Aurun Mines Ltd.

ORE ZONE: TOTAL REPORT ON: Y

CATEGORY: Unclassified YEAR: 1997

QUANTITY: 96000000 Tonnes

COMMODITY GRADE

Copper 0.4100 Per cent

Gold 0.0450 Grams per tonne

COMMENTS: This geological resource was calculated previous to 1997.

REFERENCE: Information Circular 1997-1, page 29.

CAPSULE GEOLOGY

The Harper Creek deposit lies 3500 metres north of the Cretaceous Baldy batholith and within metavolcanics and metasediments of the Lower Cambrian and older(?) to Mississippian Eagle Bay Formation.

Copper mineralization is confined to tabular-shaped zones within light silvery grey quartz-sericite phyllites, with lesser amounts of green chloritic phyllite, dark grey carbonaceous phyllite and light

CAPSULE GEOLOGY

grey sericitic quartzite. These rocks locally include thin horizons of quartz-feldspathic orthogneiss.

Chalcopyrite occurs as disseminations and patches along foliations, in steeply dipping, northerly striking fractures, within quartz and quartz-carbonate veins and with massive pyrite-pyrrhotite. Sphalerite, galena, arsenopyrite, molybdenite, tetrahedrite-tennantite, bornite and cubanite are present in minor quantities. Magnetite occurs locally as massive lenses containing minor chalcopyrite.

Sphene occurs evenly disseminated or in clusters within chloritic phyllite. Rocks with 15 to 20 per cent sphene contain an average of 2.0 per cent titanium (Property File - Belik, 1973).

The tabular mineralized zones strike approximately east and dip about 25 degrees to the north, in approximate conformity with the schistosity and lithology of the host rocks. In detail, however, the zones transgress lithologic contacts and are not stratigraphically controlled. The main mineralized zone is about 1800 metres long, has a local thickness of 100 metres and has been explored downdip for 600 metres. A north-northeast trending, southeast dipping fault cuts the zone midway.

The East zone contains indicated open pittable reserves of 53 million tonnes grading 0.37 per cent copper and 0.016 per cent molybdenum. Bench-scale tests indicate 2.8 grams per tonne gold and 88.4 grams per tonne silver. There are also significant titanium values (Application for Listing 14/87, Aurun Mines Ltd.).

By 1997, American Comstock Exploration Ltd. had acquired a 100 per cent interest in the project and had conducted a 9-hole diamond drilling program (in 1996). A 171-metre intersection assayed 0.31 per cent copper (Exploration in BC 1996, page D5). The program was designed to increase a previously calculated geological resource of 96 million tonnes grading 0.41 per cent copper, 0.045 gram per tonne gold and 2.5 grams per tonne silver (Information Circular 1997-1, page 29).

BIBLIOGRAPHY

- EM EXPL 1996-D5
EMPR AR 1967-132,284; 1968-165,281
EMPR ASS RPT 1035, *1612, 15738, 16226, *16344, 17650
EMPR FIELDWORK 1985, pp. 89-94
EMPR GEM 1969-229; *1970-297-301; 1971-443; 1972-93; 1973-116-117;
1974-98
EMPR INF CIRC 1997-1, p. 29
EMPR MAP 65 (1989)
EMPR OF 1992-1
EMPR PF (*Thesis by G. Belik, 1973; Letter to Shareholders, Aurun
Mines Ltd., July 8, 1986)
EMR MIN BULL MR 223 B.C. 77
GCNL #209, 1978
N MINER May 18, 1986
WWW <http://www.infomine.com/>
Dickie, G.J., V.A. Preto and P. Schiarizza (in preparation): Mineral
Deposits of the Adams Plateau-Clearwater area
Preto, V.A. and P. Schiarizza (1985): Geology and Mineral Deposits of
the Adams Plateau and Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11.

DATE CODED: 1985/07/24
DATE REVISED: 1987/12/29

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEX ZONE**, RAN

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 40 N
LONGITUDE: 119 43 44 W
ELEVATION: 990 Metres

NORTHING: 5686106
EASTING: 309745

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 2 (Assessment Report 14124).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Undefined Group	Spapilem-Deadfall Creeks	
Upper Devonian			Unnamed/Unknown Informal

ISOTOPIC AGE: 126 +/- 4 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Quartzite
Phyllite
Schist
Calc-silicate Schist
Staurolite Garnierite Mica Schist
Amphibolite

HOSTROCK COMMENTS: Dating by Okulitch, 1979.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by probable Lower Cambrian to Hadrynian age Spapilem Creek-Deadfall Creek Succession (unit SDQ Map 56). The rocks consist of quartzite, micaceous quartzite, grit and phyllite with lesser staurolite-garnet-mica schist, calc-silicate schist and amphibolite. These rocks are cut by Late Devonian orthogneiss and sillimanite bearing paragneiss (unit Dgnp). To the northeast, the rocks are cut by post-tectonic granitic rocks of the Mid-Cretaceous Baldy Batholith. Locally the intrusion is a quartz-diorite with related quartz-monzonite along the contact with the paragneiss.

Mineralization consisting of disseminated pyrite and chalcopyrite along foliation planes occurs within feldspar mica paragneiss. The foliation strikes 120 degrees and dips 45 degrees southwest. Geochemical results have outlined an anomalous zone of about 1200 metres, striking 120 degrees.

A north-east striking fault zone is interpreted (Assessment Report 14124) to laterally offset the quartz-diorite/paragneiss contact, 400 metres to the left. This interpretation is supported by geochemical results. The Bex Zone may be an offset continuation of the Grizzly Zone (082M 049), 1200 metres to the west.

BIBLIOGRAPHY

EMPR AR 1967-134; 1968-168
EMPR ASS RPT *2230, *3432, *10480, *11149, *12081, *14124
EMPR EXPL 1978-E109; 1982-111; 1983-159; 1985-C104
EMPR GEM 1971-438
EMPR MAP 56
EMPR OF 2000-7
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 587
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **BIG BEN 2**, PETE 16

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5660780
EASTING: 317378

LATITUDE: 51 04 10 N
LONGITUDE: 119 36 24 W
ELEVATION: 1900 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Anomaly "h", map (Assessment Report 1936).

COMMODITIES: Lead Zinc Copper Silver

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
DIMENSION:

STRIKE/DIP: 045/65N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Phyllitic Limestone
Feldspar Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees north-west. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

Mineralization comprises sulphides of silver, lead and zinc within metasedimentary rocks on the north limb of the Nitwikaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous and/or graphitic phyllite, calcareous phyllite, streaky banded calc-silicate rock, limestone and quartzite. The metasediments are stratigraphically underlain by chloritic schists and greenstone (EBG). (Preto, et al in preparation).

The Big Ben showing, 500 metres south of Lucky Coon (082M 012), is underlain by graphitic and chloritic phyllites cut by several rhyolite dykes.

Mineralization, consisting of galena, sphalerite and chalcopyrite, occurs along a shear zone within quartz veins measuring 2.5 to 56 centimetres in width. The shear zone, 15 metres long and 30 centimetres wide strikes northeast and dips 65 degrees west.

BIBLIOGRAPHY

EMPR ASS RPT 1629, 1936, 2331, 7019, 9915, *10665 (same as 11022), *11521, *11933, *13142, *16024
EMPR EXPL *1982-108-109; 1984-113; 1985-C100
GSC MAP 48-1963; 5320G
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 012**

NATIONAL MINERAL INVENTORY: 082M4 Pb1

NAME(S): **LUCKY COON (L. 5231)**, MCGILLVRAY, GOLDEN EAGLE (L.5230), WHITE SWAN (L.5229), EAST LEMHI, LAST CHANCE (L.5232)

STATUS: Past Producer	Open Pit	MINING DIVISION: Kamloops
REGIONS: British Columbia		
NTS MAP: 082M04E		UTM ZONE: 11 (NAD 83)
BC MAP:		
LATITUDE: 51 04 30 N		NORTHING: 5661405
LONGITUDE: 119 36 34 W		EASTING: 317205
ELEVATION: 1800 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Northeast open pit, Fig. 2a (Assessment Report 11521); southwest open pit is 250 metres from the northeast pit.		

COMMODITIES: Lead Zinc Silver Gold Arsenic
 Cadmium

MINERALS

SIGNIFICANT:	Galena	Sphalerite	Argentite	Tetrahedrite	Arsenopyrite
	Pyrrhotite	Chalcopyrite			
ASSOCIATED:	Quartz				
ALTERATION:	Silica				
ALTERATION TYPE:	Silicific'n				
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER:	Stratiform	Massive		
CLASSIFICATION:	Replacement	Sedimentary	Syngenetic	Industrial Min.
TYPE:	E14 Sedimentary exhalative Zn-Pb-Ag			
SHAPE:	Cylindrical			
MODIFIER:	Folded			
DIMENSION:	1200 x 0002	Metres	STRIKE/DIP: 055/40N	TREND/PLUNGE:
COMMENTS:	General strike of strata; approximate size of deposit, traced intermittently.			

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
 Quartz Sericite Schist
 Phyllitic Limestone
 Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay	
METAMORPHIC TYPE: Regional	RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees north-west. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

Mineralization comprises sulphides of silver, lead and zinc within metasedimentary rocks on the north limb of the Nitwikwaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous and/or graphitic phyllite, calcareous phyllite, streaky banded calc-silicate rock, limestone and quartzite. The metasediments are stratigraphically underlain by chloritic schists and greenstone (EBG). (Preto, et al in preparation).

The mineralization occurs as layers, lenses and pods of semi-massive to massive sulphides, generally within a siliceous gangue. The sulphide horizons are generally well banded and conformable to the schistosity and where observed, to the bedding. Intense deformation of the rocks has caused discontinuity and marked variability in the widths of the sulphide horizons which tend to thicken in the hinge zones of folds.

The Lucky Coon deposit is exposed intermittently over a strike length of 1200 metres in a northeast trend. Banded and massive sulphides include arsenopyrite, pyrite, sphalerite, galena, argentite, chalcopyrite and minor tetrahedrite within silicified limy phyllites,

CAPSULE GEOLOGY

quartz-sericite schist and greenstone schist. Mineralization widths are generally less than 0.5 metres but may occur up to 2 metres. A 30 centimetre sample gave 0.7 grams per tonne gold, 583 grams per tonne silver, 14.5 per cent lead and 24 per cent zinc.

The Elsie deposit (082M 213) is thought to be a continuation of the Lucky Coon deposit however, it does not appear to be on the same stratigraphic level. Inferred reserves have been noted as 68,033 tonnes of 'high-grade' ore (Canadian Mines Handbook 1972-1973, p. 136 (Giant Metallics Mines Ltd.)).

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 223-246
EM OF 2000-22
EMPR AR 1927-199,200; 1928-210; 1930-184-187; 1931-106; *1936-D40-43; 1949-132; 1956-A49
EMPR ASS RPT 1936, 7019, 9915, *10665 (same as 11022), *11521, *11933, *13142, *13381, *13542, *16024
EMPR EXPL 1977-E91; 1982-108-109; 1983-156; 1984-113; 1985-C100
EMPR FIELDWORK *1978, pp. 31-35; 1979, pp. 28-36; 1984, pp. 67-76
EMPR INF CIRC 1985-1, pp. 24, 36; 1986-1, pp. 41, 51
EMPR MAP *56
EMPR MINING *1975-1980, pp. 54, 62
EMR MP CORPFILE (Norlex Mines Limited, East Lehmi Mining Company, Consolidated Giant Metallics Ltd., Adams Silver Resources Inc.)
GSC MAP 48-1963; 5320G
GSC OF *637
CMH 1972-73, p. 136
GCNL Oct 29, Dec 12, 1984; June 13, #165,#199, 1985; #228, 1987
IPDM Nov-Dec 1985
N MINER Nov 1, 1984
NAGMIN Nov 9, 1984, p. 1; June 7, 1985, p. 14; Nov 19, 1985
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986): *Mineral Deposits of the Adams Plateau-Clearwater Area
Hainsworth, W.G. (1973): Report on the Lucky Coon Claims, Aug 1973 in Consolidated Giant Metallics Ltd. Statement of Material Facts, October 17, 1973
Placer Dome File
Preto, V.A. and Schiarizza, P. (1985): *Geology and Mineral Deposits of the Adams Plateau-Clearwater Region; GSA Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 013**

NATIONAL MINERAL INVENTORY: 082M4 Pb5

NAME(S): **KING TUT, PETE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 00 N
LONGITUDE: 119 35 14 W
ELEVATION: 1800 Metres

NORTHING: 5662276
EASTING: 318794

LOCATION ACCURACY: Within 1 KM

COMMENTS: From description; symbol Map 2 (Assessment Report 7019); symbol Sheet No. 1 (Assessment Report 10665).

COMMODITIES: Silver Lead Zinc Gold

MINERALS

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

DEPOSIT

CHARACTER: Stratiform Disseminated Massive
CLASSIFICATION: Replacement Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Cylindrical
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Phyllite
Schist
Porphyritic Dike
Phyllitic Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1930
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 1118.0000 Grams per tonne
Gold 2.7000 Grams per tonne
Lead 28.8000 Per cent
Zinc 8.4000 Per cent

COMMENTS: The sample width is 0.9 metres.
REFERENCE: Annual Report 1930, page 186.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees north-west. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

The King Tut occurrence lies about 900 metres northeast of Lucky Coon (082M 012). The lens strikes 55 degrees intermittently for 1200 metres. Mineralization consists of galena, pyrite and sphalerite across a one metre siliceous band within dark phyllites. A 60 centimetre sample assayed 295 grams per tonne silver, 7.6 per cent lead and 21.5 per cent zinc.

One hundred and fifty metres to the northeast a 60 to 75 centimetre silicified band within chloritic schist contains pyrite, arsenopyrite, galena and sphalerite. A 90 centimetre sample assayed 2.7 grams per tonne gold, 1118 grams per tonne silver, 28.8 per cent lead

CAPSULE GEOLOGY

and 8.4 per cent zinc.

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 223-246
EMPR AR *1930-185-187; 1931-106; 1932-A146; 1933-A194; 1934-D28;
*1936-D40,D43
EMPR ASS RPT 6513, 7019, 9915, 10665 (same as 11022), 13142
EMPR EXPL 1977-E89; 1978-E103; 1979-E110; 1982-108-109; 1983-155-
156; 1985-C100
EMPR FIELDWORK 1978, pp. 31-35; 1979, pp. 28-36; *1984, pp. 67-76
EMPR MAP *56
EMR MP CORPFILE (Norlex Mines Ltd., East Lehmi Mining Co.)
GSC MAP 48-1963; 5320G
GSC OF *637
Dickie, G.J., Preto, V.A. and Schiarizza, P. *(in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area
Tough, T.R. (1982): Geological Report on the Adams Plateau Property
for Adams Silver Resources Inc., Feb. 1982; (unpublished?)
Location unknown
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 014**

NATIONAL MINERAL INVENTORY: 082M4 Pb6

NAME(S): **SPEEDWELL**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 40 N
LONGITUDE: 119 34 44 W
ELEVATION: 1500 Metres

NORTHING: 5663491
EASTING: 319421

LOCATION ACCURACY: Within 1 KM
COMMENTS: From descriptions.

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Schist
Phyllite
Phyllitic Limestone
Porphyritic Dike
Silica Phyllite
Greenstone
Calcareous Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1932
SAMPLE TYPE:	Rock		
COMMODITY		GRADE	
Silver		549.0000	Grams per tonne
Lead		17.0000	Per cent
Zinc		10.0000	Per cent

COMMENTS: These values represent an average of several samples.
REFERENCE: Annual Report 1932, page A146.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

Mineralization comprises sulphides of silver, lead and zinc within metasedimentary rocks on the north limb of the Nitwikaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous and/or graphitic phyllite, calcareous phyllite, streaky banded calc-silicate rock, limestone and quartzite. The metasediments are stratigraphically underlain by chloritic schists and greenstone (EBG). (Preto, et al in preparation).

The Speedwell occurrence lies 1.6 kilometres northeast of the King Tut (082M 013) and is underlain by quartzose schist and phyllite metasediments intruded by hornblende diorite.

Mineralized bands, near an andesite dyke, occur across 6 metres within the metasediments. The widest band is 20 centimetres and consists of pyrite, galena and sphalerite. A sample assayed 549 grams per tonne silver, 17 per cent lead and 10 per cent zinc.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 594
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1930-A186,A187; 1931-A106; *1932-A146; *1934-D28;
*1936-D40,D43
EMPR ASS RPT 7019, 9915, 13142
EMPR EXPL 1982-108-109; 1983-155-156; 1984-113; 1985-C100
EMPR MAP *56
EMR MP CORPFILE (Norlex Mines Ltd., East Lehmi Mining Co.)
GSC MAP 48-1963; 5320G
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 015**

NATIONAL MINERAL INVENTORY: 082M4 Pb7

NAME(S): **DONNAMORE**, LUND, SILVERTIP

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 06 00 N
LONGITUDE: 119 34 04 W
ELEVATION: 1200 Metres

NORTHING: 5664081
EASTING: 320220

LOCATION ACCURACY: Within 1 KM

COMMENTS: Descriptions, symbol Map 2 (Assessment Report 7019).

COMMODITIES: Lead Zinc Silver Gold

MINERALS

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

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Argillite
Quartzite
Phyllite
Porphyritic Dike
Limestone
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees north-west. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

Mineralization comprises sulphides of silver, lead and zinc within metasedimentary rocks on the north limb of the Nitwikwaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous and/or graphitic phyllite, calcareous phyllite, streaky banded calc-silicate rock, limestone and quartzite. The metasediments are stratigraphically underlain by chloritic schists and greenstone (EBG). (Preto, et al in preparation).

The Donnamore occurrence lies 4.8 kilometres northeast of Lucky Coon (082M 012). A strongly silicified 15 to 60 centimetre band containing pyrite, galena and sphalerite occurs within argillaceous-quartzite rocks. A 20 centimetre sample assayed 1.4 grams per tonne gold, 79 grams per tonne silver, 27 per cent lead and 12 per cent zinc.

BIBLIOGRAPHY

EMPR AR *1934-D28; *1936-D40,D43
EMPR ASS RPT *7019, 9915, 13142
EMPR EXPL 1982-108-109; 1983-155-156; 1985-C100
EMPR MAP *56
GSC MAP 48-1963; 5320G
GSC OF *637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 016**

NATIONAL MINERAL INVENTORY: 082M4 Ag2

NAME(S): **MOSQUITO KING**, GARNET, PAT,
E, A1, A2,
PATCH, D, S,
HILTEC

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 50 N
LONGITUDE: 119 30 24 W
ELEVATION: 1700 Metres

NORTHING: 5658066
EASTING: 324299

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of main showings, Map 6 (Assessment Report 11264).

COMMODITIES: Silver Zinc Lead Copper Gold
Cadmium

MINERALS

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

DEPOSIT

CHARACTER: Concordant Disseminated Massive
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Cylindrical
MODIFIER: Folded
DIMENSION: STRIKE/DIP: 030/20N TREND/PLUNGE:
COMMENTS: Discontinuous and variable width from 0.2 to 5.5 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Phyllite
Calc-silicate
Limestone
Quartzite
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: MOSQUITO KING REPORT ON: Y
CATEGORY: Indicated YEAR: 1985
QUANTITY: 33744 Tonnes
COMMODITY GRADE
Silver 13.3000 Grams per tonne
Lead 0.8300 Per cent
Zinc 2.0900 Per cent

COMMENTS: Drill indicated. An additional 4716 tonnes grading 19.8 grams per tonne silver, 2.6 per cent zinc, and 1.38 per cent lead.
REFERENCE: Statement of Material Facts 28/01/85, Killick Gold Company Ltd.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees north-west. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

Mineralization comprises sulphides of silver, lead and zinc within metasedimentary rocks on the north limb of the Nitwikaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous and/or graphitic phyllite, calcareous

CAPSULE GEOLOGY

phyllite, streaky banded calc-silicate rock, limestone and quartzite. The metasediments are stratigraphically underlain by chloritic schists and greenstone (EBG). (Preto, et al in preparation).

Mosquito King comprises a number of thin, laterally extensive massive pyrrhotite layers, with locally high precious metal content in a highly deformed and metamorphosed calc silicate gneiss succession.

Potassic and siliceous alteration are reflected in silicified sericitic zones in the immediate hanging wall.

The mineralization occurs as layers, lenses and pods of semi-massive to massive sulphides, generally within a siliceous gangue. The dominant sulphides are pyrite, galena, sphalerite, chalcopyrite and pyrrhotite. The sulphide horizons are generally well banded and conformable to the schistosity and where observed, to the bedding. Intense deformation of the rocks has caused discontinuity and marked variability in the widths of the sulphide horizons which tend to thicken in the hinge zones of folds.

The Mosquito King showings occur as discontinuous stringers, lenses and disseminations over an area about 1000 by 500 metres. Mineralized widths vary from less than a metre to over 6 metres.

Drill indicated reserves are 33,744 tonnes grading 13.3 grams per tonne silver, 0.83 per cent lead, and 2.09 per cent zinc; an additional 4716 tonnes grading 19.8 grams per tonne silver, 2.6 per cent zinc, and 1.38 per cent lead (Statement of Material Facts 28/01/85, Killick Gold Company Ltd.)

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 307-320
EM OF 2000-22
EMPR AR 1928-C210; 1930-A186-188; 1931-A106; 1934-D29; 1936-D40;
1949-132-136; 1966-146; 1967-134-135
EMPR ASS RPT 45, 46, 308, 5919, *6349, 6420, 6788, 6913, *7019, *8131,
11264, 13239, *13381, 14439
EMPR EXPL 1977-E88-90; 1978-103-104; 1979-110; 1984-110; 1986-C111
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76;
1998, pp. 236-239
EMPR GEM 1970-317; 1971-436; 1972-85
EMPR INF CIRC 1986-1, pp. 41, 51
EMPR MAP 56
EMPR MINING *1975-1980, p. 69
EMR MIN BULL MR 223 B.C. 71
EMR MP CORPFILE (Consolidated Giant Metallics Ltd.; Orell Resources
Ltd.)
GSC MAP 48-1963; 5320G
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (*in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area
GCNL July 12,17, Aug 28, 1979; #73, 1980; Nov 4, 1980; July 16,30,
Aug 14, Sept 21, 1981; Jan 13, Oct 21, 1982; Jan 5, June 14,
Nov 28, 1983; *Feb 15, Oct 9, 1985
Hainsworth, W.G. (1973): Report on Giant Metallics Mines, Adams
Plateau in Consolidated Giant Metallic Ltd. Statement of Material
Facts, July 13, 1973
IPDM March/April 1984, p. 9 (Bachelor, D. 1984: Orell Resources
Joint Venturing with Noranda at Adams Plateau)
N MINER Nov 18, 1948; Aug 25, 1949; March 15, 1979; Apr 4, 1981;
Jan 21, 1982; July 5, 1984
Preto, V.A. and Schiarizza, P. (1985): *Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region; GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11
Zachanko, V. (1971): General Report on Giant Metallics Mines in
Giant Metallics Mines Limited Statement of Material Facts, May 17,
1971
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 2003/03/04

CODED BY: GSB
REVISED BY: MPS

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 017**

NATIONAL MINERAL INVENTORY: 082M4 Pb2

NAME(S): **EX 1, SPAR ELK,
 SPAR 1, SPAR 2, MP,
 WESTVILLE**

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 082M04E
 BC MAP:

Open Pit

MINING DIVISION: Kamloops

LATITUDE: 51 03 40 N
 LONGITUDE: 119 32 44 W
 ELEVATION: 1640 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5659704
 EASTING: 321626

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of showings, Map 6 (Assessment Report 11264). Near headwaters of the east branch of Nik Wik Waia Creek.

COMMODITIES: Lead Zinc Silver Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Pyrrhotite Chalcopyrite

Magnetite

ASSOCIATED: Quartz

ALTERATION: Epidote

ALTERATION TYPE: Silicific'n Epidote

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Massive

CLASSIFICATION: Sedimentary

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

SHAPE: Cylindrical

MODIFIER: Folded

DIMENSION: 0365 x 0003 Metres

STRIKE/DIP: 040/30N

TREND/PLUNGE:

COMMENTS: Argillite beds.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
 Quartzite
 Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Adams Plateau

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SPAR

REPORT ON: Y

CATEGORY: Indicated
 QUANTITY: 11157 Tonnes

YEAR: 1985

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	187.6000	Grams per tonne
Lead	10.5600	Per cent
Zinc	4.8300	Per cent

COMMENTS: Width is 3.35 metres, length unknown.

REFERENCE: George Cross Newsletter No.33 (Feb. 15), 1985.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees north-west. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

The Spar massive sulphide layer trends northeast and dips 30 to 40 degrees to the northwest. The layer can be traced approximately 600 metres to the north where it is folded and truncated by a fault. The thickness of the layer is structurally controlled, and it is the less obvious phase 2 structures that control thickness, and not the west plunging phase 3 structures.

Mineralization comprises sulphides of silver, lead and zinc

CAPSULE GEOLOGY

within metasedimentary rocks on the north limb of the Nitwikaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous and/or graphitic phyllite, calcareous phyllite, streaky banded calc-silicate rock, limestone and quartzite. The metasediments are stratigraphically underlain by chloritic schists and greenstone (EBG). (Preto, et al in preparation). The succession that hosts these layers are lower in sequence than those at Mosquite King (082M 016).

The mineralization occurs as layers, lenses and pods of semi-massive to massive sulphides, generally within a siliceous gangue. The dominant sulphides are pyrite, galena, sphalerite, chalcopyrite and pyrrhotite. The sulphide horizons are generally well banded and conformable to the schistosity and where observed, to the bedding. Intense deformation of the rocks has caused discontinuity and marked variability in the widths of the sulphide horizons which tend to thicken in the hinge zones of folds.

The Spar mineralization occurs at the crests of several super-imposed monoclinial folds averaging 3 metres thick along a strike length of 365 metres in a northeast trend. The massive sulphide mineralization is localized in the crests of drag-folds with axis south 60 degrees west, flat dip and plunge at 10 degrees southwest. The central portion of the zone is primarily massive galena bordered by a "fringe" zone of galena, sphalerite, pyrite and pyrrhotite.

Spar was first discovered in 1927. In the 1960's Giant Metallics mapped the area and undertook some trenching and drilling. The property was acquired by Killick Gold in 1974. In 1976 Hesca Resources drilled 8 holes. It was optioned to Craigmont Mines in 1977 and 1978, Brinex Ltd. in 1980 and Noranda Exploration in 1984 and 1985.

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 239-240, 297-306
EM OF 1998-9; 2000-22
EMPR AR *1949-136-137; 1952-A41; *1953-A44,A102,A103; 1955-A47;
1958-72; 1967-134-135
EMPR ASS RPT 45, 46, 308, 3220, 5176, 6645, 7019, 11264, 13239, 13381,
*14439
EMPR EXPL 1976-E60; 1977-E90-E91; 1984-110; 1986-C111
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR GEM 1970-317; 1971-436; 1972-85; 1974-96
EMPR MAP 56
EMPR MINING 1975-1980, V. 1, p. 58
EMPR PF (*Gutrath, G. (1977): Report on the Spar, Willi, VK, K and
MP Claims)
EMR MP CORPFILE (Jetcan Limited; Plateau Metals Limited; Consolidated
Giant Metallics Ltd.; Quintaine Resources Inc.; Hesca Resources
Corporation Ltd.; Orell Resources Ltd.)
GSC MAP 48-1963; 5320G
GSC OF 637
CMJ Sept 1953, p. 126
GCNL Jan 5, 1983; Feb 15, 1985
IPDM March/April 1984, p. 9 (Bachelor, D. 1984: Orell Resources
Joint Venturing with Noranda at Adams Plateau
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area
Hainsworth, W.G. (1973): Report on Giant Metallics Mines, Adams
Plateau in Consolidated Giant Metallic Ltd. Statement of Material
Facts, July 13, 1973
Preto, V.A. and Schiarizza, P. (1985): *Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region; GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11
Zachanko, V. (1971): General Report on Giant Metallics Mines in
Giant Metallics Mines Limited Statement of Material Facts, May 17,
1971

DATE CODED: 1985/07/24
DATE REVISED: 2003/03/03

CODED BY: GSB
REVISED BY: MPS

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 018**

NATIONAL MINERAL INVENTORY: 082M4 Pb2

NAME(S): **BEL**, OCT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 10 N
LONGITUDE: 119 33 34 W
ELEVATION: 1550 Metres

NORTHING: 5658811
EASTING: 320621

LOCATION ACCURACY: Within 500M
COMMENTS: Drill hole, location map (Assessment Report 7693).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrrhotite
ASSOCIATED: Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Limestone
Argillite
Tuff
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 5.8000 Grams per tonne
Lead 0.2200 Per cent
Zinc 0.2200 Per cent

REFERENCE: Assessment Report 7693.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestone and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends. A major fault has a northerly trend across the area.

A diamond drill hole intersected disseminated pyrrhotite, galena and sphalerite within limestone, argillite and tuff sequences. A sample in graphitic argillite assayed 0.22 per cent zinc, 0.22 per cent lead and 5.8 grams per tonne silver (Assessment Report 7693). A nearby surface showing consists of a 10 centimetre wide zone of sphalerite within calcareous argillite.

BIBLIOGRAPHY

EMPR ASS RPT *46, 6513, *7693, *14277
EMPR EXPL 1977-E89; 1978-E103; 1979-110
EMPR MAP 56
GSC MAP 48-1963; 5320G
GSC OF 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 601
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/15

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 019**

NATIONAL MINERAL INVENTORY: 082M4 Pb4

NAME(S): **ELMOORE**, WALLACE, LINCOLN

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 40 N
LONGITUDE: 119 41 54 W
ELEVATION: 1025 Metres

NORTHING: 5658232
EASTING: 310855

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, plate 3 (Assessment Report 7040).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite
ASSOCIATED: Quartz Chlorite Epidote Calcite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Regular
MODIFIER: Sheared
DIMENSION: 0090 x 0060 x 0002 Metres STRIKE/DIP: 170/70E TREND/PLUNGE:
COMMENTS: Quartz vein dimension; shear zone general attitude.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Greenschist
Greenstone
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1966
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 75.4000 Grams per tonne
Copper 2.4200 Per cent
Lead 1.6900 Per cent
Zinc 2.3800 Per cent
REFERENCE: Assessment Report 904.

CAPSULE GEOLOGY

The property is underlain by Devonian to Mississippian age Eagle Bay Formation rocks. The rocks consist of greenstones, greenschist and chlorite schists with a northeast strike and a 35 to 45 degree northwest dip.

Mineralization occurs within quartz veins along a highly brecciated shear zone striking north to north-northeast and dipping from 60 to 75 degrees east. The shear varies from a few centimetres to several metres wide and is intermittently mineralized, along the footwall, with pyrite, galena, sphalerite and chalcopyrite. The mineralized quartz vein measures 15 centimetres to 4 metres wide, 90 metres long and about 60 metres deep. A 3.4 metre wide sample assayed 75.4 grams per tonne silver, 2.42 per cent copper, 2.38 per cent zinc and 1.69 per cent lead.

BIBLIOGRAPHY

EMPR AR *1927-C200-C201; 1928-C210; *1934-D28-D29; 1936-D43; 1966-145-146; 1967-134
EMPR ASS RPT *904, *2650, 7040, 11353, 13387

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 603
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1975-E56; 1983-155; 1984-115
EMPR GEM 1970-317; 1971-437
EMPR MAP 56
EMR MP CORPFILE (Cannon Mines Limited)
GSC MAP 48-1963; 5320G
GSC OF *637
Donaldson, T.J. (1966): *Elmore Group; for Dolmage, Campbell &
Associates in Amendment No. 3 to the Prospectus of Cannon Mines
Limited, May 1966
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region; GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/22

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 020**

NATIONAL MINERAL INVENTORY: 082M4 Pb3

NAME(S): **TWIN MOUNTAIN**, STAR, MAX,
 HOPE

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M04W
 BC MAP:
 LATITUDE: 51 07 45 N
 LONGITUDE: 119 46 41 W
 ELEVATION: 1600 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: West adit, Fig. 3 (Assessment Report 9882).

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5667859
 EASTING: 305623

COMMODITIES: Lead Zinc Silver Copper Gold
 Barite

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Barite Chalcopyrite
 Cuprite Malachite Azurite Bornite
 ASSOCIATED: Quartz Calcite Barite Dolomite Siderite
 ALTERATION: Malachite Cuprite Azurite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Concordant Disseminated Massive
 CLASSIFICATION: Volcanogenic Industrial Min.
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Irregular
 DIMENSION:
 COMMENTS: Typical foliation of schists. STRIKE/DIP: 150/48E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
 Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Quartz Sericite Schist
 Chlorite Schist
 Greenschist
 Limestone
 Dolomite
 Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1981
 SAMPLE TYPE: Rock
 COMMODITY GRADE
 Silver 8.9000 Grams per tonne
 Gold 0.1700 Grams per tonne
 Copper 0.1800 Per cent
 Lead 0.9000 Per cent
 Zinc 2.1500 Per cent

REFERENCE: Assessment Report 9882.

CAPSULE GEOLOGY

The property is underlain by Devonian or older rocks of the Eagle Bay Formation consisting of calcareous chlorite-sericite-quartz schist within unit EBG (Map 56). The schists were derived largely from mafic to intermediate volcanic and volcanoclastic rocks. The metavolcanics contain several thin layers of limestone and dolomite, as well as remnant pillow basalt structures. The Tshinakim limestone member lies to the northeast of the property. Mineralization occurs within a conformable northeast dipping zone of grey pyritic and calcareous chlorite-sericite-quartz schists enclosed within darker green chlorite schists of unit EBG (Map 56). The zone is several metres to over 10 metres wide and has been traced

CAPSULE GEOLOGY

intermittently over a strike length of over 4 kilometres (Assessment Report 8942).

Galena-sphalerite-pyrite-chalcopyrite mineralization occurs within carbonate-quartz-barite lenses concordant to the schistosity. The carbonate is mainly dolomite with lesser calcite and siderite. The lenses range up to several metres thick and contain disseminations to massive pods, up to 30 centimetres wide, of galena and sphalerite.

A subjective average value of eleven samples considered to be representative of the mineralized zone is 0.90 per cent lead, 2.15 per cent zinc, 8.9 grams per tonne silver, 0.18 per cent copper and 0.17 grams per tonne gold (Assessment Report 9882).

A second parallel zone of mineralization occurs 500 metres west of the main zone.

BIBLIOGRAPHY

- EM FIELDWORK 1999, pp. 287-296
- EMPR AR *1939-D39; 1953-A101
- EMPR ASS RPT 1783, *2093, *8942, *9882, *11990, 13614, *15568
- EMPR EXPL 1983-157-158; 1985-C103
- EMPR FIELDWORK 1979, pp. 28-36; 1980, pp. 15-23; 1984, pp. 67-76
- EMPR GEM 1969-234
- EMPR MAP *56
- EMPR OF 1999-2
- EMR MP CORPFILE (Camoose Mines Ltd.)
- GSC MAP 48-1963; 5320G
- GSC OF 637
- CMH 1952, p. 146
- GCNL #117, 1983; #216, 1986; #237, 1987; #212, 1989
- Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area
Placer Dome File
Stockwatch Dec. 11, 1987

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 021**

NATIONAL MINERAL INVENTORY: 082M12 U1

NAME(S): **REXSPAR**, BIRCH ISLAND, CLEARWATER,
BLACK DIAMOND, A, B,
BD, F

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:
LATITUDE: 51 33 42 N
LONGITUDE: 119 54 41 W
ELEVATION: 1200 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit to BD zone. See Spar (082M 007) for nearby fluorite zone.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5716305
EASTING: 298205

COMMODITIES: Uranium Thorium Fluorite Rare Earths Lead
 Zinc Molybdenum Copper Tungsten

MINERALS

SIGNIFICANT: Uraninite Uranothorite Torbernite Metatorbernite Thorianite
 Thorite Fluorphlogopite Pyrite Monazite Bastnaesite
 Rutile Galena Sphalerite Molybdenite
COMMENTS: Also chalcopyrite and scheelite.
ASSOCIATED: Pyrite Mica Feldspar Fluorite Calcite
 Celestite Siderite Dolomite
COMMENTS: Also includes barite and quartz.
ALTERATION: Sericite Albite
ALTERATION TYPE: Deuteric Sericitic Carbonate Silicific'n Pyrite
MINERALIZATION AGE: Middle Triassic
ISOTOPIC AGE: 236 Ma DATING METHOD: Potassium/Argon MATERIAL DATED: Fluorphlogopite

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Volcanogenic Syngenetic Replacement Industrial Min.
TYPE: D06 Volcanic-hosted U
SHAPE: Tabular
MODIFIER: Fractured
DIMENSION: 140 x 90 x 15 Metres STRIKE/DIP: 030/25W TREND/PLUNGE:
COMMENTS: BD zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Trachyte
Alkali Feldspar Porphyry
Lithic Tuff
Porphyry Breccia
Breccia
Pyritic Schist

HOSTROCK COMMENTS: Unit EBFt of the Eagle Bay Assemblage (Scharizza and Preto, 1987).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: B REPORT ON: Y
CATEGORY: Measured YEAR: 1977
QUANTITY: 164291 Tonnes
COMMODITY GRADE
Uranium 0.0630 Per cent
COMMENTS: Cutoff grade is 0.021 per cent uranium and a stripping ratio of 2:1.
REFERENCE: Property File - Kilborn Engineering, 1977.

INVENTORY

ORE ZONE: A REPORT ON: Y
CATEGORY: Measured YEAR: 1977
QUANTITY: 490968 Tonnes
COMMODITY GRADE
Uranium 0.0720 Per cent
COMMENTS: Cutoff grade is 0.021 per cent uranium and a stripping ratio of 2:1.
REFERENCE: Property File - Kilborn Engineering, 1977.

ORE ZONE: REXSPAR REPORT ON: Y
CATEGORY: Measured YEAR: 1977
QUANTITY: 1114385 Tonnes
COMMODITY GRADE
Uranium 0.0660 Per cent
COMMENTS: Cutoff grade is 0.021 per cent uranium and a stripping ratio of 2:1.
REFERENCE: Property File - Kilborn Engineering, 1977.

ORE ZONE: BD REPORT ON: Y
CATEGORY: Measured YEAR: 1977
QUANTITY: 459126 Tonnes
COMMODITY GRADE
Uranium 0.0600 Per cent
COMMENTS: Cutoff grade is 0.021 per cent uranium and a stripping ratio of 2:1.
REFERENCE: Property File - Kilborn Engineering, 1977.

CAPSULE GEOLOGY

The area is underlain by northeast striking, moderately northwest dipping felsic to intermediate metavolcanics and minor interlayered metasediments of the Lower Cambrian and older(?) to Mississippian Eagle Bay Formation. The rocks hosting the Rexspar uranium deposits consist of a deformed and metamorphosed pile of alkali feldspar porphyry, porphyry breccia, lithic tuff and breccia of trachytic composition, with occasional pyritic schist of rhyolitic composition. Rocks of this "trachyte" unit are light grey in colour and stained rusty brown or yellow due to widespread pyrite. They may be massive, brecciated, or markedly schistose and lineated. Fractured and sheared crystals of potassium feldspar and albitic plagioclase, and rock chips of trachytic composition occur in a fine-grained groundmass of feldspar and sericite. The trachyte unit, which is 15 to 120 metres thick, is apparently a mixture of intrusive porphyry and its extrusive equivalent tuffs and tuff breccias. It is likely related to a volcanic centre or vent active during the Middle Devonian.

The above unit is structurally underlain by quartz-sericite schist, chlorite schist and dacitic and andesitic volcanic breccia, with interlayers of grey phyllite, slate, chert and sericitic quartzite.

The prominent schistosity, which is parallel to the compositional layering and was probably produced during the first phase deformation, is deformed by tight, recumbent, east trending second-phase folds. These structures are refolded by upright third-phase, northerly to northeasterly trending structures. Subsequent late kinks and prominent north trending tension fractures are commonly followed by post-tectonic felsic and mafic dykes of Cretaceous or later age. High-angle, northerly trending faults sharply control the distribution of the trachyte unit.

Uranium and thorium mineralization occur exclusively in the trachyte unit and mainly in the dark-coloured, upper part of the unit, which shows extensive replacement by silver-grey fluorophlogopite and pyrite, with lesser fluorite and calcite. The replacement zones, a few centimetres to several metres in size, generally occur as coarse-grained segregations, which show conformable and crosscutting relationships and deformation similar to the surrounding rocks. The best grade material occurs in a series of discontinuous, conformable tabular masses or lenses, generally less than 20 metres thick and up to 140 metres long.

The principal radioactive minerals include uraninite, uranothorite, torbenite, metatorbenite, thorianite and uranium thorite. They occur as tiny discrete grains within fluorophlogopite flakes, and cause pleochloric haloes, or are scattered in the pyrite-fluorophlogopite matrix. Uranium and thorium also occur in monazite and niobium ilmenorutile. Rare earths, mainly cerium and lanthanum, occur in bastnaesite and monazite. Other minerals include celestite, galena, sphalerite, chalcopyrite, molybdenite, scheelite, siderite, dolomite, barite and quartz.

CAPSULE GEOLOGY

The geological setting and mineralogy suggest that the mineralized zones were formed by deuteritic, volatile rich fluids during a late-stage in the formation of the trachyte unit. The considerable amount of thorium and widespread rare earths associated with the uranium support its origin as primary rather than secondary.

A potassium/argon age of 236 Ma +/- 8 Ma for fluorophlogopite from one of the mineralized zones is considered a minimum age and used cautiously because of some analytical problems. This Middle Triassic age suggests the mineralization is syngenetic with the host rocks, that is in no way related to the nearby Cretaceous Baldy batholith.

Three main tabular zones of radioactivity occur parallel to the surfaces of the alkali feldspar porphyry and have irregular terminations above and below.

The BD or Black Diamond zone is a flat-dipping lens with a strike length of 140 metres, dip-slope length of 90 metres and an average thickness of 15 metres. A 1.8 metre sample across part of the zone assayed 0.09 per cent uranium, 0.14 per cent thorium oxide, 0.025 per cent niobium and trace yttrium and lanthanum (Minister of Mines Annual Report 1954). The zone lies along the upper surface of the porphyry and the radioactivity appears to be mainly associated with uranothorite, associated with rutile.

The A zone, 600 metres east-northeast of the BD zone, is a shallow dipping (12 degrees) irregular lens averaging 15 metres thick which has been traced along strike for about 60 metres. It pinches out at a slope depth of about 60 metres and appears to occur at a lower horizon in the porphyry mass. A 1.8 metre sample across the zone assayed 0.07 per cent uranium, 0.06 per cent thorium oxide, 0.015 per cent niobium and trace yttrium, lanthanum and cerium (Minister of Mines Annual Report 1954). The principal radioactive mineral is uraninite associated with rutile.

The B zone, 360 metres north-northeast of the BD zone, averages 8 metres wide, strikes about 60 metres and has a dip-slope length of about 75 metres.

Ore reserves for the three zones outlined by polygons within the proposed pit limits as defined by a cutoff grade of 0.021 per cent uranium are 1,114,385 tonnes grading 0.066 per cent uranium with an overall stripping ratio of 12:1 (Property File - Kilborn Engineering, 1977). The ore zones also grade 5 to 10 per cent fluorite (Property File - Wright Engineers, 1975).

Smaller zones occurring in relation to the BD zone include the F zone, 450 metres to the west, the H zone, 600 metres to the north-northeast, and the G zone (082M 022), 1420 metres to the northeast.

The Fluorite zone (082M 007) lies about 550 metres northeast of the BD zone and contains no uranium reserves.

In 1926 Smuggler Hill Development Company was formed to explore and develop silver and lead deposits (Smuggler, 082M 023 and Foghorn, 082M 029), which were originally staked in 1918 by A.G. McDonald. The results of this early exploration activity were reported by H.G. Nicol, 1926 and D.B. Starrett, 1930. A manganese occurrence was examined by W. Elliot and N.C. Stines in 1929 (Smuggler Manganese, 082M 158). Further geological examinations of fluorite occurrences were reported on by D.B. Starrett, R.P.D. Graham and M.R. Wilson in the early 1940's (Spar, 082M 007). The ground was relocated in 1942 by Ole Johnson and the B.C. Fluospar Syndicate developed the fluorite deposit in 1943. The property was leased by A.E. Sjoquist and optioned in 1951 by Technical Mine Consultants who conducted an extensive exploration and development program for Rexspar Uranium and Metals Mining Co. Ltd.

The presence of uranium mineralization became known in late 1949. Dr. F.R. Joubin studied and reported on the mineral occurrences during 1950 and 1951. Rexspar Uranium, later reorganized as Consolidated Rexspar Minerals and Chemicals Ltd., acquired the rights to mineral claims incorporating the uranium bearing zones and delineated three uranium deposits in the late 1950's. However, the deposits were not brought into production. Denison Mines Ltd. resampled and undertook an economic feasibility study in 1969. Exploration programs and geological reviews were conducted in 1969-1972, directed mainly at determining fluorite reserves. Additional diamond drilling of the uranium bearing zones was carried out in 1976 and the drill core was used in a metallurgical test program undertaken to establish process flowsheets.

The Fluorite deposit and the three uranium deposits have been outlined by fairly close spaced diamond drilling and by surface sampling. A total of 368 surface and underground holes have been drilled from 1943 to 1976, for a total of approximately 17,280 metres. Of these, 121 holes were on the "A" deposit, 81 on the "B" deposit, 125 on the "BD" deposit and most of the others on the fluorite deposit. Drifts, cross cuts and raises for a total of 664

CAPSULE GEOLOGY

metres were driven in the "A" and "BD" uranium zones. The property has been prospected several times over the years. Geological mapping, radiometric surveying, soil sampling and metallurgical testing have also been performed. Work conducted by Placer Development Ltd. during October, 1981, included ground magnetometer and VLF - EM surveys.

In 1987, Consolidated Rexspar changed its name to Conrex Corporation and sold the property in 1988 to Gold Ventures Limited. American Bullion Minerals Ltd. attempted to get a permit to do exploration on the main fluorite zone in the early 1990's.

BIBLIOGRAPHY

- EMPR AR 1953-101-102; *1954-108-111; 1955-38-39; 1956-70-71;
1957-31-32; 1968-164
EMPR ASS RPT 1737, 1912, 1913, 2337, 2338, 2339, 2340, *4957, 5697,
6064, 6106, 8066, 10207, *10934
EMPR EXPL 1980-144-145; 1982-122-123
EMPR FIELDWORK *1977, pp. 19-22; 1985, p. 93; 1988, pp. 474-476
EMPR GEM 1969-229; 1970-301-302; 1972-92; 1973-117; 1975-58;
1976-73
EMPR GEOLOGY *1977-1981, pp. 44-56
EMPR MAP 53; 56; 65, 1989
EMPR OF 1986-5; *1990-32; 1992-1; 1992-9; 1992-16
EMPR P *1979-6, pp. 37-43; 1987-2, p. 62
EMPR PF (Reports by Wright Engineers Ltd. (Reserves), March 1975;
*Avison, A.T. (1977): Consolidated Rexspar Minerals and Chemicals
Limited 1976 Summary Report (Drilling and Metallurgical); *Kilborn
Engineering (B.C.) Ltd. and B.C. Research (Environmental), March
1977; P. Pisani (Drill Sections), January 1970; Consolidated
Rexspar Minerals & Chemicals Limited, Annual Reports 1975-1977 and
Prospectus 1976; Maps by P. Pisani, 1970; S.S. Gandhi, 197?;
Kilborn Engineering; *Ferguson, A.B. (1952): Progress Report 1952
Field Season, Rexspar Uranium & Metals Mining Co. Ltd.; Campbell,
S.W. (1982): Diamond Drilling Report on Rexspar Property; Dept. of
Fisheries & Environment, November 1977: A Commentary on the
Consolidated Rexspar Minerals & Chemicals Ltd. Birch Island
Uranium Mining Proposal; Various letters, memos and newspaper
articles, December 1975-September 1978; McCammon, J.W. (1963):
Preliminary Report on the Geology of the Surface Cuts on the
Fluorite Zone at Rexspar Mining Property)
EMR MR 181 (1978) p. 37; 223 B.C. 76
EMR MP CORPFILE (Consolidated Rexspar Minerals & Chemicals Limited;
Denison Mines Limited)
GSC ECON GEOL 16, p. 44; 16(2nd Ed.), pp. 205-207
GSC OF 551; 637
GSC P *70-48, pp. 90-91; 78-1B, pp. 137-140
Bates, D.V., Murray, J.W. and Raudsepp, V. (1980): Royal Commission
of Inquiry, Health and Environmental Protection, Uranium Mining,
Commissioner's Report, October 30, 1980, Volume 1, pp. 34-35
BCPG Dec. 1977, Vol.25, No.6, pp. 1222-1249
CANMET IR 125/52; 246/54
CANMET RPT 3185
CIM *Dec. 1978, pp. 62,63,82-88; *Congress Volume, pp. 85-88 (Joubin,
F.R. and James, D.H. 1957): Rexspar Uranium Deposits, in
Structural Geology of Canadian Ore Deposits, Vol. 2; Special Volume
*33, pp. 305-308 (Descarreau, J. 1986)
CMH 1986-87, p. 109; 1988-89, pp. 120, 207
CMJ July 1956, Vol.77 No.7, pp. 59-60
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area
GCNL #165, 1976; #167, 1978
IAEA 1985 Vol. ST1/PUB/690 - Uranium in Volcanic Rocks, pp. 321-325
Mining Journal (London) *Oct.3, 1975
N MINER April 8, June 3, June 14, Sept.9, 1976; Feb.3, June 9, Nov.
24, Dec.15, 1977; May 25, Aug.24, Sept.21, 1978; July 19, 1979;
Feb.4,18, 1982; Jun.29, Oct.12, 1987
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11
W MINER 1954, Vol.27, No.12, pp. 40-42; 1955, Vol.28, No.10, pp. 54-
58; Feb. 1979, p. 18
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **G ZONE**, REXSPAR

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 34 20 N
LONGITUDE: 119 54 02 W
ELEVATION: 1000 Metres

NORTHING: 5717448
EASTING: 299002

LOCATION ACCURACY: Within 500M

COMMENTS: G zone (Property File -Report and Map by P. Pisani, 1970, in Rexspar - 082M 021).

COMMODITIES: Molybdenum Uranium Thorium Fluorite

MINERALS

SIGNIFICANT: Molybdenite Uraninite Uranothorite Fluorite Pyrite

ASSOCIATED: Mica

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic Syngenetic Industrial Min.
TYPE: D06 Volcanic-hosted U
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Devonian-Mississipp.

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Feldspar Porphyry
Lithic Tuff
Breccia
Trachyte
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1970

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Fluorite

9.2000

Per cent

Molybdenum

0.2300

Per cent

Uranium

0.0160

Per cent

REFERENCE: Property File, Report by P. Pisani, 1970.

CAPSULE GEOLOGY

The area is underlain by a "trachytic" unit of alkali-feldspar porphyry, lithic tuff, tuff breccia and pyritic schist of Unit EBft of the Devonian to Mississippian part of the Eagle Bay Assemblage. The trachytic unit is structurally underlain by quartz-sericite schist, chlorite schist and interlayered metasediments. High-angle northerly trending faults sharply control the distribution of the trachyte unit.

Molybdenite, fluorite, uranium and thorium minerals, likely uraninite and uranothorite, occur in the trachytic unit mainly associated with pyrite and mica. Drilling intersected 0.230 per cent MoS2 over 6 metres in one hole and 0.014 per cent uranium over 6.7 metres and 9.2 per cent CaF2 over 3 metres in a hole 100 metres to the northeast. A further 400 metres to the northeast a hole intersected 0.16 per cent ThO2 over 6 metres and another hole intersected 0.014 per cent uranium over 17.6 metres (Property File, Report by P. Pisani, 1970).
See Rexspar (082M 021).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 611
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 4032, 4957
EMPR FIELDWORK 1988, pp. 474-476
EMPR OF 1992-16
EMPR P 1987-2
EMPR PF (RPT and MAP by P. Pisani, 1970; see Rexspar (082M 021))
GSC EC GEOL #16
GSC OF 551; 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/16

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 023**

NATIONAL MINERAL INVENTORY: 082M12 Pb2

NAME(S): **SMUGGLER, REXSPAR**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

Underground

MINING DIVISION: Kamloops

LATITUDE: 51 34 10 N
LONGITUDE: 119 54 44 W
ELEVATION: 1160 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Smuggler No. 1 Claim (L.5389).

UTM ZONE: 11 (NAD 83)

NORTHING: 5717172
EASTING: 298182

COMMODITIES: Lead Silver Zinc Gold

MINERALS

SIGNIFICANT: Galena Pyrite Pyrrhotite
ASSOCIATED: Quartz
ALTERATION: Limonite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian Undefined Group Eagle Bay

LITHOLOGY: Quartz Sericite Schist
Chlorite Schist
Quartzite
Phyllite
Slate
Chert

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1927
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 82.3000 Grams per tonne
Lead 7.4000 Per cent
Zinc 1.0000 Per cent
COMMENTS: Trace gold.
REFERENCE: Annual Report 1927.

CAPSULE GEOLOGY

Underlying rocks are quartz-sericite schist and chlorite schist with interlayers of phyllite, slate, chert and sericitic quartzite of the Devonian part of the Eagle Bay Formation. The rocks dip shallowly to the north.

Quartz veins and fractures contain minor galena and pyrite. A 35 centimetre sample across a seam assayed 7.4 per cent lead, 1 per cent zinc, 82.3 grams per tonne silver and trace gold (Annual Report 1927).

BIBLIOGRAPHY

EMPR AR 1924-151; 1926-187,443; *1927-191; 1929-223-224; 1930-192; 1931-107; 1949-251
EMPR ASS RPT 1737, 1912, 1913, 2337-2340, 4957, 10207
EMPR GEM 1970-301-302; 1973-117
EMPR INDEX 3-214
EMR MP CORPFILE (Consolidated Rexspar Minerals & Chemicals Limited)
GSC MAP 48-1963
GSC OF 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 613
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT *1930, pp. 146-147

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/16

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **GC**, AMA

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 25 N
LONGITUDE: 118 23 34 W
ELEVATION: 1890 Metres

NORTHING: 5651520
EASTING: 402286

LOCATION ACCURACY: Within 500M

COMMENTS: (Assessment Report 1794) Fig. 4.

COMMODITIES: Gemstones Lithium

MINERALS

SIGNIFICANT: Tourmaline Feldspar Lepidolite Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Pegmatite Magmatic
TYPE: O01 Rare element pegmatite - LCT family
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Mica Schist
Quartz Feldspar Tourmaline Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence lies within cover rocks south of the Frenchman Cap Dome on Tonkawatla Ridge.
A pegmatite of coarse-grained quartz, feldspar and black tourmaline is hosted by a mica (lepidolite) schist.

BIBLIOGRAPHY

EMPR ASS RPT *1794
EMPR BULL 57, pp. 37,58
EMPR MAP 43
GSC MAP 12-1964; 4404G
GSC P 64-32

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/21

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 025**

NATIONAL MINERAL INVENTORY: 082M4 Ag1

NAME(S): **HOMESTAKE (L.827)**, HOMESTAKE MINE, KAMAD

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M04W
BC MAP:

Underground

MINING DIVISION: Kamloops

LATITUDE: 51 06 40 N
LONGITUDE: 119 49 44 W
ELEVATION: 668 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5665987
EASTING: 301989

LOCATION ACCURACY: Within 500M

COMMENTS: "Barite bluff" (Fig. 7-7, Fieldwork 1985).

COMMODITIES: Silver Lead Zinc Gold Copper
 Barite Mica

MINERALS

SIGNIFICANT: Barite Tetrahedrite Galena Sphalerite Pyrite
 Chalcocopyrite Argentite Silver Pyrrargyrite Gold
 Muscovite
ASSOCIATED: Barite Quartz
ALTERATION: Sericite Chlorite Talc Muscovite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: Metres STRIKE/DIP: 115/20N TREND/PLUNGE:
COMMENTS: Attitude of host schist.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Quartz Talc Sericite Schist
 Sericite Quartz Phyllite
 Sericite Chlorite Quartz Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: HOMESTAKE REPORT ON: Y
CATEGORY: Indicated YEAR: 1982
QUANTITY: 249906 Tonnes
COMMODITY GRADE
Silver 226.6000 Grams per tonne
Gold 0.5800 Grams per tonne
Barite 36.7000 Per cent
Copper 0.2800 Per cent
Lead 1.2400 Per cent
Zinc 2.1900 Per cent

COMMENTS: Probable.

REFERENCE: Statement of Material Facts 06/06/86, Kamad Silver Company Ltd.

CAPSULE GEOLOGY

The Homestake deposit is hosted by quartz-talc-sericite schists, sericite-quartz phyllite and sericite-chlorite-quartz phyllite derived from felsic to intermediate volcanic rocks (Unit EBA) of the Lower Cambrian and older(?) to Mississippian Eagle Bay Formation. The rocks are overlain by intermediate to felsic volcanic and volcanoclastic rocks (Unit EBF) which hosts the Rea Gold deposit (082M 191), 4 kilometres north. These units are overlain by metasedimentary rocks consisting of argillites, siltstones and grits, which are structurally overlain, to the east by mafic volcanic rocks (Unit EBG) (see Map 56 for unit descriptions).

The deposit lies on the southern limb of a northwest trending,

CAPSULE GEOLOGY

tight, overturned syncline. An east dipping thrust fault is inferred to separate the felsic to intermediate metavolcanics and the more mafic metavolcanics to the east.

Several barite lenses with variable amounts of sulphides occur near the top of a bleached, rusty-yellowish weathered zone of pyritic sericite-quartz schist interpreted to be a highly altered, felsic tuff. The schistosity and compositional layering dip at shallow to moderate angles to the northeast.

The main mineralized areas occur as two tabular horizons separated by 4 to 5 metres of schist. The largest, called the "barite bluff", is 5 to 6 metres wide on surface and contains most of the sulphides. A lower horizon, 1 to 2 metres thick, is banded with only minor sulphides. Underground, the barite-sulphide lenses have been traced several hundred metres.

The main horizon consisting of massive to banded barite, metallic minerals and quartz-sericite are cut by veins and lenses of quartz. The metallic minerals include tetrahedrite, galena, sphalerite, pyrite, chalcopyrite, argentite, native silver and trace ruby silver and native gold. The base-metal deposit has an extremely large sericite mica envelope.

Several small sulphide lenses, known as the Victory Group, were intersected by old workings at 600, 1700 and 2100 metres respectively, southeast of the Homestake deposit (Property File - Stevenson, 1936b).

Twelve hundred metres northwest of the Homestake deposit, old workings intersected several conformable quartz lenses with pyrite, chalcopyrite, galena and sphalerite. These showings were known as the Silver King and Silver Queen (Minister of Mines Annual Report 1936).

Bands, up to 600 metres wide, of sericite and quartz-sericite extend for up to 7 kilometres from Squam Bay northwest. The sericite schist is fine-grained, fissile and weathers yellow due to ferric sulphate coating. Nodules of augen-like quartz give the rock a mottled appearance (Z.D. Hora, personal communication, 1990). X-ray diffraction analyses in 1987, by the Ministry of Energy, Mines and Petroleum Resources found talc to be a component in a number of samples of quartz-sericite schist. This deposit is a major potential sericite-mica resource in British Columbia.

Probable reserves are 249,906 tonnes grading 226.6 grams per tonne silver, 36.7 per cent barite, 0.28 per cent copper, 1.24 per cent lead, 2.19 per cent zinc and 0.58 grams per tonne gold (Statement of Material Facts 06/06/86, Kamad Silver Company Ltd.). Caving occurs in unsupported ground. Test milling in 1981 was completed for flow sheet design.

The large sericite envelope of the deposit represents a metamorphosed alteration zone that is of potential interest as a source of mica and may contain substantial reserves of fine-grained muscovite within the sericite schist.

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 297-306
EMPR AR 1893-1068-1069; 1894-751; 1895-696; 1897-575; 1902-191;
1913-208; 1917-221-223,236; 1918-236; 1922-147; 1923-170;
*1924-154-157; 1925-171; 1926-185; *1927-201-204,403; 1929-
218; 1935-A24,G46; *1936-D32-36,G48; 1937-A35; 1941-24,58;
1942-57; 1943-61; 1947-203; 1964-99
EMPR ASS RPT *2915
EMPR FIELDWORK 1978, pp. 36-37; 1979, pp. 28-36; 1984, pp. 67-76;
1985, pp. 59-68
EMPR GEM 1969-234; 1970-317; 1971-437; 1972-86; 1973-114; 1974-96
EMPR MAP 56; 65 (1989)
EMPR OF 1988-19, p. 69; 1992-1; 1992-9; 1998-9; 1998-10; 1999-2;
1999-14; 2000-31
EMPR PF (Richmond, A.M. (1932): Barite in British Columbia, Non-
Metallic Mineral Investigations Report No. 1, pp. 13-14;
*Stevenson, J.S. (1936b): Special Report, Victory Group;
*Stevenson, J.S. (1936c): Special Report, Silver King and Silver
Queen Group; *Goring, A.W. (1974): Private Report on Homestake
Mine)
EMR MIN BULL 223 B.C. 70
EMR MP CORPFILE (Kamloops Homestake Mines, Limited; Allied Mines
Ltd.; Taylor (Bride River) Mines, Limited; Kamad Silver Co. Ltd.;
Canadian Reserve Oil and Gas Ltd.)
GSC MAP 48-1963; 5320G
GSC OF 637
GSC P 91-1A, pp. 27-31
GSC SUM RPT 1894, p. 21A; *1921, Pt. A, pp. 103-104
CANMET IR 493; 711; 774
CMH 1983-84, p. 181
FIN POST Survey of Mines (1963), p. 81

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 617
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL #271, 1969; July 22, 1971; Nov.29, 1978; #132, 1979; #244, 1985;
#206, 1989
N MINER Dec.25, 1980; Dec.9, 1985; Nov.27, 1989
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): *Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 618
REPORT: RGEN0100

MINFILE NUMBER: **082M 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **BIRMOLY, JANE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

LATITUDE: 51 22 50 N
LONGITUDE: 119 57 04 W

ELEVATION: 2100 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description (Assessment Report 1938).

COMMODITIES: Molybdenum

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

NORTHING: 5696279

EASTING: 294640

MINERALS

SIGNIFICANT: Molybdenite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated

CLASSIFICATION: Unknown

TYPE: L05 Porphyry Mo (Low F- type)

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous			Baldy Batholith

LITHOLOGY: Quartz Monzonite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

Disseminated molybdenite occurs in a 122 metre northwest trending zone within quartz-monzonite or granodiorite of the Cretaceous Baldy Batholith.

BIBLIOGRAPHY

EMPR ASS RPT 1938
EMPR GEM 1969-232
EMPR OF 2000-7
GSC MAP 48-1963

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 026**

MINFILE NUMBER: **082M 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **RIP**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 14 30 N
LONGITUDE: 118 43 24 W
ELEVATION: 2050 Metres

NORTHING: 5678111
EASTING: 379708

LOCATION ACCURACY: Within 500M

COMMENTS: Sample 14-2 location, p. 18, GSC Paper 71-29, pp. 16-19.

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrrhotite Pyrite
ASSOCIATED: Nepheline Biotite Zircon Calcite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated
CLASSIFICATION: Pegmatite

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Nepheline Gneiss
Quartzite
Pelite
Pegmatite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area lies within the Shuswap Complex along the western margin of the Frenchman Cap Dome. The core of the dome rocks are probable Archean Age paragneiss and orthogneiss. Lying unconformably on the dome are a succession of metasedimentary quartzites and pelites and concordant nepheline syenite gneisses.

Molybdenite occurs disseminated in nepheline and pegmatite dykes which intrude biotite schists and gneisses. Limonite staining is associated with pyrite and pyrrhotite.

BIBLIOGRAPHY

EMPR GEM 1969-337; *1970-464
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
GSC P 64-32; 71-29, pp. 16-19
CJES V. II, pp. 304-318, (McMillan, W.J., Moore Jr., J.M. (1974):
Gneissic Alkaline Rocks and Carbonatites in the Frenchman's Cap
Gneiss Dome, Shuswap Complex, B.C.)
GAC Special Paper No. 6, 1970, pp. 87-98

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **TIM**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 49 50 N
LONGITUDE: 119 56 50 W
ELEVATION: 1800 Metres

NORTHING: 5746300
EASTING: 296930

LOCATION ACCURACY: Within 500M
COMMENTS: Drilling area, map (Property File).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
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-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Schist
Gneiss
Greenalite Rock

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by metasedimentary schists and gneisses of the Shuswap Metamorphic Complex intruded by granitic rocks. Molybdenite occurs in the metasediments.

BIBLIOGRAPHY

EMPR AR 1968-166
EMPR PF (*Secondo Mining Ltd. (1968): Claim, Geochemistry, Drilling Location Map)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 029**

NATIONAL MINERAL INVENTORY: 082M12 Ag1

NAME(S): **FOGHORN, GOPHER**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

Underground

MINING DIVISION: Kamloops

LATITUDE: 51 32 05 N
LONGITUDE: 119 57 14 W
ELEVATION: 1980 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5713427
EASTING: 295139

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone, Dwg. 193-4 (Assessment Report 7813).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Argentite Chalcopyrite Pyrite

ASSOCIATED: Pyrrhotite

QUARTZ: Quartz

ALTERATION: Chlorite Feldspar Sericite Mica Limonite

ALTERATION TYPE: Chloritic Sericitic Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Massive
CLASSIFICATION: Volcanogenic Epigenetic

SHAPE: Irregular

MODIFIER: Sheared

DIMENSION: 0400 x 0150 Metres

STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian-Mississipp. Undefined Group Eagle Bay

LITHOLOGY: Quartz Sericite Schist
Phyllite
Chert
Vein
Chlorite Sericite Schist
Basalt
Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver 10.6500 Grams per tonne

Gold 0.3400 Grams per tonne

Copper 1.0600 Per cent

Lead 36.4500 Per cent

Zinc 12.5500 Per cent

COMMENTS: Eight to twenty centimetre wide vein.

REFERENCE: Assessment Report 7813.

CAPSULE GEOLOGY

Foghorn Mountain is underlain by metavolcanics derived largely from intermediate crystal-lithic tuffs and porphyritic flows of the Devonian to Mississippian part of the Eagle Bay Formation. The rocks are pale to medium green chlorite-sericite schist, quartz-sericite schist, chert, phyllite and sericitic quartzite. These comprise a relatively flat lying plate, occurring as a gentle north-plunging synform. To the west, separated by an east-dipping thrust fault, are basalt, gabbro, chert and minor sediments of the Pennell Formation. The Middle Cretaceous Baldy Batholith lies to the south.

The mineralized zone, measuring 400 by 150 metres and trending 030 degrees contains several narrow discontinuous steeply dipping

CAPSULE GEOLOGY

quartz veins with spotty to sub-massive lenses of galena, sphalerite and lesser chalcopyrite, pyrite, argentite and pyrrhotite. The veins are 5 to 20 centimetres wide, seldom exceed a few metres in length and generally strike 040 degrees. Occasionally, intersecting shear zones or breccia zones show areas of wider mineralization. A selected sample of an 8 to 20 centimetre wide vein containing massive galena and sphalerite assayed 36.45 per cent lead, 12.55 per cent zinc, 1.06 per cent copper, 10.65 grams per tonne silver and 0.34 grams per tonne gold (Assessment Report 7813).

In the mineralized zone, alteration shows a distinctive buff to orange-brown colour to the host phyllites and quartz-sericite schists and bright orange-brown limonite is common along fracture planes. A sample of the host rock in the zone of alteration and veining, which contained no visible mineralization, assayed 0.48 per cent lead, 11.0 grams per tonne silver and 0.048 per cent copper (Assessment Report 7813).

BIBLIOGRAPHY

- EMPR AR 1913-212; 1915-211; *220-221; 1916-266,518; 1917-236,450;
1924-150; 1958-30
EMPR ASS RPT *4876, 7404, *7813, 11381
EMPR EXPL 1979-114-115; 1983-168
EMPR FIELDWORK 1984, pp. 67-76; 1985, pp. 89-94
EMPR GEM 1970-302; 1974-98
EMPR GEOL 1977-1981, p. 55, Fig. 18
EMPR MAP 53; 56
EMPR OF 1986-5
EMPR PF (Map by G.C. Singhai; Foghorn Mountain Property, April 29,
1988, Prospectus, Gold Spring Resources Ltd.)
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT 1930, pp. 143-144
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/10

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 030**

NATIONAL MINERAL INVENTORY: 082M12 Cu2

NAME(S): **SHAMROCK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5713798
EASTING: 297469

LATITUDE: 51 32 20 N
LONGITUDE: 119 55 14 W
ELEVATION: 1600 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein showing, (Property File -Geology Map by Pisani, 1970);
Fig. 10 (GSC Summary Report 1930).

COMMODITIES: Lead Silver Gold

MINERALS

SIGNIFICANT: Galena Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 040/30N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Devonian

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Sericite Schist
Quartzite
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1924

Silver
Gold
Lead

GRADE

2331.0000 Grams per tonne
1.4000 Grams per tonne
26.0000 Per cent

REFERENCE: Annual Report 1924, page 152.

CAPSULE GEOLOGY

The area is underlain by the Devonian part of the Eagle Bay Formation consisting of northeast trending quartz-chlorite-sericite schist and quartzite which are cut by porphyry dykes. Several concordant quartz veins contain pyrite. A showing of galena was reported in the area and a sample assayed 26 per cent lead, 2331 grams per tonne silver and 1.4 grams per tonne gold (Annual Report 1924).

BIBLIOGRAPHY

EMPR AR 1917-236; 1924-152
EMPR ASS RPT 7404
EMPR PF (Geology Map by P. Pisani, 1970)
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT *1930, pp. 145-146

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/08

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 031**

NATIONAL MINERAL INVENTORY: 082M12 Pb3

NAME(S): **MINNESOTA GIRL**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 33 15 N
LONGITUDE: 119 54 39 W
ELEVATION: 1320 Metres

NORTHING: 5715469
EASTING: 298210

LOCATION ACCURACY: Within 500M

COMMENTS: Showing on Geology Map by Pisani (Property File).

COMMODITIES: Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Pyrrhotite
ASSOCIATED: Ankerite Feldspar Quartz Calcite
ALTERATION: Ankerite Calcite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Feldspar Porphyry
Quartzite
Quartz Sericite Schist
Tuff
Trachyte

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DUMP REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1923
SAMPLE TYPE:	Rock		
COMMODITY		GRADE	
Silver		137.0000	Grams per tonne
Gold		0.7000	Grams per tonne
Lead		1.5000	Per cent
Zinc		5.0000	Per cent

COMMENTS: Sample taken from dump.
REFERENCE: Annual Report 1923, page 155.

CAPSULE GEOLOGY

A "trachytic" unit of alkali-feldspar porphyry, lithic tuff, tuff breccia and pyritic schist is structurally underlain by quartz-sericite schist and chlorite schist with interlayered metasediments of the Devonian to Mississippian part of the Eagle Bay Formation. Widely spaced quartz stringers carrying galena, sphalerite, pyrite and pyrrhotite occur in the trachyte unit. A sample from a dump assayed 5 per cent zinc, 1.5 per cent lead, 137 grams per tonne silver and 0.7 grams per tonne gold (Annual Report 1923).

BIBLIOGRAPHY

EMPR AR *1923-155; 1924-152; 1926-187-188; 1927-191; 1929-224; 1930-193
EMPR ASS RPT 1737, 1912, 1913, 2337-2340, 10207
EMPR PF (Rpt and Map by P. Pisani, 1970; Map by S.S. Gandhi, 197?)
GSC MAP 48-1963
GSC OF 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 625
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT *1930, p. 146

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/16

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 032**

NATIONAL MINERAL INVENTORY:

NAME(S): **TINKIRK**, NOBLE, LAST CHANCE

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 36 10 N
LONGITUDE: 119 46 44 W
ELEVATION: 920 Metres

NORTHING: 5720518
EASTING: 307561

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Map 1986/5 (Open File); Tinkirk adit, south facing slope of Mount McClennan east of Peavine Creek. Figure 4 (Assessment Report 15817).

COMMODITIES: Silver Gold Lead

MINERALS

SIGNIFICANT: Pyrite Galena
ASSOCIATED: Calcite Ankerite
ALTERATION: Calcite Ankerite
ALTERATION TYPE: Quartz-Carb.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 135/90E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

MATERIAL DATED: Archaeocyathids

LITHOLOGY: Schist
Limestone
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1922

SAMPLE TYPE: Rock

COMMODITY

Silver

GRADE

13.7000

Grams per tonne

Gold

20.6000

Grams per tonne

REFERENCE: Annual Report 1922, page 145.

CAPSULE GEOLOGY

The area is underlain by Lower Cambrian part of the Eagle Bay metavolcanics consisting of chlorite schist and greenstone and a conformable north-west trending band of limestone.

Quartz veins, containing seams, about 3.8 centimetres wide, mineralized with pyrite and galena, occur in the schists. A sample of one of the veins assayed 20.6 grams per tonne gold and 13.7 grams per tonne silver (Annual Report 1922). A sample of vein material from the dump at the adit entrance assayed 0.045 per cent copper, 0.047 per cent zinc, 0.23 per cent lead and 76.0 grams per tonne silver (Assessment Report 15817).

BIBLIOGRAPHY

EMPR AR 1917-236; *1922-145; 1923-155
EMPR ASS RPT *12080, *15817
EMPR EXPL 1983-169
EMPR GEM 1969-228; 1970-296
EMPR OF 1986-5
EMPR PF (Claim Sketch Maps, 1963, 1966)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 627
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637
GSC MAP 48-1963
GSC SUM RPT 1930A, p. 152
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEARSDEN**, NIMSIC, NOBLE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5721382
EASTING: 305187

LATITUDE: 51 36 35 N
LONGITUDE: 119 48 49 W
ELEVATION: 1140 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Symbol, Map 1986/5 (Open File).

COMMODITIES: Silver Lead Copper Gold

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite
COMMENTS: Probable minerals.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Graphitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Shuswap Highland	
TERRANE: Kootenay		
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by Lower Paleozoic Eagle Bay metasediments consisting of chlorite-sericite-quartz schist and black graphitic schist. A northeast trending fault cuts the schist.
A quartz vein apparently carries silver, gold, copper and lead mineralization. An unknown sample type assayed 0.34 grams per tonne gold, 295 grams per tonne silver and 11.26 per cent lead (Old Mineral Deposit Inventory Form in Property File).

BIBLIOGRAPHY

EMPR ASS RPT 6603, 12080
EMPR EXPL 1977-101; 1983-169
EMPR GEM 1969-228
EMPR OF 1986-5
GSC MAP 48-1963
GSC OF 637
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 034**

NATIONAL MINERAL INVENTORY: 082M12 U2

NAME(S): **BULLION, CROWN, G ZONE,**
REXSPAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:
LATITUDE: 51 34 30 N
LONGITUDE: 119 51 39 W
ELEVATION: 550 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit, Fig. 196C-3 (Assessment Report 7503);
See Rexspar - 82M 021.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5717649
EASTING: 301767

COMMODITIES: Uranium Thorium

MINERALS

SIGNIFICANT: Pyrite Uraninite Uranothorite Galena Chalcopyrite
COMMENTS: Possible uranium-thorium minerals present.
ALTERATION: Hematite Limonite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: D06 Volcanic-hosted U

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE: Devonian-Mississipp. GROUP: Undefined Group FORMATION: Eagle Bay IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Trachyte
Feldspar Porphyry
Chlorite Sericite Schist
Phyllite

HOSTROCK COMMENTS: Unit EBft of the Eagle Bay Assemblage (Scharizza and Preto, 1987).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1970
SAMPLE TYPE: Rock
COMMODITY: GRADE: Per cent
Thorium 0.0900 Per cent
Uranium 0.0320 Per cent

COMMENTS: The sample width is 2.0 metres.
REFERENCE: Property File: Report and map by P. Pisani, 1970.

CAPSULE GEOLOGY

A north trending fault along Lute Creek separates metavolcanics consisting of chlorite-sericite schist derived from porphyritic flows and tuffs, to the east and phyllite, overlain by feldspar porphyry and trachyte, to the west. The trachyte, which is unit EBft of the Eagle Bay Assemblage (Scharizza and Preto, 1987), contains a radioactive zone with uranium-thorium minerals, pyrite and minor galena and chalcopyrite.

About 800 metres to the west, a drill hole intersected 10 metres of trachyte with low to medium radioactivity. A 1.5 metre sample assayed 0.027 per cent uranium and 0.09 per cent ThO2 (Property File, Report and Map by P. Pisani, 1970).

BIBLIOGRAPHY

EMPR AR 1954-110; 1958-30; *1968-164
EMPR ASS RPT 5502, *7503, 7647, 10627
EMPR EXPL 1975-58; 1977-100; 1979-115; 1982-122
EMPR FIELDWORK 1985, p. 93; 1988, pp. 474-476
EMPR GEM 1969-229
EMPR P 1979-6, p. 38; 1987-2, p. 62

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 630
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (RPT and MAP by P. Pisani, 1970, in Rexspar File)
EMR MP CORPFILE (Deer Horn Mines Limited; Consolidated Rexspar
Minerals & Chemicals Limited)
GSC EC GEOL #16
GSC MAP 48-1963
GSC OF 551; 637
GCNL #69, 1976

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/19

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **BIG CHIEF**, CHIEFTAIN, DREADNOUGHT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 35 50 N
LONGITUDE: 119 46 34 W
ELEVATION: 731 Metres

NORTHING: 5719893
EASTING: 307730

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, Claim Sketch Maps 1966, 1967 (Property File).

COMMODITIES: Lead Silver Copper Gold

MINERALS

SIGNIFICANT: Galena Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Schist
Phyllite
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by chlorite schist and greenstone of Lower Cambrian age and phyllite with intercalated sediments of Mississippian age, both of the Eagle Bay Formation.

Quartz veins within the schist and phyllite carry galena and probably pyrite, chalcopyrite, and gold.

BIBLIOGRAPHY

EMPR AR *1913-214-215; 1968-164
EMPR OF 1986-5
EMPR PF (Claim Sketch Maps 1966, 1967)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEONIE** BRENDA, SONJA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5720123
EASTING: 301767

LATITUDE: 51 35 50 N
LONGITUDE: 119 51 44 W
ELEVATION: 700 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Showings, Map 3 (Assessment Report 436).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Magnetite
ASSOCIATED: Quartz
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Sericite Schist
Sericite Quartz Phyllite
Granitic Sill
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by metavolcanics and metasediments of the Devonian part of the Eagle Bay Formation. The rocks include sericite-quartz phyllite, chlorite-sericite-quartz schist and minor limestone. A foliated granitic sill cuts the schists, which are altered and silicified near the contact.

Galena, sphalerite and chalcopyrite occur in the altered rocks within 30 to 100 metres of the contact. Chalcopyrite is closely related to quartz vein material and copper values occur with a 1.2 to 1.8 metre wide elongated magnetite dike.

BIBLIOGRAPHY

EMPR AR 1968-163
EMPR ASS RPT *436
EMPR EXPL 1978-114; 1979-113-114
EMPR GEM 1972-91-92
EMPR OF 1986-5
EMPR PF (Claim Map, 1967)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **ELVA, B.C.**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 35 50 N
LONGITUDE: 119 51 29 W
ELEVATION: 690 Metres

NORTHING: 5720112
EASTING: 302056

LOCATION ACCURACY: Within 500M

COMMENTS: Descriptions and Sketch Map (Annual Report 1913).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Galena Pyrite Magnetite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Unknown

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Phyllite
Limestone
Granitic Sill
Chlorite Sericite Quartz Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

Metavolcanics and metasediments of the Devonian part of the Eagle Bay Formation are cut by a small foliated granitic sill. The metamorphic rocks include sericite-quartz phyllite, chlorite-sericite-quartz schist and minor limestone.

Magnetite and pyrite are disseminated in the rocks near the granitic intrusion and galena and pyrite occur in quartz veins within the phyllites.

BIBLIOGRAPHY

EMPR AR 1913-215-216; 1968-163
EMPR GEOL 1977-1981, Fig. 18
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT 1930A, p. 152

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUMMIT, ADY**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 082M13W
 BC MAP:

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5746933
 EASTING: 304352

LATITUDE: 51 50 20 N
 LONGITUDE: 119 50 24 W
 ELEVATION: 2000 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: East zone, Map 3 (Assessment Report 4386); Assessment Report 127 plots a showing 1.5 kilometres to the east-southeast and describes it similar to this prospect. Also, GSC Map 48-1963 plots a Cu, Pb, Zn, Ag showing at the same location as Assessment Report 127.

COMMODITIES: Zinc Silver Lead Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Pyrite Galena Chalcopyrite
 ASSOCIATED: Quartz Biotite Calcite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
 CLASSIFICATION: Replacement
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 MODIFIER: Fractured
 DIMENSION: 0230 x 0200 x 0002 Metres STRIKE/DIP: 090/40N TREND/PLUNGE:
 COMMENTS: East zone.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Schist
 Biotite Gneiss
 Andesite Porphyritic Dike
 Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Barkerville
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: EAST REPORT ON: Y
 CATEGORY: Indicated YEAR: 1956
 QUANTITY: 244000 Tonnes

COMMODITY	GRADE	
Silver	27.4000	Grams per tonne
Copper	0.7000	Per cent
Lead	1.0000	Per cent
Zinc	4.5000	Per cent

COMMENTS: Average width of 2.2 metres.
 REFERENCE: Minister of Mines Annual Report 1956, pages 69,70.

CAPSULE GEOLOGY

The area is underlain by metasedimentary schists and gneisses of the Shuswap Metamorphic Complex, intruded by granitic dykes and sills and pegmatites. The metasediments vary from quartz-mica schist to biotite gneiss. Locally, limestone and marble occur and are generally altered, developing wollastonite, fluorite and garnet minerals. All rocks are cut by fracture related andesite porphyry dykes with a general strike of 010 degrees and dip of 70 to 75 degrees west.

The general strike is 050 degrees and the dip is between 20 to 45 degrees to the northwest. Folding and faulting are minor in the area.

Sulphide mineralization occurs in three main zones over an east-northeast strike length of 1100 metres. Mineralization is a replacement of pyrrhotite, sphalerite, galena, pyrite and chalcopyrite along

CAPSULE GEOLOGY

bedding planes and pre-existing fractures in quartz-biotite gneiss. The sulphides occur as discontinuous lenses, lacking continuity in thickness and strike length.

The East Zone strikes east-west for 230 metres and a down dip distance of 200 metres with an average width of 2.1 metres to a maximum of 4.9 metres. In several places the zone is cut by post mineralization dykes and faults with displacements up to 15 metres south. A 3 metre sample of the outcrop assayed 6.67 per cent zinc, 4.13 per cent lead, 0.76 per cent copper and 87.8 grams per tonne silver (Assessment Report 2107).

The Ady vein, or Central Zone lies 500 metres west of the East Zone. It is exposed along surface for 18 metres and by drilling for 38 metres. A sample of the outcrop returned 10.0 per cent zinc, 5.0 per cent lead, 0.9 per cent copper and 99.4 grams per tonne silver (Annual Report 1956).

The west vein, 600 metres west-southwest of the Ady vein, is exposed on surface for a few metres. A sample assayed 3.73 per cent zinc, 1.29 per cent lead, 0.48 per cent copper and 31.5 grams per tonne silver (Assessment Report 4386).

The East Zone is the largest zone with indicated reserves totalling 244,000 tonnes, having an average width of 2.2 metres and an average grade of 4.5 per cent zinc, 1.0 per cent lead, 0.7 per cent copper and 27.4 grams per tonne silver (Annual Report 1956). This is assuming the zone to be continuous.

BIBLIOGRAPHY

EMPR AR *1956-69-70
EMPR ASS RPT *127, *1140, *2107, *4386
EMPR GEM 1969-230; 1972-93-94
GSC MAP 48-1963
EMPR OF 1998-10
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 636
REPORT: RGEN0100

MINFILE NUMBER: **082M 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARIBOO**, SONJA 10

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M11W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 36 30 N
LONGITUDE: 119 21 24 W
ELEVATION: 1700 Metres

NORTHING: 5720108
EASTING: 336816

LOCATION ACCURACY: Within 1 KM
COMMENTS: Descriptions by Ministry of Publications.

COMMODITIES: Copper Molybdenum Gold Silver Manganese

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Meta Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The area is underlain by the Shuswap Metamorphic Complex. An east-west striking vein, containing chalcopyrite and molybdenite, occurs in a metavolcanic rock.

BIBLIOGRAPHY

EMPR EXPL *1978-E112; *1979-113; *1980-143
EMPR GEM 1969-228
GSC MAP 48-1963
GSC OF 637
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/29

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 040**

NATIONAL MINERAL INVENTORY: 082M12 Ag1

NAME(S): **CHIDGRIN**, FOGHORN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5713890
EASTING: 295158

LATITUDE: 51 32 20 N
LONGITUDE: 119 57 14 W
ELEVATION: 1980 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Adit, Map 3 (Assessment Report 4876).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Phyllite
Chert
Vein
Crystal Lithic Tuff
Chlorite Sericite Schist
Porphyritic Flow
Basalt
Gabbro
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DUMP REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1974	
SAMPLE TYPE: Grab		
<u>COMMODITY</u>	<u>GRADE</u>	
Silver	204.7000	Grams per tonne
Gold	0.0700	Grams per tonne
Copper	0.2500	Per cent
Lead	12.4800	Per cent
Zinc	2.0200	Per cent

COMMENTS: Sample taken from adit dump.
REFERENCE: Assessment Report 4876.

CAPSULE GEOLOGY

Foghorn Mountain is underlain by metavolcanics derived largely from intermediate crystal-lithic tuffs and porphyritic flows of the Devonian to Mississippian part of the Eagle Bay Formation. The rocks are pale to medium green chlorite-sericite schist, quartz-sericite schist, chert, phyllite and sericitic quartzite. These comprise a relatively flat lying plate, occurring as a gentle north-plunging synform. To the west, separated by an east-dipping thrust fault, are basalt, gabbro, chert and minor sediments of the Pennell Formation. The Middle Cretaceous Baldy Batholith lies to the south. Several narrow, discontinuous quartz veins contain galena, sphalerite and minor pyrite and chalcopyrite. A grab sample from

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 638
REPORT: RGEN0100

CAPSULE GEOLOGY

an adit dump assayed 12.48 per cent lead, 2.02 per cent zinc, 0.25 per cent copper, 204.7 grams per tonne silver and 0.07 grams per tonne gold (Assessment Report 4876).

BIBLIOGRAPHY

EMPR AR *1924-150-151
EMPR ASS RPT *4876, 7404, 7813, 11381
EMPR EXPL 1979-114-115; 1983-168
EMPR GEM 1974-98
EMPR MAP 53; 56
EMPR OF 1986-5
EMPR PF (Map by G.C. Singhai; Foghorn Mountain Property, April 29, 1988, Prospectus, Gold Spring Resources Ltd.)
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT *1930, p. 144
GCNL #168, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/10

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **KELLY'S**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 31 20 N
LONGITUDE: 119 56 44 W
ELEVATION: 1860 Metres

NORTHING: 5712014
EASTING: 295661

LOCATION ACCURACY: Within 500M

COMMENTS: Fig. 18 (Geology in B.C. 1977-1981, p. 55, Fig. 18).

COMMODITIES: Lead

Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
ASSOCIATED: Quartz
ALTERATION: Sericite
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Sericite Schist
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by metavolcanics of the Devonian part of the Eagle Bay Formation. The rocks, consisting of quartz-sericite schist, trend northeast and dip moderately to the northwest. Quartz veins contain galena, sphalerite and pyrite.

BIBLIOGRAPHY

EMPR ASS RPT 7404
EMPR GEOL 1977-1981, p. 55, Fig. 18
EMPR MAP 53; 56
EMPR OF 1986-5
EMPR PF (Foghorn Mountain Property, April 29, 1988, Prospectus, Gold Spring Resources Ltd.)
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT *1930, p. 144

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/09

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 640
REPORT: RGEN0100

MINFILE NUMBER: **082M 042**

NATIONAL MINERAL INVENTORY: 082M12 Pb4

NAME(S): **MILLAR'S**, BIRCH ISLAND, REXSPAR,
SPAR 36 (L. 5486)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:
LATITUDE: 51 34 45 N
LONGITUDE: 119 54 29 W
ELEVATION: 920 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Spar 36 claim (L. 5486).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5718241
EASTING: 298513

COMMODITIES: Lead Zinc Molybdenum

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Molybdenite Pyrrhotite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown
 Siderite

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
 Quartzite
 Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

Flat-lying quartz-sericite schist with interlayers of phyllite and sericitic quartzite of the Devonian part of the Eagle Bay Formation contain quartz lenses with pyrite, pyrrhotite, galena, sphalerite, molybdenite, and siderite.

BIBLIOGRAPHY

EMPR AR 1927-191
EMPR ASS RPT 1737, 1912, 1913, 2337-2340, 4957, 10207
EMPR GEM 1973-117
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT *1930, pp. 150-151
Chevron File

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/16

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 042**

MINFILE NUMBER: **082M 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **FOGHORN CR MOLY**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 33 30 N
LONGITUDE: 119 54 54 W
ELEVATION: 1400 Metres

NORTHING: 5715944
EASTING: 297940

LOCATION ACCURACY: Within 500M

COMMENTS: Drill hole 73-5, Fig. 2 (Assessment Report 4957).

COMMODITIES: Molybdenum Lead Fluorite Uranium

MINERALS

SIGNIFICANT: Molybdenite Galena Pyrite Fluorite
ASSOCIATED: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Volcanogenic Epigenetic Industrial Min.
TYPE: D06 Volcanic-hosted U
SHAPE: Irregular
MODIFIER: Fractured

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian-Mississipp. Undefined Group Eagle Bay

LITHOLOGY: Feldspar Porphyry
Trachyte
Quartzite
Lithic Tuff
Breccia
Quartz Sericite Schist
Chlorite Schist

HOSTROCK COMMENTS: Unit EPFt of the Eagle Bay Assemblage (Schiarizza and Preto, 1987).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1973
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Fluorite 10.6300 Per cent
Molybdenum 0.0670 Per cent
Uranium 0.0200 Per cent
COMMENTS: 3.5 metre width.
REFERENCE: Assessment Report 4957.

CAPSULE GEOLOGY

A "trachytic" unit (Unit EPFt) of moderately northerly dipping alkali-feldspar porphyry, lithic tuff, tuff breccia and pyritic schist is structurally underlain by quartz-sericite schist and chlorite schist with interlayered metasediments of the Devonian to Mississippian part of the Eagle Bay Assemblage (Schiarizza and Preto, 1987).
Molybdenite, galena, pyrite and fluorite occur as disseminations and fracture fills in the trachyte unit. A drill hole intersected 0.067 per cent MoS₂, 10.63 per cent CaF₂ and 0.02 per cent U₃O₈ over 3.5 metres (Assessment Report 4957).
Molybdenite and minor galena were intersected in a drill hole 750 metres to the west. Assays of 0.026 per cent MoS₂ over 20 metres and 0.4 per cent lead over 1.5 metres wide were encountered (Property File, Report and Map by P. Pisani, 1970).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 642
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *4957
EMPR OF 1992-16
EMPR P 1987-2
EMPR PF (Rpt and Map by P. Pisani, 1970)
GSC BULL 27
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT 1930A-153

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/16

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 044**

NATIONAL MINERAL INVENTORY: 082M12 Pb1

NAME(S): **RED TOP**, NOBLE, NIMSIC

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M12W
 BC MAP:

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5724737
 EASTING: 302429

LATITUDE: 51 38 20 N
 LONGITUDE: 119 51 19 W
 ELEVATION: 1520 Metres

LOCATION ACCURACY: Within 500M
 COMMENTS: Mineralization, Fig. 4 (Assessment Report 12080).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT:	Pyrite	Pyrrhotite	Galena	Sphalerite	Chalcopyrite
ASSOCIATED:	Quartz				
ALTERATION:	Sericite	Pyrite	Silica		
ALTERATION TYPE:	Silicific'n		Pyrite	Sericitic	
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER:	Stratiform	Disseminated	Massive
CLASSIFICATION:	Volcanogenic	Replacement	
TYPE:	E14 Sedimentary exhalative Zn-Pb-Ag		
SHAPE:	Irregular		
DIMENSION:		STRIKE/DIP: 110/30N	TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
 Limestone
 Argillite
 Chlorite Muscovite Quartz Schist
 Calc-silicate Schist
 Quartzite
 Skarn

GEOLOGICAL SETTING

TECTONIC BELT:	Omineca	PHYSIOGRAPHIC AREA:	Shuswap Highland
TERRANE:	Kootenay		
METAMORPHIC TYPE:	Regional	RELATIONSHIP:	GRADE: Greenschist

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1962
SAMPLE TYPE:	Chip		
COMMODITY		GRADE	
Silver		18.9000	Grams per tonne
Gold		0.1700	Grams per tonne
Copper		0.0800	Per cent
Lead		2.7500	Per cent
Zinc		3.1500	Per cent

COMMENTS: 1.5 metre width.
 REFERENCE: Assessment Report 436.

CAPSULE GEOLOGY

The Lower Cambrian part of the Eagle Bay Formation on Mount McClennan comprises metasediments and metavolcanics, which are deformed into a shallow plunging east trending antiform. The rocks, which occupy the north limb of the structure, include quartzite, chlorite-muscovite-quartz schist, quartz-sericite schist, limestone, calc-silicate schist and skarn. Stratiform lenses of massive, semi-massive and disseminated pyrite and pyrrhotite with lesser galena, sphalerite and chalcopyrite occur in pyritiferous, siliceous and recrystallized units.

The Redtop prospect is a 300 metre thick section of rusty, pyritic, quartz-sericite schist with intercalated meta-argillite and limestone. The strata strikes 110 degrees and dips 30 to 50 degrees northeast. A 1.5 metre chip sample assayed 0.17 grams per tonne

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 644
REPORT: RGEN0100

CAPSULE GEOLOGY

gold, 18.9 grams per tonne silver, 0.08 per cent copper, 2.75 per cent lead and 3.15 per cent zinc (Assessment Report 436). A 2.0 metre thick chip sample of the pyritic unit, close to the base of the limestone assayed 3.4 grams per tonne silver, 0.015 per cent copper, 0.047 per cent zinc and 0.08 per cent lead (Assessment Report 12080).

BIBLIOGRAPHY

EMPR AR 1923-155; 1924-150; 1927-191; 1966-144
EMPR ASS RPT *436, *5813, 6174, *6603, *12080, 13463
EMPR EXPL 1975-59; 1976-73-74; 1977-101; 1983-169; 1984-130-131
EMPR FIELDWORK 1985, p. 93
EMPR GEM 1971-442
EMPR GEOL 1977-1981, p. 55
EMPR OF 1986-5
EMR MP CORPFILE (Crowpat Minerals Limited)
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT 1930A, p. 151
N MINER March 14, 1985; June 16, 1986
Placer Dome File
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 045**

NATIONAL MINERAL INVENTORY: 082M12 Pb1

NAME(S): **SNOW**, NOBLE, NIMSIC

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5723909
EASTING: 303840

LATITUDE: 51 37 55 N
LONGITUDE: 119 50 04 W
ELEVATION: 1540 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mineralization, Fig. 4 (Assessment Report 12080).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

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

DEPOSIT

CHARACTER: Stratiform Disseminated Massive
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Quartz Sericite Schist
Limestone
Skarn
Quartzite
Calc-silicate Schist
Chlorite Muscovite Quartz Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1962
SAMPLE TYPE: Rock
COMMODITY GRADE
Copper 1.7000 Per cent
Lead 8.2500 Per cent
Zinc 2.5700 Per cent
COMMENTS: 0.6 metre sample.
REFERENCE: Assessment Report 436.

CAPSULE GEOLOGY

The Lower Cambrian part of the Eagle Bay Formation on Mount McCleannan comprises metasediments and metavolcanics, which are deformed into a shallow plunging east trending antiform. The rocks, which occupy the north limb of the structure, include quartzite, chlorite-muscovite-quartz schist, quartz-sericite schist, limestone, calc-silicate schist and skarn. Stratiform lenses of massive, semi-massive and disseminated pyrite and pyrrhotite with lesser galena, sphalerite and chalcopyrite occur in pyritiferous, siliceous and recrystallized units.

The Snow prospect consists of four "semi-conformable", 0.3 to 1.2 metre wide bands of massive sulphide within a 12.2 metre thick, flat-lying unit of carbonate bearing quartz-sericite schist. Zinc rich bands grade upward into copper rich bands and chalcopyrite is partially mobilized into north trending tension fractures. A 0.6 metre sample assayed 1.70 per cent copper, 8.25 per cent lead and 2.57 per cent zinc (Assessment Report 436) and chips from several mineralized blocks assayed 1.18 per cent copper, 0.80 per cent zinc,

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 646
REPORT: RGEN0100

CAPSULE GEOLOGY

2.10 per cent lead, 140 grams per tonne silver and 0.12 grams per tonne gold (Assessment Report 12080).

BIBLIOGRAPHY

EMPR AR 1966-144
EMPR ASS RPT *436, *5813, 6174, *6603, 6931, *12080, 13463
EMPR EXPL 1975-59; 1976-73-74; 1977-101; 1978-114-115; 1983-169;
1984-130-131
EMPR FIELDWORK 1985, p. 93
EMPR GEM 1971-442
EMPR GEOL 1977-1981, p. 55
EMPR OF 1986-5
EMR MP CORPFILE (Crowpat Minerals Limited)
GSC MAP 48-1963, 637
GSC SUM RPT 1930A
N MINER March 14, 1985; June 16, 1986
Placer Dome File
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 046**

NATIONAL MINERAL INVENTORY: 082M12 Pb1

NAME(S): **SUNRISE**, NAOMI, BONNIE JEAN
 NOBLE, SINBAD, NIMSIC

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M12W
 BC MAP:
 LATITUDE: 51 37 45 N
 LONGITUDE: 119 48 54 W
 ELEVATION: 1520 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Mineralization, Fig. 4 (Assessment Report 12080).

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5723548
 EASTING: 305174

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Chalcopyrite
 Tetrahedrite
 ASSOCIATED: Quartz Magnetite
 ALTERATION: Silica
 ALTERATION TYPE: Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated Massive
 CLASSIFICATION: Replacement
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 DIMENSION: STRIKE/DIP: 110/10N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
 Limestone
 Skarn
 Quartzite
 Chlorite Muscovite Quartz Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1984
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	225.0000 Grams per tonne
Gold	1.7300 Grams per tonne
Copper	1.7000 Per cent
Lead	2.6200 Per cent
Zinc	18.3000 Per cent

COMMENTS: 2.0 metre width.
 REFERENCE: Assessment Report 12080.

CAPSULE GEOLOGY

Lower Cambrian Eagle Bay Formation rocks on Mount McClennan are comprised of metasediments and metavolcanics, which are deformed into a shallow plunging east trending antiform. The rocks, which occupy the north limb of the structure, include quartzite, chlorite-muscovite-quartz schist, quartz-sericite schist, limestone, calc-silicate schist and skarn. Stratiform lenses of massive, semi-massive and disseminated pyrite and pyrrhotite with lesser galena, sphalerite and chalcopyrite occur in pyritiferous, siliceous and recrystallized units.

The Sunrise prospect consists of massive sulphide horizons, up to 1.2 metre thick, within flat-lying quartz sericite schist and close to the nose of the antiform. A 2.0 metre chip sample assayed 1.73 grams per tonne gold, 225 grams per tonne silver, 2.62 per cent

CAPSULE GEOLOGY

lead, 18.3 per cent zinc and 0.13 per cent copper (Assessment Report 12080). The mineralization occurs over a 150 metre length.

BIBLIOGRAPHY

EMPR AR 1913-214-215; 1922-146; 1923-155; 1924-150; 1966-144
EMPR ASS RPT *436, *5813, 6174, *6603, 6931, *12080, 13463
EMPR EXPL 1975-59; 1976-73-74; 1977-101; 1978-114-115; 1983-169;
1984-130-131
EMPR FIELDWORK 1985, p. 93
EMPR GEM 1971-442
EMPR OF 1986-5; 1998-9
EMR MP CORPFILE (Crowpat Minerals Limited)
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT 1930A, p. 152
N MINER March 14, 1985; June 16, 1986
Placer Dome File
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 047**

NATIONAL MINERAL INVENTORY:

NAME(S): **MORRISON**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 37 00 N
LONGITUDE: 119 48 04 W
ELEVATION: 1400 Metres

NORTHING: 5722121
EASTING: 306082

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 3 (Assessment Report 436).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Mariposite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Sericite Schist
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by Lower Cambrian to Devonian meta-sediments consisting of chlorite-sericite-quartz schist and carbonaceous graphite and metavolcanics consisting of calcareous chlorite schist and greenstone of the Eagle Bay Formation. A northeast trending fault cuts the rocks.

Gold is reported in quartz veins and altered chlorite-sericite-quartz schist. A channel sample is reported to assay 13.7 grams per tonne gold (Assessment Report 436). Mariposite probably occurs in the schist.

BIBLIOGRAPHY

EMPR ASS RPT *436, 6603, *12080
EMPR EXPL 1977-101; 1983-169
EMPR OF 1986-5
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 048**

NATIONAL MINERAL INVENTORY:

NAME(S): **FOGGY 11**, RAY, BIRCH

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 31 55 N
LONGITUDE: 119 53 34 W
ELEVATION: 1740 Metres

NORTHING: 5712949
EASTING: 299364

LOCATION ACCURACY: Within 500M

COMMENTS: Trenches, Fig. 3 (Assessment Report 12904).

COMMODITIES: Copper Lead Zinc Silver

MINERALS

SIGNIFICANT:	Pyrite	Chalcopyrite	Sphalerite	Galena	Pyrrhotite
ASSOCIATED:	Quartz	Chlorite			
ALTERATION:	Chlorite	Sericite			
ALTERATION TYPE:	Chloritic	Sericitic			
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Volcanogenic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular
DIMENSION: 0900 x 0010 Metres STRIKE/DIP: 050/30N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1984
SAMPLE TYPE: Drill Core	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	5.0000 Grams per tonne
Copper	0.1300 Per cent
Lead	0.0150 Per cent
Zinc	0.0860 Per cent

COMMENTS: 16.1 metre width.
REFERENCE: Assessment Report 12904.

CAPSULE GEOLOGY

The area is underlain by Devonian rocks of the Eagle Bay Formation comprised of metavolcanics and arenaceous sediments. The units are metamorphosed to greenschist facies, forming quartz-chlorite-sericite schists and quartzites.

Two semi-massive sulphide horizons, 35 metres apart are composed of granular pyrite in a matrix of chlorite and quartz with minor sphalerite, galena, chalcopyrite and pyrrhotite. The upper horizon, about 900 metres long and 3 to 10 metres wide, trends 50 degrees and dips about 30 degrees to the west. A drill hole intersected the zone and assayed 0.03 per cent copper, 0.02 per cent lead, 0.10 per cent zinc and 2.38 grams per tonne silver over 24.8 metres. A drill hole 220 metres to the southwest assayed 0.13 per cent copper, 0.015 per cent lead, 0.086 per cent zinc and 5.00 grams per tonne silver over 16.1 metres (Assessment Report 12904).

New Global Resources mapped and sampled the Birch property from 1988 to 1990; they drilled 9 holes (309.5 metres) in 1991. Gemstar Resources optioned the claims in 1991; ownership was Foundation Resources Ltd. in 1995. In 1997, Homegold Resources Ltd. prospected on the Birch property.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 651
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 1737, 2810, 7404, 7990, 9008, 9537, 11503, *12904,
17555, 18970, 20218, 21527
EMPR EXPL 1980-144; 1983-168; 1984-129-130
EMPR GEM 1970-302
EMPR OF 1986-5
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/08

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 049**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRIZZLY**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 40 N
LONGITUDE: 119 44 59 W
ELEVATION: 650 Metres

NORTHING: 5686160
EASTING: 308293

LOCATION ACCURACY: Within 500M

COMMENTS: Trench, plate 1 and 2 (Assessment Report 12842).

COMMODITIES: Copper Silver Zinc Molybdenum Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform Disseminated

CLASSIFICATION: Unknown

TYPE: 105 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

DIMENSION:

STRIKE/DIP: 120/80S

TREND/PLUNGE:

COMMENTS: Strike of mineralized zone, dip of foliation.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Cambrian

Upper Devonian

GROUP

Undefined Group

FORMATION

Spapilem-Deadfall Creeks

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

ISOTOPIIC AGE: 126 +/- 4 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY:

Quartzite
Phyllite
Schist
Para Gneiss
Grit
Amphibolite
Quartz Diorite
Staurolite Garnet Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by probable Lower Cambrian to Hadrynian age Spapilem Creek-Deadfall Creek Succession (unit SDQ, Map 56). The rocks consist of quartzite, micaceous quartzite, grit and phyllite, with lesser staurolite-garnet-mica schist, calc-silicate schist and amphibolite. These rocks are cut by Late Devonian orthogneiss and sillimanite bearing paragneiss (unit Dgnp). To the north-east the rocks are cut by post-tectonic granitic rocks of the Mid-Cretaceous Baldy Batholith. Locally the intrusion is a quartz-diorite.

A mineralized zone is exposed over a 75 metre width and striking 120 degrees. Disseminated pyrite and chalcopyrite occurs along foliation planes within feldspar-mica paragneissic rocks. The foliation strikes 105 degrees and dips 80 degrees southwest.

A few scattered quartz veins having moderate to steep dips strike at various angles to the foliation. Mineralization is usually weak, except for a 30 centimetre vein with good chalcopyrite.

Chip sampling of the zone returned values from 0.12 per cent to 1.61 per cent copper and minor silver, zinc, and gold. Trenching and a drill hole suggests a mineralized area of 150 by 450 metres (Assessment Report 10675).

A north-east striking fault zone is interpreted to laterally offset the quartz-diorite/paragneiss contact, 400 metres to the left. (Assessment Report 10675). This interpretation is supported by geochemical results. The Bex Zone, 1200 metres to the east, may be an

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 653
REPORT: RGEN0100

CAPSULE GEOLOGY

offset continuation of the Grizzly Zone.

BIBLIOGRAPHY

EMPR ASS RPT *2230, *2231, *2232, 4685, *10675, 11435, 12842
EMPR EXPL 1982-112; 1983-150
EMPR FIELDWORK 1984, pp. 67-76
EMPR GEM 1969-233; 1970-315; 1971-438
EMPR MAP 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region; GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/02

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **RENNING**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 20 N
LONGITUDE: 119 45 34 W
ELEVATION: 720 Metres

NORTHING: 5685568
EASTING: 307592

LOCATION ACCURACY: Within 500M

COMMENTS: Quartz vein, Fig. 3 (Assessment Report 2232).

COMMODITIES: Silver Zinc Copper Lead

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Bornite Covellite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
DIMENSION:

STRIKE/DIP: 120/65S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Cambrian
Upper Devonian

Undefined Group

Spapilem-Deadfall Creeks

Unnamed/Unknown Informal

ISOTOPIC AGE: 126 +/-4 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY: Quartzite
Phyllite
Schist
Grit
Amphibolite

HOSTROCK COMMENTS: Dating by Okulitch, 1979.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1968

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

6.9000

Grams per tonne

Zinc

0.1000

Per cent

COMMENTS: Average of several grab samples over 10.6 metre width. Traces of lead and copper.

REFERENCE: Assessment Report 2231.

CAPSULE GEOLOGY

The area is underlain by probable Lower Cambrian to Hadrynian age Spapilem Creek-Deadfall Creek Succession (unit SDQ, Map 56). The rocks consist of quartzite, micaceous quartzite, grit and phyllite, with lesser staurolite-garnet-mica schist, calc-silicate schist and amphibolite. These rocks are cut by Late Devonian orthogneiss and sillimanite bearing paragneiss (unit Dgnp). To the north-east the rocks are cut by post-tectonic granitic rocks of the Mid-Cretaceous Baldy Batholith.

A vein 0.5 to 0.6 metres wide is traced for 4.6 metres along a strike of 120 degrees and dip of 65 degrees southwest within quartz-biotite feldspar schist.

Mineralization consists of pyrite and chalcopyrite with traces of bornite and covellite occurring as streaks and stringers within the quartz vein.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 655
REPORT: RGEN0100

CAPSULE GEOLOGY

Several grab samples along a 10.6 metre length of the vein averaged 6.9 grams per tonne silver, 0.1 per cent zinc and traces of lead and copper (Assessment Report 2231).

BIBLIOGRAPHY

EMPR AR 1968-168
EMPR ASS RPT *2230, *2231, *2232, 2620
EMPR GEM 1969-233; 1970-315; 1971-438
EMPR MAP 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637
Preto, V.A. and Schiarizza, P.(1985): Geology and Mineral Deposits of the Adams Plateau-Clearwater Region; GSA Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/02

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 051**

NATIONAL MINERAL INVENTORY: 082M5 Cu1

NAME(S): **EBL, REM, EB,**
MCLELLAN

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 51 19 50 N
LONGITUDE: 119 46 24 W
ELEVATION: 1100 Metres

NORTHING: 5690237
EASTING: 306799

LOCATION ACCURACY: Within 500M
COMMENTS: Diamond Drill Hole 74-6, Fig. 3 (Assessment Report 10584).

COMMODITIES: Copper Lead Zinc Silver Gold
 Molybdenum

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite Galena
ASSOCIATED: Quartz Garnet Epidote Magnetite Calcite
ALTERATION: Garnet Epidote Chlorite Quartz Calcite
ALTERATION TYPE: Skarn Oxidation Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform Massive Disseminated
CLASSIFICATION: Replacement Skarn
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular
DIMENSION: 2700 x 0800 x 0090 Metres STRIKE/DIP: 160/10W TREND/PLUNGE:
COMMENTS: Maximum extent of erratic mineralization on surface and in drillholes;
overall strike of mineralized area.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Chlorite Schist
Phyllite
Quartz Sericite Schist
Skarn
Dioritic Dike
Granodiorite
Quartz Calcite Vein
Limestone
Amphibolite
Gossan

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1970
SAMPLE TYPE: Drill Core
COMMODITY: Copper GRADE Per cent
 0.3520
COMMENTS: 64.6 metre width.
REFERENCE: Assessment Report 2989.

CAPSULE GEOLOGY

The property is underlain by a sequence of interlayered and interlaminated chlorite schist, phyllite, quartz-sericite schist and minor amounts of skarnified limestone. These rocks are tentatively included within unit EBG (Map 56) of the Devonian or older part of the Eagle Bay Formation. The sequence is likely derived from mafic to intermediate volcanic and volcanoclastic rocks.

The metavolcanics and metasediments are intruded by diorite to granodiorite dykes ranging from a few centimetres to tens of metres in thickness.

Pyrite, pyrrhotite and lesser chalcopyrite occur over a 2.7

CAPSULE GEOLOGY

kilometre north-northwest strike length as disseminations and massive zones along foliation planes, as fracture fillings and within quartz-calcite veins. This type of mineralization occurs within a variety of lithologies but is most abundant within chloritic schists. Pyrrhotite-pyrite-chalcopyrite-magnetite mineralization within garnet-epidote-chlorite-quartz skarn also occurs, associated with amphibole and limestone.

Massive sulphide mineralization, up to a metre thick, occurs within in a gossan zone 50 metres in length. Local foliation strikes north-northwest and dips 25 degrees westerly. Similar massive sulphide mineralization occurs over 4.3 metres in DDH 74-6, 1700 metres north-northwest of the gossan zone. Several earlier, nearby drill holes intersected good copper mineralization, one of which assayed 0.35 per cent copper over 65 metres (Assessment Report 2989). This hole, P70-9, lies 250 metres north-northwest of DDH 74-6.

A skarn zone, 400 metres south of the exposed massive sulphide zone, is exposed over a 20 metre length and 10 metre width. Drill hole 74-6 also intersected skarn zones over a 18.3 metre interval.

Mineralization on the EBL property is similar to that on the Harper Creek property, 20 kilometres north, on the north edge of the Baldy Batholith. Recent mapping (Schiarizza, 1986) indicates that the Harper Creek deposit occurs near the contact between a metasedimentary sequence, possible equivalent to unit SDQ (Map 56) and overlying felsic metavolcanic rocks of unit EBA. Both units are intruded by Devonian orthogneiss and quartz porphyry sills, which may relate to mineralization. The EBL property may comprise similar SDQ metasediments intruded by Dgn orthogneiss, instead of the underlying unit EBG, referred to earlier.

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 297-306
EMPR ASS RPT 2369, 2680, *2989, 3431, 4685, 5973, *9203, *10435, *10584, *11386, 13334, 14950, 21047, 21605
EMPR EXPL 1976-E60-E61; 1982-114-115; 1983-159; 1986-C116
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36
EMPR GEM 1969-233; 1970-314-315; 1971-438-439; 1972-87-88; 1973-115; 1974-97
EMPR MAP 1986, p. 5; 56
EMPR OF 1999-2; 2000-7
EMR MP CORPFILE (Royal Canadian Ventures Ltd., Rayrock Mines Limited, The Dynamic Group of Companies, Western Mines Limited)
GSC MAP 48-1963
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Region; GSA
Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 052**

NATIONAL MINERAL INVENTORY:

NAME(S): **H**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 22 30 N
LONGITUDE: 119 51 24 W
ELEVATION: 1600 Metres

NORTHING: 5695401
EASTING: 301187

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, Fig. 2 (Assessment Report 3298).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
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>
Cretaceous			Baldy Batholith

LITHOLOGY: Quartz Monzonite
Biotite Granite
Pegmatite
Granitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The area is underlain by Mid-Cretaceous Baldy Batholith rocks, consisting of biotite granite, pegmatite, monzonitic granite and aplitic granite dykes.

Molybdenite occurs as disseminations and blebs in aplite granite dykes in contact with monzonitic granite.

BIBLIOGRAPHY

EM EXPL 2001-33-43
EMPR AR 1968-134; 1969-169
EMPR ASS RPT 1062, 1669, *2263, *3298
EMPR GEM 1971-439-440
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 053**

NATIONAL MINERAL INVENTORY:

NAME(S): **AGATE**, TRY ME, RANKIN,
 KAREN, JOE, BAY

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M04E
 BC MAP:
 LATITUDE: 51 04 30 N
 LONGITUDE: 119 45 04 W
 ELEVATION: 425 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Adit, Map 3 (Assessment Report 4135).

NORTHING: 5661766
 EASTING: 307283

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite Pyrite Argentite
 Pyrrhotite
 ASSOCIATED: Quartz Calcite Mica Chlorite
 ALTERATION: Sericite Epidote
 ALTERATION TYPE: Sericitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform Concordant Disseminated
 CLASSIFICATION: Replacement Epigenetic
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Irregular
 MODIFIER: Faulted
 DIMENSION: 0800 x 0005 Metres STRIKE/DIP: 120/45N TREND/PLUNGE:
 COMMENTS: Mineralized concordant quartz veins intermittent over 800 metres up to 4.5 metres wide; general attitude of strata.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
 Sericite Quartz Phyllite
 Sericite Chlorite Phyllite
 Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1961
SAMPLE TYPE: Bulk Sample	
COMMODITY	GRADE
Silver	27.4000 Grams per tonne
Copper	0.1400 Per cent
Lead	5.1600 Per cent
Zinc	1.7000 Per cent

COMMENTS: Taken from upper showing.
 REFERENCE: Annual Report 1961, pages 53-55.

CAPSULE GEOLOGY

The property is underlain by Devonian part of the Eagle Bay Formation rocks consisting of west-northwest trending sericite-quartz phyllites and sericite-chlorite-quartz phyllites derived from felsic to intermediate volcanic and volcanoclastic rocks. The strata dips moderately to the northeast.

Galena, sphalerite, pyrite, chalcopyrite and argentite mineralization occurs within quartz veins and replacements concordant with the metavolcanics. The quartz veins also cross cut schistosity and are sometimes cut off by faults.

A bulk sample of the upper showing, 830 metres west-northwest of the adit, assayed 27.4 grams per tonne silver, 5.16 per cent lead, 1.70 per cent zinc and 0.14 per cent copper (Annual Report 1961).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 660
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1924-157; *1961-53-55, Fig. 9; 1966-145
EMPR ASS RPT 1114, 4134, *4135, *5226, *6684, 7123 (Parts 1 & 2)
EMPR EXPL 1975-E57; 1978-E106
EMPR FIELDWORK 1984, pp. 66,69
EMPR GEM 1972-86
EMPR MAP 56
GSC MAP 48-1963
GSC OF *637

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/28

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 054**

NATIONAL MINERAL INVENTORY:

NAME(S): **JOE** BECA, GLEN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 22 N
LONGITUDE: 118 34 55 W
ELEVATION: 425 Metres

NORTHING: 5655402
EASTING: 389093

LOCATION ACCURACY: Within 500M

COMMENTS: North showing, plate 2 (Assessment Report 6680). Location of north adit, GPS Mike Cathro, July 2002. The south adit is 250 metres to the south.

COMMODITIES: Silver Lead Copper Zinc Gold

MINERALS

SIGNIFICANT: Galena Pyrite Pyrrhotite Chalcopyrite Sphalerite
ASSOCIATED: Quartz Pyrite Chlorite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

SHAPE: Irregular

STRIKE/DIP: 104/43N

TREND/PLUNGE:

COMMENTS: Bedding attitude.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

ISOTOPIC AGE: 387 Ma

DATING METHOD: Zircon

MATERIAL DATED: Zircon

LITHOLOGY: Phyllite
Chlorite Schist
Argillite

HOSTROCK COMMENTS: Isotopic data from Preto and Schiarizza, 1985.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1977

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	16.5000	Grams per tonne
Gold	0.1400	Grams per tonne
Copper	1.7000	Per cent
Lead	0.0400	Per cent
Zinc	0.1800	Per cent

REFERENCE: Assessment Report 6680.

CAPSULE GEOLOGY

The property is underlain by Devonian to Mississippian age rocks of the Eagle Bay Formation. The rocks consist of phyllites and schists (EBA) derived from felsic to intermediate volcanic and volcanoclastic rocks. The strata strikes 070 to 110 degrees and dips 25 to 45 degrees north.

The Joe showings, 3 kilometres south of Beca (082M 055), occur within a thick horizon of greenish grey chlorite-sericite-quartz phyllite containing conspicuous "eyes" of quartz. Locally, thin horizons of dark green chloritic schist, dark grey phyllite and argillite occur.

Two mineralized zones, 250 metres apart, consist of thin conformable lenses of rusty siliceous pyritic rock. The southern showing is

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 662
REPORT: RGEN0100

CAPSULE GEOLOGY

a 0.7 metre wide band of massive pyrite with sulphide mineralization. The northern showing consists of heavily disseminated pyrrhotite with lesser disseminations and streaks of chalcopyrite. A grab sample assayed 0.14 gram per tonne gold, 16.5 grams per tonne silver, 1.7 per cent copper, 0.18 per cent zinc and 0.04 per cent lead.

BIBLIOGRAPHY

EMPR AR 1967-134
EMPR ASS RPT 1114, 4504, *6680, *7040, 7112, *7326, 12959, 13138
EMPR EXPL 1978-E102; 1979-E109-E110; 1985-C99
EMPR FIELDWORK 1980, pp. 15-23; 1984, pp. 67-76
EMPR MAP *56
EMPR OF 1999-2
GSC MAP 48-1963; 5320G
GSC OF *637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): *Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 054**

MINFILE NUMBER: **082M 055**

NATIONAL MINERAL INVENTORY:

NAME(S): **BECA, TOM, AD,
 DAY, RHODE ISLAND**

STATUS: Past Producer
 REGIONS: British Columbia
 NTS MAP: 082M04E
 BC MAP:
 LATITUDE: 51 02 50 N
 LONGITUDE: 119 43 04 W
 ELEVATION: 425 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: North showing, plate 2 (Assessment Report 6680).

Underground
 MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5658591
 EASTING: 309503

COMMODITIES: Silver Lead Copper Zinc Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Chalcopyrite Pyrite
 ASSOCIATED: Arsenopyrite
 QUARTZ: Quartz Chlorite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated
 CLASSIFICATION: Volcanogenic
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Irregular
 MODIFIER: Folded
 DIMENSION: 0500 x 0001 Metres STRIKE/DIP: 100/20N TREND/PLUNGE:
 COMMENTS: Lenses up to 0.5 metres over 500 metre length; attitude of schistos-
 ity intermittent.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	
	ISOTOPIC AGE: 387 +/- 4 Ma		
	DATING METHOD: Zircon		
	MATERIAL DATED: Zircon		

LITHOLOGY: Chlorite Schist
 Phyllite

HOSTROCK COMMENTS: Isotopic data from Preto and Schiarizza, 1985.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1977
SAMPLE TYPE: Rock	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	342.8000 Grams per tonne
Gold	16.5000 Grams per tonne
Copper	0.8000 Per cent
Lead	1.9000 Per cent
Zinc	1.3000 Per cent

COMMENTS: Average from 3 samples.
 REFERENCE: Assessment Report 6680.

CAPSULE GEOLOGY

The property is underlain by Devonian to Mississippian part of the Eagle Bay Formation. The rocks consist of phyllites and schists (EBA) derived from felsic to intermediate volcanic and volcani-clastic rocks. The strata strikes 070 to 110 degrees and dips 25 to 45 degrees north.
 The Beca showings occur within a medium green chloritic schist containing lighter coloured siliceous clasts. The main showing is a 0.5 metre thick conformable sulphide-rich lens of rusty siliceous schist. Mineralization consists of fine grained pyrite, arsenopyrite, chalcopyrite, galena and sphalerite bands up to 2 centimetres thick. Three typical samples gave average assay values of 16.5 grams per

CAPSULE GEOLOGY

tonne gold, 342.8 grams per tonne silver, 1.9 per cent lead, 1.3 per cent zinc and 0.8 per cent copper (Assessment Report 6680).

Several other narrow conformable lenses of siliceous pyritic rock occur over 500 metres. One of these, 120 metres north of the main showing is a narrow mineralized zone containing pyrite, galena, chalcopyrite and sphalerite. The average of two grab samples gave 4.5 grams per tonne gold, 54.9 grams per tonne silver, 3.6 per cent lead, 0.6 per cent zinc and 1.8 per cent copper. A minor showing 400 metres north of this showing consists of a 10 centimetre pyrite-galena bed assaying 2.75 per cent lead with only trace copper, zinc and silver (082M 111).

BIBLIOGRAPHY

- EMPR AR 1926-A186; 1967-134
EMPR ASS RPT 1114, *2650, 4504, *6680, *7040, 11353, 12959, 13138
EMPR EXPL 1978-E102; 1979-E109-E110; 1985-C99
EMPR FIELDWORK 1980, pp. 15-23; 1984, pp. 67-76
EMPR GEM 1973-113-114
EMPR MAP *56
EMPR OF 1999-2; 1999-14
GSC MAP 48-1963; 5320G
GSC OF *637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 056**

NATIONAL MINERAL INVENTORY: 082M13 W2

NAME(S): **TU**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 48 00 N
LONGITUDE: 119 35 24 W
ELEVATION: 1720 Metres

NORTHING: 5741967
EASTING: 321418

LOCATION ACCURACY: Within 500M

COMMENTS: Trenches, dwg. No. 5 (Assessment Report 14233).

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT:	Scheelite	Sphalerite			
ASSOCIATED:	Diopside	Vesuvianite	Garnet	Tremolite	
ALTERATION:	Tremolite	Garnet	Diopside	Vesuvianite	
ALTERATION TYPE:	Skarn				
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement Skarn
TYPE: K05 W skarn
SHAPE: Regular
DIMENSION: 0030 x 0002 Metres STRIKE/DIP: 115/70N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Schist
Biotite Gneiss
Skarn
Muscovite Granite

HOSTROCK COMMENTS: A muscovite granite intrudes the gneiss and schist developing a skarn along the schist-granite contact.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The area is underlain by the Shuswap Metamorphic Complex with granitic intrusives likely representing an extension of the Raft Batholith to the southwest.
A northerly trending muscovite granite unit separates a biotite gneiss unit to the west and a quartz mica schist unit to the east. A skarn is developed along the contact between the granite and schist.
Tungsten mineralization occurs as scheelite crystals, up to 0.5 centimetre long, in a diopside-vesuvianite-garnet-tremolite skarn. Minor sphalerite occurs occasionally. The mineralized zone strikes 115 degrees and dips steeply north for about 30 metres with a width varying between 2 to 4 metres.
A 2.0 metre trench sample assayed 2.04 per cent tungsten. The best diamond drill intersection was 0.49 per cent tungsten over 2.45 metres (Assessment Report 14380).

BIBLIOGRAPHY

EMPR ASS RPT *7473, *7474, *12012, *14233, *14380
EMPR EXPL 1985-C111; 1986-C126
EMPR OF 1991-17
GSC EC GEOL #17, pp. 14-157
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 057**

NATIONAL MINERAL INVENTORY: 082M4 Zn1

NAME(S): **ROSE** AMY-DEE, DEL,
POET

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 07 30 N
LONGITUDE: 119 41 24 W
ELEVATION: 460 Metres

NORTHING: 5667167
EASTING: 311766

LOCATION ACCURACY: Within 500M
COMMENTS: Drill hole, Fig. 2 (Assessment Report 10782).

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Sedimentary Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
DIMENSION:

E14 Sedimentary exhalative Zn-Pb-Ag

STRIKE/DIP: 130/25N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian-Ordovician	Undefined Group	Eagle Bay	

LITHOLOGY: Limestone
Dolomite
Greenschist

HOSTROCK COMMENTS: Tshinakin Member.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area is underlain by limestone of the Tshinakin member of the Eagle Bay Formation of Cambrian-Ordovician age. Bedding strikes about 130 degrees and dips 35 to 65 degrees northeast.

An east-west band, dipping 20 to 25 degrees north, of discontinuous layered, strands of dark-brown to grey-black coloured sphalerite occurs with dense white vein quartz within the limestone. An approximate one metre width of similar mineralization was intersected by drilling 130 metres down dip of the surface mineralization. Rotary drilling results returned anomalous gold and silver values which could not be confirmed by a second lab (Assessment Report 14046).

Contact with underlying greenschist occurs at the bottom of the drill hole.

BIBLIOGRAPHY

EMPR AR *1961-56
EMPR ASS RPT *10782, *14046, 15670
EMPR EXPL 1985-C100
EMPR MAP 56
EMR MP CORPFILE (Tombac Expl. Ltd.)
GSC MAP 48-1963
GSC OF 637
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 058**

NATIONAL MINERAL INVENTORY:

NAME(S): **KAJUN, JUNE, SOBS,
RENNING NO. 1, KAYJUN, PONGO**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:
LATITUDE: 51 15 30 N
LONGITUDE: 119 48 04 W
ELEVATION: 800 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Symbol, Fig. No. 350-3 (Assessment Report 13334).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5682281
EASTING: 304557

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite Pyrite
ASSOCIATED: Quartz Calcite Dolomite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant Disseminated
CLASSIFICATION: Replacement Hydrothermal
TYPE: I VEIN, BRECCIA AND STOCKWORK
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION: 40 x 8 Metres STRIKE/DIP: 180/25E TREND/PLUNGE:
COMMENTS: Contact fault strike; surface exposure dimension.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Phyllite
Limestone
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 52.1000 Grams per tonne
Gold 0.9000 Grams per tonne
Lead 2.3800 Per cent
Zinc 1.1800 Per cent
COMMENTS: Average of several samples over a 40 metre strike length.
REFERENCE: Assessment Report 12733.

CAPSULE GEOLOGY

The property is underlain by Eagle Bay Formation rocks consisting of dark grey phyllites, siltstones and limestone of Eagle Bay Group Formation (Map 56).
The showing lies along a northerly trending contact between dark grey phyllite and siltstone and overlying limestone. The contact dips east at 15 to 25 degrees and is highly sheared and faulted.
A concordant lens of fine grained siliceous rock, generally less than 1 metre thick, occurs within the limestone. Mineralization occurs within a thickened siliceous zone at the crest of a recumbent southwest-verging fold. Mineralization consists of galena, sphalerite, chalcopyrite and pyrite within pods and lenses of quartz, calcite and dolomite.
Irregular and discontinuous lenses of mineralized vein quartz also occur within the underlying metasediments. This mineralization is most common near the fault contact and is exposed in widths up to 8 metres.
Several chip samples over a strike length of 40 metres, across

CAPSULE GEOLOGY

the mineralized zone averaged 52.1 grams per tonne silver, 0.9 grams per tonne gold, 2.38 per cent lead and 1.18 per cent zinc (Assessment Report 12733). Sample widths are not specified, however, are likely from 1 to 4 metres.

BIBLIOGRAPHY

- EMPR AR *1961-48-49; 1968-168
EMPR ASS RPT *4579, 4685, *12733, *13334, 14392, *15483
EMPR EXPL 1983-161; 1984-121
EMPR FIELDWORK 1979, pp. 28-36; 1984, pp. 67-76
EMPR GEM 1973-115
EMPR MAP *56
GSC MAP 48-1963
GSC OF 637
GCNL #228, 1985
PERS COMM Jacques Houle & Andris Kikanka, June 2002
WWW <http://www.infomine.com/>
Burton, A.D.K. (1984): Report on Kayjun Property, East Barriere Lake Area; Private Report to Primont Resources Ltd., location unknown
Dawson, J.M. (1984): Report on the ADON Property, Adams Plateau-Barriere District, Kamloops Mining Division for Titan Resources Ltd., November 5, 1984, location unknown
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986): *Mineral Deposits of the Adams Plateau-Clearwater Area
Garratt, G. (1984): Report on the Kayjun (June) Showing, East Barriere Lake Area; Private Report to Northair Mines Ltd., location unknown
Misener, D.J. and Mullan, A.W. (1980): Report on the Combined Airborne Magnetic and Electromagnetic Survey on the EBL and Kayjun Claim Groups, Kamloops Mining Division; Private Report to Western Mines Ltd., location unknown
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau-Clearwater Region in GSA Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11
Scott, G.H. (1973): Report on the Geochemical Survey of the Kayjun Claim Group, East Barriere Lake, Kamloops M.D.; Private Report for Western Mines Ltd., location unknown
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 059**

NATIONAL MINERAL INVENTORY: 082M5 Cu3

NAME(S): **CC**, C-C

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5689971
EASTING: 297681

LATITUDE: 51 19 30 N
LONGITUDE: 119 54 14 W
ELEVATION: 710 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Showing, Map 3 (Assessment Report 6202).

COMMODITIES: Zinc Lead Silver Copper

MINERALS

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

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Chlorite Schist
Limestone
Quartz Sericite Schist
Phyllite
Graphitic Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1976
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 16.8000 Grams per tonne
Copper 0.3400 Per cent
Lead 1.7000 Per cent
Zinc 3.1000 Per cent
COMMENTS: 30 centimetres sample from trench.
REFERENCE: Assessment Report 6202.

CAPSULE GEOLOGY

The area is underlain by metavolcanics and lesser metasedimentary rocks of the Eagle Bay Formation of Devonian to Mississippian age. The volcanics include felsic tuffs and flows, metamorphosed to quartz-sericite schists and quartz-chlorite schists. The metavolcanics are intercalated with and overlain by limestone, graphitic argillite and phyllite.

The rocks trend northwest, with a prominent foliation dipping moderately to the southwest and locally striking 100 degrees with a 20 degree dip.

Small stocks of fine-grained, porphyritic granodiorite to quartz diorite intrude the metavolcanics. The Cretaceous Baldy Batholith of quartz monzonite to granodiorite composition lies north of the area.

Mineralization at the CC showing comprises a thin band, 10 to 20 centimetres wide, of semi-massive pyrite, galena, sphalerite and chalcopyrite within a 1 to 2 metre horizon of siliceous pyritic schist enclosed within light silvery grey chlorite-sericite-quartz schist of felsic volcanic origin.

A 30 centimetre sample from a trench assayed 3.1 per cent zinc,

CAPSULE GEOLOGY

1.7 per cent lead, 0.34 per cent copper and 16.8 grams per tonne silver (Assessment Report 6202).

BIBLIOGRAPHY

EMPR AR 1929-225; 1966-144-145
EMPR ASS RPT 69, 70, 3333, *6202, 6802, 6879, 11033, 14388
EMPR EXPL 1982-112,114; 1986-C115
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR MAP 53; *56
EMPR OF 1999-2; 2000-7
EMR MP CORPFILE (Pacific Cassiar Limited; Vestor Explorations Ltd.;
Seaforth Mines Ltd.; Craigmont Mines Ltd.)
GSC MAP 48-1963
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 060**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARPER**, ULTIMA, LUCKY BOY,
 WAH WAH, NB

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M05W
 BC MAP:
 LATITUDE: 51 20 30 N
 LONGITUDE: 119 51 34 W
 ELEVATION: 940 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: West sulphide band, Maps 1 & 2, (Assessment Report 6177).

NORTHING: 5691703
 EASTING: 300849

COMMODITIES: Copper Zinc Lead Silver Gold

MINERALS

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

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive
 CLASSIFICATION: Syngenetic
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Tabular
 DIMENSION: 0100 x 0050 x 0008 Metres STRIKE/DIP: 155/25W TREND/PLUNGE:
 COMMENTS: West sulphide band.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Sericite Schist
 Phyllite
 Gossan

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1983
SAMPLE TYPE: Grab	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	24.0000 Grams per tonne
Gold	0.3700 Grams per tonne
Copper	2.1000 Per cent

REFERENCE: Assessment Report 12442.

CAPSULE GEOLOGY

The area is underlain by metavolcanics and metasediments of the Devonian age part of the Eagle Bay Formation. The rocks consist of phyllites and schists derived from felsic to intermediate volcanic volcaniclastic rocks. The strata forms a homoclinal sequence with a moderate, uniform southwesterly dip. The Cretaceous Baldy Batholith lies to the north.

Mineralization occurs as stratabound bands of massive sulphides consisting of pyrrhotite and pyrite and lesser chalcopyrite, sphalerite and galena. Two main sulphide bands, trending northwest and dipping southwest at 25 to 45 degrees, occur within quartz schist.

The westernmost sulphide band strikes over 100 metres, with up to 8 metre widths and over 50 metre depths. A 1 metre chip sample from an adit wall gave 0.41 per cent copper, 6.86 grams per tonne silver and 0.14 grams per tonne gold (Assessment Report 12442).

The easternmost sulphide band has a length of 210 metres, a vertical depth of at least 20 metres and variable widths. A grab sample at the northern end of the zone returned 2.1 per cent copper, 24 grams per tonne silver and 0.37 grams per tonne gold (Assessment Report 12442). This band lies 175 metres northeast of the western band.

CAPSULE GEOLOGY

In addition to the two main sulphide bands, a prominent gossan zone with sulphide outcrops and anomalous geochemical results lies 1000 metres southwest of the western sulphide band. Also, 300 metres northwest of the western band, a drill hole cut a 1 to 2 metre section assaying .93 per cent zinc and .18 per cent copper (Assessment Report 12442).

Drilling (Assessment Report 6177) in an area 400 metres northwest of the west sulphide band, intersected copper values from 0.15 per cent over 7.9 metres to 0.84 per cent over 4.9 metres.

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 297-306
EMPR AR 1927-189; 1962-60-61; 1963-59; 1965-159; 1966-145
EMPR ASS RPT 2627, 3716, *6177, 11095, *12442, *12567, 13434, 14388, *15802
EMPR EXPL 1976-E61-E62; 1982-116; 1983-160; 1986-C115
EMPR FIELDWORK 1978, pp. 31-37; 1984, pp. 67-76
EMPR GEM 1970-313-314; 1972-88
EMPR MAP 56
EMPR OF 1998-9; 1999-2; 2000-7; 2000-31
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT 1921A, pp. 105, 106
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau-Clearwater Region in GSA Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 061**

NATIONAL MINERAL INVENTORY:

NAME(S): **RUTH**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 30 N
LONGITUDE: 119 47 24 W
ELEVATION: 640 Metres

NORTHING: 5685957
EASTING: 305473

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Fig. No. 350-3 (Assessment Report 13334); location of drilling (Property File Moore, 1966).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Limestone
Siltstone
Quartz Vein

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1966

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Silver	144.0000	Grams per tonne
Gold	0.3400	Grams per tonne
Copper	0.1700	Per cent
Lead	4.7100	Per cent
Zinc	8.8400	Per cent

COMMENTS: 76 centimetre width.

REFERENCE: Property File, (Moore T., 1966).

CAPSULE GEOLOGY

The area is underlain by Devonian or older Eagle Bay Formation rocks consisting of dark grey phyllites, siltstones and limestone of unit EBGp (Map 56).

Scattered chalcopyrite, galena and sphalerite occurs in quartz veins within metasediments.

A 76 centimetre drill core sample assayed 8.84 per cent zinc, 4.71 per cent lead, 0.17 per cent copper, 144 grams per tonne silver and 0.34 grams per tonne gold (Property File, Moore, 1966).

BIBLIOGRAPHY

EMPR AR 1965-159; 1966-145
EMPR ASS RPT 4685, *13334, 14392
EMPR MAP 56
EMPR OF 2000-7
EMPR PF (Moore, T. (1966): Barriere Lake Mines)
GSC MAP 48-1963
GSC OF 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 674
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL #228, 1985

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 062**

NATIONAL MINERAL INVENTORY:

NAME(S): **BAR-BARRIERE**, TONY

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 23 50 N
LONGITUDE: 119 51 54 W
ELEVATION: 1000 Metres

NORTHING: 5697894
EASTING: 300704

LOCATION ACCURACY: Within 500M

COMMENTS: Main showing, Fig. No. 235-2 (Assessment Report 10111).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Silicific'n Chloritic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Porphyry
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Regular
MODIFIER: Sheared
DIMENSION: 0150 x 0100 Metres STRIKE/DIP: 050/75N TREND/PLUNGE:
COMMENTS: Surface area of showing; attitude of mineralization.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cretaceous _____ _____ Baldy Batholith

LITHOLOGY: Quartz Monzonite
Granodiorite
Quartz Vein
Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay

CAPSULE GEOLOGY

The property is underlain by quartz-monzonite and granodiorite of the Cretaceous Baldy Batholith. Later phase aplite dykes and quartz veins are common throughout the rock. Locally, the quartz-monzonite is fractured, brecciated and altered.

A 150 metres by 100 metre area, known as the Main showing, is a well fractured, brecciated and altered quartz-monzonite or granodiorite with disseminations and fracture coatings of MoS₂. Alteration includes silicification, sericitization and chloritization. Grab samples indicated MoS₂ content ranging from 0.15 to 0.35 per cent.

A drill hole (DDH T 81-2) 700 metres to the east, intersected similar mineralization with an assay of 0.03 per cent MoS₂ over 15.2 metres (Assessment Report 10111).

BIBLIOGRAPHY

EMPR AR 1964-99; 1966-144
EMPR ASS RPT *8952, *10111, *10829
EMPR OF 2000-7
EMPR PF (Midgley, G.E. (1966): DDH Map)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 063**

NATIONAL MINERAL INVENTORY:

NAME(S): **SITTING BULL**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 20 40 N
LONGITUDE: 119 53 04 W
ELEVATION: 760 Metres

NORTHING: 5692080
EASTING: 299121

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description (Annual Report 1927, p. 189).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant

CLASSIFICATION: Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION:

STRIKE/DIP: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
090/29S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Graphitic Argillite
Quartz Chlorite Schist
Limestone
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

13.7000

Grams per tonne

Copper

2.0000

Per cent

COMMENTS: 60 centimetre sample width. Trace gold.

REFERENCE: Annual Report, 1927.

CAPSULE GEOLOGY

The area is underlain by metavolcanics and lesser metasedimentary rocks of the Eagle Bay Formation of Devonian to Mississippian age. The volcanics include felsic tuffs and flows, metamorphosed to quartz-sericite schists and quartz-chlorite schists. The metavolcanics are intercalated with and overlain by limestone, graphitic argillite and phyllite.

The rocks trend northwest, with a prominent foliation dipping moderately to the southwest and locally striking east-west with a 29 degree dip to the south.

Small stocks of fine-grained, porphyritic granodiorite to quartz diorite intrude the metavolcanics. The Cretaceous Baldy Batholith of quartz monzonite to granodiorite composition lies north of the area.

A 60 centimetre quartz vein mineralized with chalcopyrite occurs within schist. A sample across the 60 centimetres gave 2.0 per cent copper, 13.7 grams per tonne silver and trace gold (Annual Report 1927).

BIBLIOGRAPHY

EMPR AR *1922-146; *1927-C189

EMPR ASS RPT 3333, 14388

EMPR EXPL 1986-C115

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 677
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP 53; 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 064**

NATIONAL MINERAL INVENTORY:

NAME(S): **NORTH STAR (NORTH SHOWING)**, ACE, ENERGITE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5693471
EASTING: 291428

LATITUDE: 51 21 15 N
LONGITUDE: 119 59 44 W
ELEVATION: 1400 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Descriptions (Annual Report 1935-D7-8, 1936-D36, 38-39).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Ankerite
ALTERATION TYPE: Carbonate Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	
Paleozoic	Undefined Group	Fennell	

LITHOLOGY: Phyllite
Slate
Siltstone
Sandstone
Limestone
Chert
Quartzite
Quartz Vein

HOSTROCK COMMENTS: Mineralization consists of sulphide-bearing quartz veins which cut sheared rocks along a faulted Fennell-Eagle Bay contact.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The property is underlain by Devonian to Permian age Fennell Formation rocks consisting of cherts and phyllites in the west and Mississippian age part of the Eagle Bay Formation rocks consisting of phyllites, siltstones and sandstones in the east. A 150 degree striking and steeply dipping fault, separating the two formations, has sheared and silicified the metasediments. The rocks generally strike 160 to 170 degrees and dip 50 to 90 degrees to the west, and in places, display rusty carbonate alteration. To the southeast is a Mississippian limestone unit.

Mineralization consists of sphalerite and galena with minor pyrite and chalcopyrite in quartz veins within highly sheared phyllite pyritic quartzite and ferruginous limestone. The quartz veins are a few centimetres to a few metres wide and generally strike north-northwest with near vertical dips.

BIBLIOGRAPHY

EMPR AR 1927-188,190; *1935-D7,8; *1936-D36,38,39; 1939-93
EMPR ASS RPT 5039, 5363, 13766
EMPR EXPL 1975-57; 1976-63; 1978-E108; 1980-140; 1985-C105
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR GEM 1974-97
EMPR MAP 53; 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 679
REPORT: RGEN0100

BIBLIOGRAPHY

Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 064**

MINFILE NUMBER: **082M 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **ENERGITE** ENARGITE, NORTH STAR (SOUTH SHOWING)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:
LATITUDE: 51 21 00 N
LONGITUDE: 119 59 34 W
ELEVATION: 1540 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Symbol (Map 53).

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

NORTHING: 5693000
EASTING: 291603

COMMODITIES: Lead Silver Zinc Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Ankerite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0180 x 0120 Metres STRIKE/DIP: 165/50W TREND/PLUNGE:
COMMENTS: Area of mineralized quartz veins; attitude of host rocks.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Mississippian	Undefined Group	Eagle Bay	
ISOTOPIC AGE: 360 Ma			
MATERIAL DATED: Paleozoic	Conodont in limestone Undefined Group	Fennell	
ISOTOPIC AGE: 360 Ma			
LITHOLOGY:	Phyllite Chert Siltstone Slate Sandstone Limestone		

HOSTROCK COMMENTS: Dating by Preto, et. al., 1980.
Fennell Fm rocks also occur in the area.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The property is underlain by Devonian to Permian age Fennell Formation rocks consisting of cherts and phyllites in the west and Mississippian age Eagle Bay Formation rocks consisting of phyllites, siltstones and sandstones in the east. A fault striking 150 degrees and dipping steeply fault, separating the two formations, has sheared and silicified the metasediments. The rocks generally strike 160 to 170 degrees and dip 50 to 90 degrees to the west, and in places, display rusty carbonate alteration. To the east is a Mississippian limestone unit.

Mineralization consisting of galena and pyrite and lesser sphalerite and chalcopyrite, occurs within several quartz veins within a northerly trending zone measuring about 200 by 120 metres. Individual veins and lenses vary from a few centimetres to several metres wide and vary in orientation, although northerly strikes and moderate (40 to 50 degrees) easterly dips predominate.

BIBLIOGRAPHY

EMPR AR 1927-188,190,191; *1935-D7-8; *1936-D36-39; 1939-93;
1954-A48
EMPR ASS RPT 5039, 5363, 9963, 12774, 13766

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 681
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1975-57; 1976-63; 1978-E108; 1980-140; 1985-C105
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR GEM 1972-22; 1974-97
EMPR MAP *53, 56
EMPR OF 2000-7
GSC OF 637
*Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area
GCNL #2, 1983; #191, 1984
PR REL Navasota Resources Ltd., Oct.29, 2002
WWW <http://www.navasota.com/>
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 065**

MINFILE NUMBER: **082M 066**

NATIONAL MINERAL INVENTORY: 082M5 Pb1

NAME(S): **WHITE ROCK (L.4023)**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:
LATITUDE: 51 17 50 N
LONGITUDE: 119 54 04 W
ELEVATION: 1060 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Symbol (GSC Map 48-1963); centre of L. 4023.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5686875
EASTING: 297752

COMMODITIES: Lead Silver Zinc Copper Gold

MINERALS

SIGNIFICANT: Galena Tetrahedrite Sphalerite Chalcopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Azurite Malachite
ALTERATION TYPE: Argillic Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Faulted
DIMENSION:
COMMENTS: Fault. STRIKE/DIP: 017/83E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Dolomite
Marble
Chlorite Phyllite
Limestone
Chlorite Schist

HOSTROCK COMMENTS: Tshinakin Member.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1950
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 92.6000 Grams per tonne
Gold 0.3400 Grams per tonne
Lead 2.2000 Per cent
Zinc 0.8000 Per cent

COMMENTS: 56 centimetre sample width.
REFERENCE: Annual Report 1950.

CAPSULE GEOLOGY

The area is underlain by the Devonian or older age Eagle Bay Formation rocks and the Tshinakin Limestone Member. The rocks include calcareous chlorite schist and fragmental schist derived from mafic to intermediate volcanic and volcanoclastic rocks. The limestone is massive, light grey and finely crystalline.

Several parallel quartz veins of variable dimension, trending north-south and dipping steeply east, carry scattered patches of galena and tetrahedrite with minor azurite and malachite. The veins occur within the schists and limestone and are associated with a north trending, steeply dipping fault zone.

A 56 centimetre sample assayed 2.2 per cent lead, 0.8 per cent zinc, 92.6 grams per tonne silver and 0.34 grams per tonne gold (Annual Report 1950).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 683
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1921-347; *1927-189; *1928-212; *1929-226; *1930-191;
*1950-111-112
EMPR ASS RPT *16190
EMPR FIELDWORK 1979, pp. 28-36; 1984, pp. 67-76
EMPR MAP 53; 56
GSC EC GEOL No. 8, p. 302
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/11/09

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 067**

NATIONAL MINERAL INVENTORY: 082M5 Cu2

NAME(S): **ANACONDA**, LYNX, IRON CAP,
OK, LAVERNE KP5

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:
LATITUDE: 51 19 45 N
LONGITUDE: 119 55 04 W
ELEVATION: 910 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Showing, Map 3 (Assessment Report 6202).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5690473
EASTING: 296732

COMMODITIES: Copper Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Galena Sphalerite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive
CLASSIFICATION: Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
DIMENSION: STRIKE/DIP: 090/18S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian-Mississipp.	Undefined Group	Eagle Bay	

LITHOLOGY: Argillite
Limestone
Phyllite
Sericite Schist
Chlorite Schist
Granodiorite
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by metavolcanics and metasediments of the Eagle Bay Formation of Devonian to Mississippian age. The volcanics include felsic tuffs and flows, metamorphosed to quartz-sericite schists and quartz-chlorite schists. These are intercalated with and overlain by limestone, graphitic argillite and phyllite. The rocks trend east-west, with a prominent foliation dipping moderately to the south. Small stocks of fine-grained, porphyritic granodiorite to quartz diorite intrude the rocks. The Cretaceous Baldy Batholith of quartz monzonite to granodiorite composition lies north of the area. The Lynx showing consists of a 2 metre thick massive, pyrite lens with pyrrhotite, chalcopyrite, galena and sphalerite, within black argillite and minor sericite schist. About 300 metres to the south, old workings revealed an 8 metre silicified massive pyrite lens with minor chalcopyrite within quartz-sericite and chlorite schist.

BIBLIOGRAPHY

EMPR AR 1920-168; 1922-146; 1923-150; 1924-153; 1927-189-190;
1928-211; 1939-93
EMPR ASS RPT 69, 70, 3333, *6202, 6879, 14388
EMPR EXPL 1976-E61; 1978-E107; 1982-112-113; 1986-C115
EMPR FIELDWORK 1984, pp. 67-76
EMPR MAP 53; 56
EMPR OF 1999-2; 2000-7
EMPR PF (*1939 Report, 7 pages)
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 685
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637
GSC SUM RPT 1921, Part A, pp. 105-106
GCNL #75, 1986
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
Mineral Deposits of the Adams Plateau-Clearwater Area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits
of the Adams Plateau-Clearwater Region in GSA Cordilleran Section
Meeting May 1985, p. 16-10

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 067**

MINFILE NUMBER: **082M 068**

NATIONAL MINERAL INVENTORY:

NAME(S): **AXL 1, OCT**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 30 N
LONGITUDE: 119 35 24 W
ELEVATION: 1850 Metres

NORTHING: 5659503
EASTING: 318502

LOCATION ACCURACY: Within 500M

COMMENTS: Trench, location Map (Assessment Report 7693).

COMMODITIES: Copper Zinc Lead Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
DIMENSION:
COMMENTS: Attitude of strata.

STRIKE/DIP: 170/15W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Schist
Phyllitic Limestone
Greenschist
Graphitic Phyllite
Chlorite Schist
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1979
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		8.9000	Grams per tonne
Copper		0.8900	Per cent
Lead		0.0300	Per cent
Zinc		0.1200	Per cent

COMMENTS: The sample width is 0.5 metres.
REFERENCE: Assessment Report 7693.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestones and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends. Massive pyrite with chalcopyrite occurs within dark green uniform chlorite schist having a 170 degree strike and 15 degree westerly dip. The zone is 0.5 metres thick and assayed 0.89 per cent copper, 0.03 per cent lead, 0.12 per cent zinc and 8.9 grams per tonne silver.

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 223-246
EMPR ASS RPT 6513, *7019, *7693
EMPR EXPL 1977-E89; 1978-E103; 1979-110
EMPR MAP 56
EMPR OF 1999-2
GSC MAP 48-1963; 5320G

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 687
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/15

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 069**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER MINERAL**, SILVER MINNOW

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 20 N
LONGITUDE: 119 54 04 W
ELEVATION: 1300 Metres

NORTHING: 5685949
EASTING: 297716

LOCATION ACCURACY: Within 1 KM
COMMENTS: Descriptions.

COMMODITIES: Silver Lead Gold

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Schist
Limestone

HOSTROCK COMMENTS: Tshinakin Member.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1925
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Silver	925.7000 Grams per tonne
Gold	0.6900 Grams per tonne

COMMENTS: 61 centimetre sample width.
REFERENCE: Annual Report 1925, page 170.

CAPSULE GEOLOGY

The area is underlain by the Devonian or older age part of the Eagle Bay Formation and the Lower Cambrian Tshinakin Limestone Member. The rocks include calcareous chlorite schist and fragmental schist derived from mafic to intermediate volcanic and volcanoclastic rocks. The limestone is massive, light grey and finely crystalline.

Several parallel quartz veins of variable dimension, trending north-south and dipping steeply east, carry scattered patches of galena. The veins occur within the limestone and adjacent schist and are associated with a north trending fault zone.

A 61 centimetre sample assayed 50 per cent lead, 925.7 grams per tonne silver and 0.69 grams per tonne gold (Annual Report 1925).

BIBLIOGRAPHY

EMPR AR 1923-150; 1924-153; *1925-170; 1926-186; 1927-189; 1928-212
EMPR FIELDWORK 1979, pp. 28-36
EMPR MAP 53; 56
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 689
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/16

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 070**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORTUNA 2**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 21 30 N
LONGITUDE: 119 57 44 W
ELEVATION: 1570 Metres

NORTHING: 5693840
EASTING: 293767

LOCATION ACCURACY: Within 500M

COMMENTS: Trench, Fig. 3 (Assessment Report 14387).

COMMODITIES: Lead Zinc Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite Galena Pyrrhotite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Quartz vein.

STRIKE/DIP: 040/90E

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Quartz Sericite Schist
Tuff

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1986

SAMPLE TYPE: Rock

COMMODITY

Silver

GRADE

1001.0000

Grams per tonne

Gold

0.3800

Grams per tonne

Lead

4.3200

Per cent

Zinc

33.0000

Per cent

COMMENTS: 25 centimetre sample width.

REFERENCE: Assessment Report 14387.

CAPSULE GEOLOGY

The area is underlain by the Devonian or older part of the Eagle Bay Formation consisting of micaceous quartzite and sericite-quartz schist. Local foliation strikes 135 degrees with a 5 degree northeast dip. The Cretaceous Baldy Batholith lies 1 kilometre to the north.

Mineralization consists of pyrite, chalcopyrite, galena and sphalerite within a 040 degree striking, steep dipping quartz vein. The vein is 25 centimetres wide and a sample across it assayed 4.32 per cent lead, 33.0 per cent zinc, 1001 grams per tonne silver and 0.38 grams per tonne gold (Assessment Report 14387).

BIBLIOGRAPHY

EMPR AR *1927-188,190
EMPR ASS RPT 4136, 12200, *14387, 14388
EMPR EXPL 1986-C115,C117
EMPR MAP *53; 56
EMPR OF 2000-7
EMPR P 1987-2
GSC MAP 48-1963
GSC OF 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 691
REPORT: RGEN0100

BIBLIOGRAPHY

Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 071**

NATIONAL MINERAL INVENTORY:

NAME(S): **KUNO**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 22 10 N
LONGITUDE: 119 56 44 W
ELEVATION: 2000 Metres

NORTHING: 5695028
EASTING: 294977

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description and rough map (Annual Report 1927-188, 190); this showing may be further south than indicated.

COMMODITIES: Lead Silver Gold

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: VEINS

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1927

COMMODITY	GRADE	
Silver	357.0000	Grams per tonne
Lead	23.0000	Per cent

COMMENTS: From three quartz veins over 24 metre width. Trace gold.
REFERENCE: Annual Report 1927, page C190.

CAPSULE GEOLOGY

The area is underlain by the Devonian or older part of the Eagle Bay metasediments and metavolcanics. The Cretaceous Baldy Batholith lies to the north. Three quartz veins, carrying galena, occur over a 24 metre width within schist. A grab sample assayed 23 per cent lead, 357 grams per tonne silver, and trace gold.

BIBLIOGRAPHY

EMPR AR *1927-188,190
EMPR ASS RPT 14388
EMPR EXPL 1986-C115
EMPR MAP 53; 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORTUNA 1, KIDZICKS**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 20 40 N
LONGITUDE: 119 56 24 W
ELEVATION: 1400 Metres

NORTHING: 5692233
EASTING: 295252

LOCATION ACCURACY: Within 500M
COMMENTS: Symbol (MAP 53).

COMMODITIES: Lead Silver Zinc Copper Gold

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: 105 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 0040 x 0003 Metres
COMMENTS: Quartz vein.

STRIKE/DIP: 360/90E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian Undefined Group Eagle Bay

LITHOLOGY: Quartz Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1987
SAMPLE TYPE: Rock	
COMMODITY	GRADE
Silver	3426.0000 Grams per tonne
Gold	0.3500 Grams per tonne
Copper	0.0800 Per cent
Lead	34.1000 Per cent
Zinc	0.1300 Per cent

REFERENCE: Assessment Report 16108.

CAPSULE GEOLOGY

The area is underlain by Devonian age rocks of the Eagle Bay Formation consisting of flat lying chlorite-sericite-quartz schist overlain by siliceous pyritic sericite-quartz schist. The Cretaceous Baldy Batholith lies 1.5 kilometres to the north. Mineralization consists of coarse-grained pods of galena with minor pyrite in quartz veins 2.4 to 3.0 metres wide and 30 to 46 metres long. The veins strike north-south and dip vertical. A sample from the dump assayed 34.10 per cent lead and 3426 grams per tonne silver (Assessment Report 16108).

BIBLIOGRAPHY

EMPR AR *1927-188,190
EMPR ASS RPT 14388, 14770, 16108
EMPR EXPL 1986-C115,C117
EMPR MAP *53; 56
EMPR OF 2000-7
EMPR P 1987-2
GSC MAP 48-1963
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 694
REPORT: RGEN0100

BIBLIOGRAPHY

*Mineral Deposits of the Adams Plateau-Clearwater Area

DATE CODED: 1985/07/24
DATE REVISED: 1987/10/09

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 695
REPORT: RGEN0100

MINFILE NUMBER: **082M 073**

NATIONAL MINERAL INVENTORY:

NAME(S): **KUNIGUNDE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 22 30 N
LONGITUDE: 119 54 44 W
ELEVATION: 1700 Metres

NORTHING: 5695553
EASTING: 297321

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description and rough map (Annual Report 1927-188, 190); this showing may be further south than indicated.

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Mississippian	Undefined Group	Eagle Bay	

LITHOLOGY: Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by the Devonian or older part of the Eagle Bay Formation rocks and the Cretaceous Baldy Batholith. A north-south striking quartz vein with scattered inclusions of galena occurs within schist.

BIBLIOGRAPHY

EMPR AR *1927-188,190
EMPR MAP 53; 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/15

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 073**

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 696
REPORT: RGEN0100

MINFILE NUMBER: **082M 074**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAFALDA**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 22 50 N
LONGITUDE: 119 54 44 W
ELEVATION: 1700 Metres

NORTHING: 5696171
EASTING: 297346

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description and rough map (Annual Report 1927-188, 190); this showing may be further south than indicated.

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by the Devonian or older part of the Eagle Bay Formation rocks and the Cretaceous Baldy Batholith. A north-south striking quartz vein, 50 centimetres wide, with scattered inclusions of galena occurs within schist.

BIBLIOGRAPHY

EMPR AR *1927-188,190
EMPR MAP 53; 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/15

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 074**

MINFILE NUMBER: **082M 075**

NATIONAL MINERAL INVENTORY:

NAME(S): **ACACIA**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 20 N
LONGITUDE: 119 50 34 W
ELEVATION: 1000 Metres

NORTHING: 5663554
EASTING: 300922

LOCATION ACCURACY: Within 1 KM
COMMENTS: No definite location available.

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Quartz Sericite Biotite Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The area is underlain by the Devonian or older part of the Eagle Bay Formation rocks consisting of phyllite, sericitic quartzite and quartz biotite schist.

Two seams (10 to 20 centimetres wide) of lead-zinc mineralization lies conformable within the schists.

In 2000, Eagle Plains Resources acquired 4800 hectares of claims about the Acacia showing. Mineralization at the showing is believed to be the strike extension of the package that hosts the volcanogenic massive sulphide Rea Gold deposit (082M 191) located 6.5 kilometres to the north. Eagle Plains completed an initial survey of the property in 2000; further work is planned in 2001.

BIBLIOGRAPHY

EMPR AR *1926-186
EMPR MAP 56
GSC MAP 48-1963
GSC OF 637
GCNL #118(June 20), 2000
N MINER July 31, 2000

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 698
REPORT: RGEN0100

MINFILE NUMBER: **082M 076**

NATIONAL MINERAL INVENTORY:

NAME(S): **AX**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 12 40 N
LONGITUDE: 119 46 34 W
ELEVATION: 1300 Metres

NORTHING: 5676964
EASTING: 306103

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 5 (Assessment Report 13126).

COMMODITIES: Lead

Copper

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant Disseminated

CLASSIFICATION: Replacement

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

MODIFIER: Faulted

DIMENSION:

STRIKE/DIP: 080/28N

TREND/PLUNGE:

COMMENTS: Contact.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Mississippian	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Limestone
Greenstone
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by metasediments and metavolcanics of the Devonian or older part of the Eagle Bay Formation. A lower, mainly volcanic unit, consists of greenstone, derived from mafic volcanics. An upper, mainly sedimentary unit, consists of sericite-quartz phyllite, limestone and quartzite. The formation strikes from 070 to 160 degrees and dips from 5 degrees to 40 degrees northeast.

Mineralization occurs along the contact between the limestone and underlying phyllites. The phyllites are graphitic close to the contact which is often marked by a layer of soft, light-grey clay gouge. The contact zone is mineralized with veins and pods of quartz, up to 2 metres thick containing sparse to abundant pyrite and occasionally galena and chalcopyrite.

BIBLIOGRAPHY

EMPR ASS RPT *13126
EMPR MAP 56
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/01

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 076**

MINFILE NUMBER: **082M 077**

NATIONAL MINERAL INVENTORY:

NAME(S): **TRIDENT CR**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 57 00 N
LONGITUDE: 118 03 44 W
ELEVATION: 750 Metres

NORTHING: 5756010
EASTING: 426998

LOCATION ACCURACY: Within 500M

COMMENTS: Intersection of Trident Creek and Kinbasket Lake.

COMMODITIES: Niobium Uranium Thorium

MINERALS

SIGNIFICANT: Pyrochlore Nepheline Sodalite Staurolite Kyanite

MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Nepheline Syenite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
COMMENTS: A nepheline syenite stock lies within the Kootenay Terrane

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Placer uranium, thorium and niobium occur in Trident Creek, possibly derived from the nepheline syenite body at the head of the creek.

BIBLIOGRAPHY

EMPR AR *1959-104-105
EMPR FIELDWORK 1985, pp. 255-260
EMPR OF 1987-17, pp. 48-50; 1991-10
EMPR PF (*Russel, F.T. (1956): Report on #223 Prospecting, 1956)
GSC OF 551
GSC P 64-32

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/13

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 078**

NATIONAL MINERAL INVENTORY: 082M16 Pb1

NAME(S): **MOGUL**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 55 10 N
LONGITUDE: 118 01 54 W
ELEVATION: 900 Metres

NORTHING: 5752581
EASTING: 429049

LOCATION ACCURACY: Within 500M

COMMENTS: From descriptions and Cominco Geology Map, (Property File).

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive
CLASSIFICATION: Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Irregular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Proterozoic	Horsethief Creek	Undefined Formation	

LITHOLOGY: Quartzite
Mica Schist
Argillite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

Rocks in the area are probable Upper Proterozoic Horsethief Creek Group consisting of crystalline limestone overlain by quartzite and underlain by metamorphosed black argillite. The rocks are isoclinally folded and dip about 50 degrees to the southwest.

The original discovery is in quartzite and quartz-mica schist in the apex of a sharp fold surrounded by crystalline limestone estimated to be 30 metres or more thick. Quartz masses roughly follow the bedding but also break across it in the fractured apex of the fold in quartzite. A length of about 12 metres of quartz lenses in quartzite is exposed on the northwesterly limb of the fold, in masses up to 1.8 metres wide. Coarsely cubic galena occurs in masses as much as 0.6 metre across.

Limestone replacement by sphalerite and galena, in 8 to 10 centimetre bands, occurs in the northwesterly limb of the same fold (Annual Report, 1951).

BIBLIOGRAPHY

EMPR AR 1899-594; 1900-980; 1948-153; 1949-208; 1950-158; *1951-192; 1959-90,99,104
EMR MP CORPFILE (Kootenay Explorations Limited)
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, pp. 27,35
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/13

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 079**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRAHAM CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 42 40 N
LONGITUDE: 118 24 44 W
ELEVATION: 1650 Metres

NORTHING: 5729852
EASTING: 402430

LOCATION ACCURACY: Within 1 KM
COMMENTS: Symbol (Preliminary Map 25).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Upper Proterozoic
GROUP: Horsethief Creek

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Schist
Amphibolite
Marble
Quartzite
Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Underlying rocks in the area belong to the Upper Proterozoic Horsethief Creek Group. They consist of calcareous pelitic schists, amphibolites, marbles and quartzites.

Gold occurs in quartz veins around the heads of McCulloch and Graham creeks. These veins are thought to have been the source of the placer gold. The placer gold occurs as coarse grains and nuggets close to the bedrock and as fine colours in the gravels and surface sort. The gold is also angular and slightly porous.

BIBLIOGRAPHY

EMPR AR 1898-1061
EMPR EXPL 1983-164-165
EMPR MAP 25
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 34
GSC SUM RPT *1928, Part A, pp. 158,192

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 080**

NATIONAL MINERAL INVENTORY:

NAME(S): **STANMACK**, OLE BULL, BONANZA KING (L.2658)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 42 20 N
LONGITUDE: 118 26 04 W
ELEVATION: 1900 Metres

NORTHING: 5729264
EASTING: 400882

LOCATION ACCURACY: Within 500M

COMMENTS: Location of Ole Bull shaft, Fig. 6 (Assessment Report 11860).

COMMODITIES: Gold Silver Tungsten Mica

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Gold Scheelite Chalcopyrite
Galena Tetrahedrite Mica

COMMENTS: Green chromium mica. (Fuchsite).

ASSOCIATED: Quartz Ankerite

ALTERATION: Ankerite

ALTERATION TYPE: Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Discordant
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Upper Proterozoic Horsethief Creek Undefined Formation

LITHOLOGY: Phyllite
Quartzite
Schist
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1942
SAMPLE TYPE: Rock
COMMODITY GRADE
Tungsten 9.1000 Per cent

COMMENTS: May not have been assayed for other metals.

REFERENCE: Property File (Newmarch, C.B., 1942).

CAPSULE GEOLOGY

Underlying rock types consist of metasedimentary rocks interlayered with mafic volcanic rocks. The metasediments consist of quartzites, schists, phyllites, calcareous schists and carbonates. The metavolcanics are tholeiitic flows and mafic tuffs metamorphosed to greenstone and chloritic phyllite. The rocks exposed are correlated to Hoy's (Bulletin 71) Metavolcanic-Phyllite Division and Quartzite Schist Division of probable Lower Paleozoic Hamill Group and Upper Proterozoic Horsethief Creek Group (Assessment Report 11860).

Phase 2 and phase 3 folds are developed in an inverted stratigraphic panel. Predominant schistosity is east to southeast with dips commonly at 20 degrees east.

Two sets of quartz veins occur in the area. The commonly mineralized discordant veins strike 10 to 20 degrees and dip 70 to 85 degrees west. They range 0.15 to 4 metres in width. Barren veins, concordant with bedding, although with steeper dips, are up to 3 metres thick.

The mineralized veins are composed essentially of milky quartz and often contain minor pyrite and green chrome mica and lesser

CAPSULE GEOLOGY

pyrrhotite. Scheelite occurs in some of the gold-bearing veins. The gold occurs both in the quartz veins and in the country rock immediately adjacent to the auriferous veins.

Quartz veins in the Ole Bull shaft area lie within calcareous phyllites. A grab sample assayed 44.6 grams per tonne gold. A tungsten assay by Newmarch (1942) gave 9.1 per cent tungsten. A grab sample in the Ole Bull adit gave 371.0 grams per tonne silver (Assessment Report 11860).

BIBLIOGRAPHY

EM OF 1999-3
EMPR AR 1886-202; 1895-691; 1896-536; 1898-1059,1192; 1922-214-215; 1959-105-106
EMPR ASS RPT *10393, *11101, *11860, *13235
EMPR BULL 1, p. 119; 20, Part II, p. 17; 71
EMPR EXPL 1982-121; 1983-164-165; 1984-128-129
EMPR FIELDWORK 2000, pp. 231-252
EMPR MAP 25
EMPR OF 1991-17, 1999-3
EMPR PF (*Newmarch, C.B. (1942): Ole Bull Tungsten)
GSC MAP 12-1964; 237A
GSC OF 637
GSC P 64-32, p. 33
GSC SUM RPT *1928, Part A, pp. 154,155,158,159
GCNL Oct 25, 1982
IPDM March/April 1984, p. 11
N MINER April 26, 1984
W MINER April, 1984
WWW <http://www.orphanboy.com/gstream.html>

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/12

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 081**

NATIONAL MINERAL INVENTORY:

NAME(S): **MCCULLOCK CR**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

Open Pit

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 41 20 N
LONGITUDE: 118 27 34 W
ELEVATION: 1500 Metres

NORTHING: 5727445
EASTING: 399118

LOCATION ACCURACY: Within 1 KM
COMMENTS: Symbol (Preliminary Map 25).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Upper Proterozoic
GROUP: Horsethief Creek

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Schist
Amphibolite
Marble
Quartzite
Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Underlying rocks in the area belong to the Upper Proterozoic Horsethief Creek Group. They consist of calcareous pelitic schists, amphibolites, marbles and quartzites.

Gold occurs in quartz veins around the heads of McCulloch and Graham creeks. These veins are thought to have been the source of the placer gold. The placer gold occurs as coarse grains and nuggets close to the bedrock and as fine colours in the gravels and surface sort. The gold is also angular and slightly porous.

BIBLIOGRAPHY

EMPR AR 1885-499; 1886-204; 1887-268; 1889-267,279; 1890-356, 363; 1893-1043; 1894-743; 1895-690; 1896-535; 1898-1057,1061; 1901-139; 1904-115-116; 1906-149-150; 1908-91; 1912-K143; 1917-151,193; 1924-204; 1925-259; 1926-270; 1928-311; 1929-330; 1931-147; 1934-E34; 1939-A110; 1940-97; 1950-105-106; 1960-85
EMPR ASS RPT 10393, Appendix 1
EMPR BULL 20, Part II, p. 17; 21, p. 23; 28, pp. 52-54, Fig. 3
EMPR EXPL 1982-121; 1983-164-165; 1984-128-129
EMPR MAP 25
GSC ANN RPT 1887-88, V. III, Part II, pp. 133R-134R
GSC MAP 12-1964; 237A
GSC OF 637
GSC P 64-32, p. 34
GSC SUM RPT *1928, Part A, pp. 154,156,158,192

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 082**

NATIONAL MINERAL INVENTORY: 082M15 Zn1

NAME(S): **RUDDOCK CR (Q,R,U,V ZONES)**, IN, TO

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082M15W
BC MAP:
LATITUDE: 51 46 40 N
LONGITUDE: 118 57 04 W
ELEVATION: 1525 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: V zone, (Bulletin 57, pp. 48-57, Fig. 9).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5738123
EASTING: 365399

COMMODITIES: Zinc Lead Silver Fluorite Barite

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena Pyrite Chalcopyrite
Fluorite Barite
ASSOCIATED: Quartz Fluorite Barite Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Massive
CLASSIFICATION: Sedimentary Exhalative Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag S01 Industrial Min.
SHAPE: Tabular Broken Hill-type Pb-Zn-Ag±Cu
MODIFIER: Folded
DIMENSION: 1000 x 2 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: U-V synform, axial plane strikes 005 degrees and dips 25 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Shuswap Metamorphic Complex

LITHOLOGY: Quartzite
Calc-silicate Gneiss
Marble
Mica Schist
Calc-silicate Schist
Pegmatite
Granitic Rock

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The property lies on the northwest flank of Frenchman Cap Dome in a complexly and isoclinally folded metasedimentary sequence. The core gneisses of the dome lie beneath gently, north dipping metasedimentary rocks, which grade upward into the overlying metasediments consisting of micaceous schist, calc-silicate schist and gneiss, with intercalated layers of marble. Pegmatite and associated medium-grained granitic rocks replace and impregnate the metasediments. The metasediments are tentatively correlative with the Hadrynian Windermere Group.

Three mineralized areas, referred to as the E, F, G, M Zone, (see 082M 084) the T Zone (see 082M 083) and the Q, R, V, U Zone, occur as contorted layers and lenses, several metres thick and are traced intermittently over a strike length of several kilometres within schist, siliceous calc-silicate gneiss, quartzite and marble. The principal sulphides are sphalerite, pyrrhotite, galena, pyrite and minor chalcopyrite, locally associated with barite and fluorite. Very fine-grained sphalerite and pyrrhotite with minor galena and rounded quartz eyes are common. Equally common are layers containing medium grained dark brown sphalerite with interstitial quartz and scattered quartz augen. Galena and sphalerite also occur as scattered grains in marble, calcareous quartzite and fluorite.

In the sulphide layer, lenses of massive sulphides up to 1.5 metres thick are common. They are complexly folded within themselves on axis which plunge to the west parallel to the folds in the surrounding rocks. The folds in the sulphides, which are outlined by the banding and by discontinuous layers of schist, gneiss and quartzite, are irregular in form and usually disharmonic.

MINFILE NUMBER: **082M 082**

CAPSULE GEOLOGY

The Q, R and V Zones, which lie 4 kilometres west of the main E Zone, form a near continuous sulphide layer, outcropping for almost 1 kilometre, on the limb of a Phase 1 syncline. The U Zone lies 1 kilometre along strike to the east.

A major Phase 2 recumbent fold, closing to the south, is referred to as the U - V synform. Its axial plane strikes 5 degrees and dips 25 degrees to the west.

In 1999 Doublestar Resources Ltd. plans to acquire the property from Falconbridge Limited.

BIBLIOGRAPHY

- EMPR AR *1961-84; *1962-89; *1963-86-88
EMPR ASS RPT 4567, *5625, 5990, *6625, 10710
EMPR BULL *57, pp. 48-57, Fig. 9; 80, p. 85
EMPR EXPL 1975-E60; 1976-E75; 1977-E102; 1978-E117; 1982-124-125
EMPR GEM 1973-118
EMPR OF 1992-16
EMPR PF (*Morris, H.R. (1965): Report on Ruddock Creek Lead-Zinc Property)
GSC EC GEOL 1, p. 506
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, pp. 27-28
CIM BULL V. 75, No. 840, pp. 119,121 (Hoy, T. 1982)
CIM Special Volume No. 8, p. 244 (Muraro, T.W. (1966); No. 8, pp. 231-237 (Fyles, J.T. 1966)
Hoy, T. (1979): Stratigraphic and structural setting of stratabound lead-zinc deposits in the Shuswap Complex; abstract, Cordilleran Section, GAC 1979 meeting, p. 18
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/27

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 083**

NATIONAL MINERAL INVENTORY: 082M15 Zn1

NAME(S): **RUDDOCK CR (T ZONE)**, IT

STATUS: Developed Prospect

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082M15W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 51 46 10 N

NORTHING: 5737151

LONGITUDE: 118 55 34 W

EASTING: 367099

ELEVATION: 2150 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of T zone, (Bulletin 57, pp. 48-57, Fig. 9).

COMMODITIES: Zinc

Lead

Silver

Fluorite

Barite

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena Pyrite Chalcopyrite

Fluorite Barite

ASSOCIATED: Quartz Fluorite Barite Epidote

ALTERATION: Epidote

ALTERATION TYPE: Epidote

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound

Disseminated

Massive

CLASSIFICATION: Sedimentary

Exhalative

Replacement

Industrial Min.

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

S01

Broken Hill-type Pb-Zn-Ag±Cu

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 1000 x 2

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: T-synform, axial plane strikes 020 degrees and dips 25 degrees west.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic

Shuswap Metamorphic Complex

LITHOLOGY:

Quartzite
Calc-silicate Gneiss
Marble
Calc-silicate Schist
Mica Schist
Pegmatite
Granitic Rock

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Monashee

Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

The property lies on the northwest flank of Frenchman Cap Dome in a complexly and isoclinally folded metasedimentary sequence. The core gneisses of the dome lie beneath gently, north dipping metasedimentary rocks, which grade upward into the overlying metasediments consisting of micaceous schist, calc-silicate schist and gneiss, with intercalated layers of marble. Pegmatite and associated medium-grained granitic rocks replace and impregnate the metasediments. The metasediments are tentatively correlative with the Hadrynian Windermere Group.

Three mineralized areas, referred to as the E, F, G, M Zone, (see 082M 084) the T Zone and the Q, R, V, U Zone, (see 082M 082), occur as contorted layers and lenses, several metres thick and are traced intermittently over a strike length of several kilometres within schist, siliceous calc-silicate gneiss, quartzite and marble. The principal sulphides are sphalerite, pyrrhotite, galena, pyrite and minor chalcopyrite, locally associated with barite and fluorite. Very fine-grained sphalerite and pyrrhotite with minor galena and rounded quartz eyes are common. Equally common are layers containing medium grained dark brown sphalerite with interstitial quartz and scattered quartz augen. Galena and sphalerite also occur as scattered grains in marble, calcareous quartzite and fluorite.

In the sulphide layer, lenses of massive sulphides up to 1.5 metres thick are common. They are complexly folded within themselves on axis which plunge to the west parallel to the folds in the surrounding rocks. The folds in the sulphides, which are outlined by

CAPSULE GEOLOGY

the banding and by discontinuous layers of schist, gneiss and quartzite, are irregular in form and usually disharmonic.

The mineralized T Zone, lying 2 kilometres west-southwest of the main E Zone, is traced intermittently for 1 kilometre on the limb of a Phase 1 syncline. A major Phase 2 recumbent fold, closing to the south, is referred to as the T synform. Its axial plane strikes 20 degrees and dips 25 degrees to the west.

In 1999, Doublestar Resources Ltd. plans to acquire the property from Falconbridge Limited.

BIBLIOGRAPHY

- EMPR AR 1961-84; 1962-89; 1963-86-88
EMPR ASS RPT 4567, 5625, 5990, 6625, 10710
EMPR BULL *57, pp. 48-57, Fig. 9; 80, p. 85
EMPR EXPL 1975-E60; 1976-E75; 1977-E102; 1978-E117; 1982-124-125
EMPR GEM 1973-118
EMPR OF 1992-16
EMPR PF (*Morris, H.R. (1965): Report on Ruddock Creek Lead-Zinc Property)
GSC EC GEOL 1, p. 506
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, pp. 27-28
CIM BULL V. 75, No. 840, pp. 119,121 (Hoy, T. 1982)
CIM Special Volume No. 8, p. 244 (Muraro, T.W. (1966); No. 8, pp. 231-237 (Fyles, J.T. 1966)
Hoy, T. (1979): Stratigraphic and structural setting of stratabound lead-zinc deposits in the Shuswap Complex; abstract, Cordilleran Section, GAC 1979 meeting, p. 18
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/27

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 084**

NATIONAL MINERAL INVENTORY: 082M15 Zn1

NAME(S): **RUDDOCK CREEK**

STATUS: Developed Prospect

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082M15W

BC MAP:

LATITUDE: 51 46 35 N

LONGITUDE: 118 54 04 W

ELEVATION: 2300 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5737878

EASTING: 368844

LOCATION ACCURACY: Within 500M

COMMENTS: Main E zone (Bulletin 57, pp. 48-57, Fig. 9).

COMMODITIES: Zinc

Lead

Silver

MINERALS

SIGNIFICANT: Sphalerite

Pyrrhotite

Galena

Pyrite

Chalcopyrite

ASSOCIATED: Quartz

Fluorite

Barite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound

Disseminated

Massive

CLASSIFICATION: Sedimentary

Exhalative

TYPE: S01 Broken Hill-type Pb-Zn-Ag±Cu

E14 Sedimentary exhalative Zn-Pb-Ag

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 240 x 150 x 15 Metres

STRIKE/DIP: 025/35W

TREND/PLUNGE:

COMMENTS: Main E zone

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Paleoz.

Shuswap Metamorphic Complex

LITHOLOGY:

Quartzite

Calc-silicate Gneiss

Marble

Calc-silicate Schist

Mica Schist

Pegmatite

Granitic Rock

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Monashee

METAMORPHIC TYPE: Regional

Kootenay

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Monashee Mountains

GRADE: Amphibolite

INVENTORY

ORE ZONE: RUDDOCK CREEK

REPORT ON: Y

CATEGORY: Indicated

YEAR: 1982

QUANTITY: 5000000 Tonnes

COMMODITY

GRADE

Lead

2.5000

Per cent

Zinc

7.5000

Per cent

COMMENTS: Drill indicated.

REFERENCE: CIM Bulletin, April 1982, page 119.

CAPSULE GEOLOGY

The Ruddock Creek property lies on the northwest flank of Frenchman Cap Dome with the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex. The core gneisses of the dome lie beneath gently north dipping metasedimentary rocks consisting of micaceous schist, calc-silicate schist and gneiss, with intercalated layers of marble. Pegmatite and associated medium-grained granitic rocks replace and impregnate the metasediments.

The structure in the area is dominated by repetitive folding, followed by faulting. Earlier phase 1 folds are isoclinal and obscure. Notably, one large isoclinal syncline, with the main mineralized zone (E zone) at the hinge, trending 285 degrees and plunging 28 degrees, is recognized. Later phase 2 folds are more open and well-displayed. The axis of the phase 1 fold is essentially parallel to the axis of the phase 2 folds, with axial planes striking 020 to 030 degrees and dipping 20 to 30 degrees west.

Two general types of faulting occur in the area. The first

CAPSULE GEOLOGY

type, along the G and M showings, are irregular but fairly continuous branching zones of mylonite striking north and dipping 20 to 50 degrees west. The second type are late block faults, the most important lying west of the E Zone and displacing the main orebody down on the west. On the average, the fault strikes north and dips 58 degrees west.

Three mineralized areas, referred to as the E, F, G, M zone, (see 082M 084), the T zone and the Q, R, V, U zone, (see 082M 082), occur as contorted layers and lenses, several metres thick and are traced intermittently over a strike length of several kilometres within schist, siliceous calc-silicate gneiss, quartzite and marble.

The principal sulphides are sphalerite, pyrrhotite, galena, pyrite and minor chalcopyrite, locally associated with barite and fluorite. Very fine-grained sphalerite and pyrrhotite with minor galena and rounded quartz eyes are common. Equally common are layers containing medium-grained dark brown sphalerite with interstitial quartz and scattered quartz augen. Galena and sphalerite also occur as scattered grains in marble, calcareous quartzite and fluorite.

In the sulphide layer, lenses of massive sulphides up to 1.5 metres thick are common. They are complexly folded within themselves on axes which plunge to the west parallel to the folds in the surrounding rocks. The folds in the sulphides, which are outlined by the banding and by discontinuous layers of schist, gneiss and quartzite, are irregular in form and usually disharmonic.

The E zone (main showing), outcropping at 2300 metres elevation, is 240 metres long and widens from 15 metres across the strike at the east end to 60 metres across the open limbs at the west. The F zone, at 2000 metres elevation, occurs along strike 600 metres southwest of the E zone. The F zone is traced for 180 metres on surface. Five hundred metres west of the E zone, between 2240 and 2500 metres elevation, are a disjointed series of small mineralized showings referred to as the G zone. This zone continues 600 metres to the north to the M zone, which is at an elevation between 2470 and 2620 metres. This zone measures about 10 by 150 metres.

Drill indicated reserves at Ruddock Creek are 5 million tonnes grading 2.5 per cent lead and 7.5 per cent zinc (Canadian Institute of Mining and Metallurgy Bulletin, April 1982, page 119).

In 1999, Doublestar Resources Ltd. acquired the property from Falconbridge Limited and began mapping in 2000.

BIBLIOGRAPHY

- EM FIELDWORK 2000, pp. 85-115
- EMPR AR 1961-84; 1962-89; 1963-86-88
- EMPR ASS RPT 4567, *5625, *5990, *6625, 10710
- EMPR BULL *57, pp. 48-57; *80, p. 85
- EMPR EXPL 1975-E60; 1976-E75; 1977-E102; 1978-E117; 1982-124-125
- EMPR GEM 1973-118
- EMPR MAP 65 (1989)
- EMPR OF 1992-1; 2000-22
- EMPR PF (*Morris, H.R. (1965): Report on Ruddock Creek Lead-Zinc Property; CIM Presentation, Ruddock Creek; Doublestar Resources Ltd., Annual Report, December 1999)
- EMR MIN BULL MR 223 B.C. 81
- GSC EC GEOL 1, p. 506
- GSC MAP 12-1964
- GSC OF 637
- GSC P 64-32, pp. 27-28
- CIM Special Volume 8, p. 244 (Muraro, T.W. 1966; No.8, pp. 231-237 (Fyles, J.T. 1966); Vol.75, No.840, pp. 119-121 (Hoy, T. 1982))
- GCNL #130(Jul.7), 2000
- WWW <http://www.infomine.com/>
- Hoy, T. (1979): Stratigraphic and structural setting of stratabound lead-zinc deposits in the Shuswap Complex; abstract, Cordilleran Section, GAC 1979 Meeting, p. 18

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/27

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 085**

NATIONAL MINERAL INVENTORY: 082M9 Cu1

NAME(S): **MONTGOMERY**, MONT

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 32 25 N
LONGITUDE: 118 19 28 W
ELEVATION: 1625 Metres

NORTHING: 5710740
EASTING: 408150

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, Fig. 4 (Assessment Report 10180).

COMMODITIES: Copper Zinc Silver Gold

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Sphalerite
ASSOCIATED: Quartz Garnet Epidote Actinolite
ALTERATION: Silica Epidote
ALTERATION TYPE: Silicific'n Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Massive
CLASSIFICATION: Sedimentary Syngenetic
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 0770 x 0375 x 0004 Metres STRIKE/DIP: 070/40N TREND/PLUNGE:
COMMENTS: Maximum exposure of sulphide bed (Assessment Report 10180, p. 20).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Lardeau Index

LITHOLOGY: Mica Schist
Calc-silicate Gneiss
Amphibolite
Phyllite
Sericite Quartzite
Limestone
Dolomite
Calcareous Phyllite
Schistose Greenstone

HOSTROCK COMMENTS: Probably correlative with lower Paleozoic Lardeau Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 3.2000 Grams per tonne
Gold 0.0140 Grams per tonne
Copper 1.7600 Per cent
Zinc 0.2410 Per cent
COMMENTS: Sample width 2.0 metres.
REFERENCE: Assessment Report 10180, Fig. 4.

CAPSULE GEOLOGY

The Montgomery showings are a series of lenses of massive sulfides and disseminated sulfides in micaceous chloritic schist and sericitic quartzite of the metavolcanic-phyllite division of the Lower Paleozoic Upper Index Formation. Thin limestone and impure dolomite layers, calc-silicate gneiss, calcareous phyllite and massive to schistose greenstone layers are common in the immediate vicinity of the showings. This succession, believed to be right way up, is immediately underlain by calc-silicate gneiss, calcareous schist, amphibolite and locally skarn adjacent to the Goldstream

CAPSULE GEOLOGY

pluton, and a thick succession of quartzite and pelitic schist of the quartzite-schist division. To the northeast it is overlain by more calcareous rocks and a thick marble of the carbonate-phyllite division (Economic Geology, Vol. 79, No. 5).

Mineralization consists of disseminated pyrrhotite occurrences over a distance of 1200 metres and massive sulphide beds composed largely of pyrrhotite and lesser chalcopyrite and pyrite. The strata-bound massive sulphide mineralization, from 1 to 3.5 metres thick has been traced intermittently along strike for about 770 metres and through a vertical distance of 375 metres. The horizon strikes approximately west northwesterly and dips from 40 to 45 degrees north.

The Montgomery deposits are hosted by the same lithologic unit as the Goldstream deposit which is considered to be 'Besshi-type'.

A 2.0 metre channel sample assayed 1.76 per cent copper, 0.24 per cent zinc, 3.2 grams per tonne silver, and 0.014 grams per tonne gold (Assessment Report 10180).

BIBLIOGRAPHY

- EMPR AR 1916-192-193; 1917-152; 1921-154-155; 1929-330
- EMPR ASS RPT *10180, 15484
- EMPR BULL 71, pp. 28,29,32,33, Fig. 2
- EMPR EXPL 1976-68 (Mont)
- EMPR MAP 25
- EMPR OF 1999-2
- EMPR PF (*Morton, R.D. (1976): Preliminary Report on the Geology & Economic Potentials of the Bend & Mont Claims; in VSE Statement of Material Facts, Seaforth Mines Ltd., April 21, 1976)
- GSC MAP 12-1964
- GSC OF 637
- GSC P 64-32, p. 32
- GSC SUM RPT 1929, Part A, pp. 155,157,160-163
- GCNL Feb 18, Apr 2, May 12, Aug 3, 1976
- Hoy, T., Gibson, G., and Berg, N.W. 1984 (EG V. 79, No. 5, pp. 789, 791-793,800)

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 086**

NATIONAL MINERAL INVENTORY: 082M7 Zn1

NAME(S): **COTTONBELT**, COTTON BELT (L.2105), SHUSWAP,
 SNOW, BASS, TARTAR,
 QUEST, MOUNTAIN CHIEF

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 082M07W
 BC MAP:
 LATITUDE: 51 26 50 N
 LONGITUDE: 118 49 24 W
 ELEVATION: 1850 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Centre of main sulphide deposit (Map 43); also see Complex (082M 125) and Copper King (082M 144).

Underground
 MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5701136
 EASTING: 373296

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Sphalerite Magnetite Galena Pyrrhotite
 ASSOCIATED: Pyroxene Amphibole Quartz Garnet
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Massive
 CLASSIFICATION: Sedimentary Exhalative
 TYPE: S01 Broken Hill-type Pb-Zn-Ag±Cu E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 DIMENSION: 76 x 4 Metres STRIKE/DIP: 145/35W TREND/PLUNGE:
 COMMENTS: Main ore shoot exposed on surface; sulphide layer traced intermittently 5 kilometres along strike.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Siliceous Calcareous Schist
 Garnet Sillimanite Schist
 Quartzite
 Limestone
 Micaceous Schist
 Calcareous Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Monashee
 METAMORPHIC TYPE: Regional

Kootenay
 RELATIONSHIP:
 PHYSIOGRAPHIC AREA: Monashee Mountains
 GRADE: Amphibolite

INVENTORY

ORE ZONE: COTTONBELT REPORT ON: Y

CATEGORY: Unclassified YEAR: 1996
 QUANTITY: 725000 Tonnes
COMMODITY GRADE

Silver	58.3000	Grams per tonne
Lead	5.0000	Per cent
Zinc	6.0000	Per cent

COMMENTS: Lead and zinc are estimated; 11 per cent combined lead and zinc.
 REFERENCE: Information Circular 1996-1, pages 23, 25.

ORE ZONE: COTTON BELT REPORT ON: N

CATEGORY: Unclassified YEAR: 1982
 QUANTITY: 1000000 Tonnes
COMMODITY GRADE

Silver	50.0000	Grams per tonne
Lead	6.0000	Per cent
Zinc	2.0000	Per cent

COMMENTS: Less than 1 million tonnes.
 REFERENCE: CIM Bulletin, April 1982, page 119.

CAPSULE GEOLOGY

The property lies within the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex along the northwestern margin of the Frenchman

CAPSULE GEOLOGY

Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age. The dome is mantled by unconformably overlying metasedimentary rocks consisting of quartzites, calcareous schists, marbles and pelitic schists and locally intruded by carbonatite.

The metasediments comprise the limbs of the Grace Mountain syncline, a tight isoclinal fold trending southeasterly.

The mineralized zones occur on both limbs of the syncline within the 'Cottonbelt Sequence', a heterogeneous package of dominantly calcareous rocks (Fieldwork, 1978). At the base of the Cottonbelt sequence is a buff-weathering carbonatite layer overlain by calcareous schists and a calcareous to relatively pure white quartzite. A distinctive grey-weathering, white limestone overlies the quartzite, which is overlain by interlayered micaceous and calcareous schists and an impure grey-weathering crumbly limestone. The sulphide layer, enveloped by a thin layer of very siliceous calcareous schist and garnet sillimanite schist, defines the top of the Cottonbelt sequence.

The mineralization comprises an oxide-sulphide layer, traced intermittently through a strike length of 5 kilometres in the western (upper) limb (Cotton Belt zone) of the Grace Mountain syncline and 2 kilometres in the lower limb (McLeod zone). It varies in thickness from a few tens of centimetres to approximately 2 metres. Mineralization generally consists of coarse-grained sphalerite, magnetite, galena and minor pyrrhotite in a dark green, pyroxene-amphibole-quartz-garnet 'skarn' rock or, as layers within a lighter coloured, more siliceous calcareous gneiss, or as disseminated grains in a siliceous granular marble.

The mineralized zones are parallel with bedding in the metasediments and dip about 35 degrees southwest. Several adits, shafts and raises have exposed mineralization intermittently over a strike distance of 1650 metres. The main ore zone, as exposed on surface, is up to 3.7 metres wide and 76 metres long.

About 2.5 kilometres northwest of the main zone, within the same stratigraphic unit, are several smaller occurrences of sulphides (see Copper King (082M 144)). The McLeod zone (082M 125) lies about 460 metres northeast of the Cotton Belt zone.

Unclassified reserves of the Cotton Belt zone are less than 1 million tonnes grading 6 per cent lead, 2 per cent zinc and 50 grams per tonne silver (Canadian Institute of Mining and Metallurgy Bulletin, April 1982, page 119).

In 1995, with Explore B.C. Program support, CanQuest Resource Corporation completed geological and geophysical surveys and 1937 metres of diamond drilling in 27 holes, confirming the great lateral extent but limited and very variable thickness of the deposit due to intense and complex deformation of the hostrocks (Explore B.C. Program 95/96 - M70). Resources are estimated at 725,000 tonnes grading 11 per cent combined lead and zinc (about 5 per cent lead and 6 per cent zinc) and 58.3 grams per tonne silver (Information Circular 1996-1, pages 23, 25).

BIBLIOGRAPHY

- EMPR AR 1905-195; 1906-174-175; 1907-131-133; 1908-123; 1909-139-141; 1910-129; 1911-181; 1912-327; 1913-181-182,200-202; 1922-149-152; 1925-171-172; 1926-188-189; *1927-195-197,402; 1928-209-210; 1929-217; 1930-182-183
EMPR ASS RPT 486, 958, 1768, *2637, 4367, *6207, 6888, 7007, *13822, 23568, 23985, 24367, 24841
EMPR BULL 57, pp. 7,9,43; *80, pp. 74-83
EMPR EXPL 1976-64; 1977-93; 1978-109-110; 1985-C107; 1996-D5
EMPR Explore B.C. Program 95/96 - M70
EMPR FIELDWORK *1978, pp. 18-23; 1981, pp. 187-201; 1985, pp. 69,80; 2000, pp. 85-114
EMPR GEM 1970-318; 1973-116
EMPR INF CIRC 1996-1, p. 25
EMPR MAP 43; 65 (1989)
EMPR OF 1992-1; 1994-8; 1998-10; 2000-22
EMPR P 1991-4, pp. 71-88
EMPR PF (*Allen, A.R. (1966): Report on the Cottonbelt Property; Canquest Resource Corporation Website (Mar 1999): Cottonbelt Property, 11 p.; See OK, 092K 008 - Canquest Resource Corporation Corporate Profile Report (circa 2000), 9 p.)
EMR MIN BULL MR 223 B.C. 74
EMR MP CORPFILE (Seymour Mining Corporation Limited; Cotton Belt Mines Limited; Great Northern Petroleum & Mines Ltd.)
GSC EC GEOL 20, p. 304; 1, p. 506
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 28

BIBLIOGRAPHY

- CIM Special Volume No. 8, p. 235, Fig. 14-1 (Fyles, J.T. 1966)
CIM Vol.75, No.840, pp. 119,121,123 (Hoy, T. 1982)
EMJ July 1952, Vol.153, No.7, p. 156
GCNL Oct.25, 1983
Kovacik, J.C. (1977): Report on the Shuswap Joint Venture Project,
Cottonbelt Claims; internal company report for Metallgesellschaft
Canada Ltd.
Levin, P., McClaren, M. and Dickinson, R. (1976): Geological report
on the Cottonbelt Pb/Zn occurrence 60 miles N. of Revelstoke, B.C.;
internal company report for Metallgesellschaft Canada Ltd./United
Mineral Services Ltd.
W MINER Feb. 1979, p. 15
WWW <http://www.canquest.bc.ca/cottonbe.htm>

DATE CODED: 1985/07/24
DATE REVISED: 1996/11/08

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 087**

NATIONAL MINERAL INVENTORY:

NAME(S): **STERLING**, STIRLING, HARDPAN
ROBINA

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 23 00 N
LONGITUDE: 118 24 24 W
ELEVATION: 603 Metres

NORTHING: 5693393
EASTING: 402112

LOCATION ACCURACY: Within 500M
COMMENTS: Diamond Drill Hole 81-2, Fig. 2 (Assessment Report 9329).

COMMODITIES: Molybdenum Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Molybdenite Pyrite Galena Sphalerite Pyrrhotite
ASSOCIATED: Quartz Albite Rutile
ALTERATION: Fuchsite Carbonate Silica Albite Chlorite
ALTERATION TYPE: Quartz-Carb. Silicific'n Sericitic Albitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant Disseminated
CLASSIFICATION: Replacement Pegmatite
TYPE: * Unknown
SHAPE: Irregular
DIMENSION: 0040 x 0012 Metres STRIKE/DIP: 015/35W TREND/PLUNGE:
COMMENTS: Dimension: Surface exposure and width indicated by drilling; length unknown.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Lardeau Undefined Formation

LITHOLOGY: Quartzite
Limestone
Quartz Chlorite Muscovite Schist
Graphitic Schist
Chlorite Muscovite Magnetite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Molybdenum 4.6700 Per cent
COMMENTS: 2 metre width.
REFERENCE: Assessment Report 9329.

CAPSULE GEOLOGY

The showings are underlain by Lardeau Group metasediments consisting of sericitic impure quartzite, quartz-chlorite-muscovite schist, graphite schist, crystalline limestone and chlorite-muscovite-magnetite schist. The rocks have a general strike of 015 degrees and a 30 degree northwest dip.

Molybdenite and galena occurs in concordant pegmatite-like sills and in quartz and quartz-albite veins. Pyrite and pyrrhotite are disseminated throughout the rocks and traces of chalcopyrite and sphalerite occur.

Fuchsite, albite, and rutile are associated with molybdenum and feldspars are locally altered to epidote, sericite, and chlorite (sausseritization).

BIBLIOGRAPHY

EMPR AR 1902-299; 1931-148; 1932-180,181
EMPR ASS RPT 539, *9329

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 717
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL *9, pp. 70-73
EMPR EXPL 1980-141-142, Fig. E-1
EMPR FIELDWORK *1981, p. 56
EMPR GEM 1970-464; 1971-441
GSC EC GEOL *20, pp. 46,302-303
GSC MAP 12-1964; 1045A-M3
GSC OF 637
GSC P 64-32, p. 34

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/03

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 088**

NATIONAL MINERAL INVENTORY:

NAME(S): **KEYSTONE 1**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 26 10 N
LONGITUDE: 118 26 54 W
ELEVATION: 640 Metres

NORTHING: 5699319
EASTING: 399329

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralization, Dwg. 1 (Assessment Report 9721).

COMMODITIES: Zinc

Copper

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Sphalerite

ASSOCIATED: Quartz Chlorite Sericite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive

CLASSIFICATION: Replacement

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION:

STRIKE/DIP: 090/30S

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cambrian

Lardeau

Undefined Formation

LITHOLOGY: Chlorite Schist
Quartz Sericite Schist

HOSTROCK COMMENTS: Probably correlative with lower Paleozoic Lardeau Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The property is underlain by metasedimentary and metavolcanic rocks of the Lardeau Group.

The showing consist of a conformable layer of massive sulphides within quartz-chlorite schist. The layer strikes 090 degrees and dips between 0 and 30 degrees to the south. Sulphide mineralization includes massive pyrrhotite, pyrite with minor chalcopyrite and sphalerite. The layer varies in thickness from 6 to 20 centimetres and is about 12 metres long. The extremities appear to be faulted.

BIBLIOGRAPHY

EMPR ASS RPT 6097, *6704, *9721, 14351, 16089
EMPR OF 1999-2
GSC MAP 12-1964; 237A
GSC OF 637
GSC P 64-32
GSC SUM RPT 1929, Part A
WWW <http://www.infomine.com/>

DATE CODED: 1985/07/24
DATE REVISED: 1987/11/09

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 089**

NATIONAL MINERAL INVENTORY: 082M8 Zn2

NAME(S): **KEYSTONE**, KS

MINING DIVISION: Revelstoke

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M08W
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 27 50 N
 LONGITUDE: 118 20 34 W
 ELEVATION: 2100 Metres

NORTHING: 5702268
 EASTING: 406722

LOCATION ACCURACY: Within 500M

COMMENTS: Main adit symbol 2, (Bulletin 71, pp. 28-31, Fig. 2).

COMMODITIES: Lead Zinc Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Galena Pyrite Chalcopyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Massive

CLASSIFICATION: Replacement Epigenetic

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Tabular

STRIKE/DIP: 045/15S TREND/PLUNGE:

COMMENTS: Strike and dip of metasediments.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Index	

LITHOLOGY: Limestone
 Quartzite
 Pelitic Schist
 Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Selkirk Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1976

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver	17.8000	Grams per tonne
Gold	2.0000	Grams per tonne
Copper	0.2700	Per cent
Lead	1.0000	Per cent
Zinc	0.2500	Per cent

COMMENTS: One metre sample width.

REFERENCE: Assessment Report 6235.

CAPSULE GEOLOGY

The Keystone property is underlain by quartzites, phyllites and schists of probable Lower Paleozoic Lardeau Group and isolated inliers of the Badshot limestone. Showings on the property consist of conformable replacements in limestone and discordant fault controlled vein type occurrences with a quartz gangue.

The main showing is at an elevation of 2120 metres and has been exposed by trenching to reveal a band approximately 1 metre by 15 metres of replaced limestone. Mineralization consists dominantly of pyrrhotite, sphalerite, galena, pyrite and minor chalcopyrite. A one metre sample assay yielded 1.0 per cent lead, 0.25 per cent zinc, 0.27 per cent copper, 2.0 grams per tonne gold, and 17.8 grams per tonne silver (Assessment Report 6235).

A second trench, 400 metres northwest of the main showing, exposes a crosscutting mineralized quartz vein within quartz-chlorite-sericite phyllite. The vein contains coarse grained pyrite and minor sphalerite and galena.

A lead-zinc showing, 650 metres south of the main showing, occurs

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 720
REPORT: RGEN0100

CAPSULE GEOLOGY

in limestone. A grab sample assayed 0.31 per cent lead, 0.2 per cent zinc and 6 grams per tonne silver (Assessment Report 10768). A showing, 700 metres northeast of the main showing, consists of a quartz vein with pyrrhotite, sphalerite and galena. A grab sample yielded 0.48 per cent lead, 0.15 per cent zinc and 26 grams per tonne silver.

BIBLIOGRAPHY

EMPR AR 1898-1059; 1905-148,152; 1912-144; 1929-330
EMPR ASS RPT *6187, 6235, *6612, *7177, 10768
EMPR BULL *71, pp. 28-31
EMPR EXPL 1976-E65-66; 1977-E95-96; 1978-E110; 1979-E111; 1982-119
EMPR MAP 25
GSC MAP 12-1964; 237A
GSC OF 637
GSC P 64-32, p. 32
GSC SUM RPT 1928, Part A, pp. 154,188-189

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/03

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 090**

NATIONAL MINERAL INVENTORY: 082M8 Cu1

NAME(S): **STANDARD BASIN**, STANDARD

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M08E
 BC MAP:
 LATITUDE: 51 23 05 N
 LONGITUDE: 118 14 44 W
 ELEVATION: 2100 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Symbol (Bulletin 71, pp. 27-31, 44-45, Fig. 2).

MINING DIVISION: Revelstoke
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5693345
 EASTING: 413326

COMMODITIES: Copper Silver Gold Zinc Talc
 Asbestos

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite Talc
 Asbestos
 ASSOCIATED: Quartz Dolomite
 ALTERATION: Talc Serpentine Carbonate Chlorite Mica
 ALTERATION TYPE: Talc Serpentin'zn Carbonate Chloritic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
 CLASSIFICATION: Volcanogenic Hydrothermal Replacement Industrial Min.
 TYPE: G04 Besshi massive sulphide Cu-Zn M06 Ultramafic-hosted asbestos
 M07 Ultramafic-hosted talc-magnesite
 SHAPE: Regular
 MODIFIER: Folded
 COMMENTS: Mineralized layer traced intermittently over a strike length of 1500 metres on the east limb of an antiform.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Index	

LITHOLOGY: Greenstone
 Phyllite
 Serpentinite
 Limestone
 Chlorite Schist

HOSTROCK COMMENTS: Deposit hosted in mafic metavolcanics and phyllite of the upper Index Formation (Geological Survey of Canada Paper 83-1A).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1976
 SAMPLE TYPE: Grab

COMMODITY	GRADE	
Silver	29.0000	Grams per tonne
Gold	1.0000	Grams per tonne
Copper	9.9800	Per cent
Zinc	0.8400	Per cent

 COMMENTS: Sample of massive, fine-grained pyrite and chalcopyrite.
 REFERENCE: Geology in British Columbia, 1976, page 36.

CAPSULE GEOLOGY

The Standard property, on Standard Peak, is 41 kilometres north of Revelstoke in the Selkirk Mountains, northeast of the Columbia River. The property has been worked discontinuously since 1896 as a copper-silver-zinc-gold prospect. Ultramafic pods lie in a metasedimentary phyllite unit, within the upper Index Formation of the lower Paleozoic Lardeau Group (Geological Survey of Canada Paper 83-1A). The pods, consisting of coarse-grained, brown weathering talc-chlorite-serpentine-dolomite, are repeated as part of the Standard anticline. The anticline

CAPSULE GEOLOGY

consists of metamorphosed volcanics and sediments, crystalline limestone, pyritic graphitic schists, grey sericite schists and hornblende-feldspar-chlorite schists.

Massive sulphide mineralization, consisting of a series of layers and lenses of massive pyrrhotite and pyrite with minor chalcopyrite and sphalerite, is most dominant within the greenstones on both sides of the Standard antiform. On the east limb, mineralization can be traced intermittently through a strike length of 1500 metres. Drill holes have intersected massive sulphide sections from 0.2 to 2 metres thick.

Talc occurs admixed with carbonate and serpentine, sometimes with chrome-mica veining, along broad zones of alteration in greenstone. In the No. 2 and No. 3 adits "pure", light green talc is reported to occur in shears in serpentine, along with a lesser amount of slip-fibre asbestos.

A grab sample of massive fine-grained pyrite and chalcopyrite assayed 1 gram per tonne gold, 29 grams per tonne silver, 0.84 per cent zinc and 9.98 per cent copper (Geology in British Columbia, 1976 p. 36).

BIBLIOGRAPHY

- EMPR AR 1898-1059; 1899-671; 1900-809; 1901-1016; 1902-139,190;
1904-115; 1905-151; 1906-137,252; 1907-218; 1912-144; 1917-
181; 1919-150; *1921-155-156; 1926-155
EMPR ASS RPT *6070, *6187, 11140
EMPR BULL 71, pp. 27-31, 41-45, Fig. 2
EMPR EXPL 1976-66; 1977-95-96
EMPR FIELDWORK 1976, pp. 17-22
EMPR GEOL *1976, pp. 36-40
EMPR MAP 25
EMPR OF 1988-19; 1995-25; 1999-2
EMPR PF (Hughes, B.B. (1977): Summary of Drilling Done on the
Standard Property)
GSC MAP 12-1964; 237A
GSC OF 481
GSC P 64-32; 83-1A, pp. 203-206
GSC SUM RPT 1928, Part A, pp. 162-165
Hoy, T., Gibson, G. and Berg, N.W., 1984 (EG V. 79, No. 5, pp. 789,
792,796,799-800)
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 091**

NATIONAL MINERAL INVENTORY: 082M8 Zn4

NAME(S): **ROSEBERRY**, SALISBURY

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 40 N
LONGITUDE: 118 10 44 W
ELEVATION: 1680 Metres

NORTHING: 5685082
EASTING: 417834

LOCATION ACCURACY: Within 500M
COMMENTS: Symbol on Map 12-1964.

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Tetrahedrite Sphalerite Galena
ASSOCIATED: Pyrrhotite
ALTERATION: Jarosite Malachite Azurite Scorodite Carbonate
Goethite Sericite
ALTERATION TYPE: Silicific'n Carbonate Oxidation Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Lardeau	Badshot	

LITHOLOGY: Graphitic Quartz Phyllite
Banded Limestone
Sericite Phyllite
Quartzite

HOSTROCK COMMENTS: Includes Hamill Formation of Lower Cambrian age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP: Post-mineralization
GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by northwest striking, easterly dipping, isoclinally folded sediments and metasediments of the Badshot and Hamill Formations.

The Hamill Formation contains quartzites, quartz-sericite, chlorite-sericite, and graphitic quartz phyllites. The Badshot Formation consists of banded limestones.

A mineralized zone in the Hamill quartzite contains oxidized and leached pyrite lenses with jarosite staining and sericite alteration. A second zone, several hundred metres northeast of the first zone, contains erratic sulphide pods of tetrahedrite, galena, pyrite, sphalerite, malachite, azurite, scorodite, and jarosite occupying shear zones within the Badshot limestone. Soil and rock samples taken from these zones indicate anomalous values of gold, silver, lead, zinc, and copper.

BIBLIOGRAPHY

EMPR AR 1896-537; 1898-1059,1060; 1899-671,846; 1900-809;
1917-151; 1933-212
EMPR ASS RPT 614, 12616, *14405
EMPR EXPL 1982-118; 1986-C121
EMR MP CORPFILE (Westairs Mines Ltd.)
GSC MAP 12-1964; 237A
GSC P 64-32, p. 33
GSC SUM RPT *1928, Part A, p. 159
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 724
REPORT: RGEN0100

MINFILE NUMBER: **082M 092**

NATIONAL MINERAL INVENTORY:

NAME(S): **HAIL COLUMBIA**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 39 00 N
LONGITUDE: 118 41 44 W
ELEVATION: 550 Metres

NORTHING: 5723473
EASTING: 382698

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Schist
Gravel
Clay

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Placer gravel up to 5 metres thick overlies blue clay one metre thick which rests on bedrock. Best values came from boulder-clay that overlies the gravel.

BIBLIOGRAPHY

EMPR AR 1937-E43-44; 1938-E45; 1939-A110; 1940-A97
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 092**

MINFILE NUMBER: **082M 093**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROUGE**, MAD RIVER

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 42 20 N
LONGITUDE: 119 31 24 W

NORTHING: 5731304
EASTING: 325651

ELEVATION: 1300 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of Rouge Claims (Property File, White, 1982).

COMMODITIES: Lead Silver Gold Zinc Copper

MINERALS

SIGNIFICANT: Pyrite Galena

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Regular

DIMENSION: 0035 x 0005 Metres

STRIKE/DIP: 140/30W

TREND/PLUNGE:

COMMENTS: Quartz sulphide vein.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Cambrian

Shuswap Metamorphic Complex

LITHOLOGY: Granitic Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1935

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

631.0000

Grams per tonne

Lead

15.5000

Per cent

Zinc

3.7000

Per cent

REFERENCE: Property File: Plan, Mad River Group showings, 1935.

CAPSULE GEOLOGY

The area is underlain by the Shuswap Metamorphic Complex. Pyrite and galena occur in a northwest trending, southwest dipping quartz-sulphide lens within a quartz-feldspar-muscovite granite gneiss.

A 2 metre chip sample assayed 3.3 per cent lead, 113.5 grams per tonne silver and 0.03 per cent copper, and trace gold (Property File, White, 1982). A 2.4 by 2.4 metre chip sample assayed 5.9 per cent lead and 391 grams per tonne silver and a grab sample assayed 15.5 per cent lead, 3.7 per cent zinc and 631 grams per tonne silver (Property File; Plan, Mad River Group Showings, 1935).

BIBLIOGRAPHY

EMPR AR 1887-273; 1888-313; 1889-289; 1890-376; 1894-750; 1901-1083

EMPR PF (*White, G.P.E. (1982): Memorandum, Map and Sample Results; *(1935): Plan, Mad River Group Showings)

GSC MAP 48-1963

GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 094**

NATIONAL MINERAL INVENTORY: 082M1 Zn4

NAME(S): **LEAD KING**, EUREKA (L.9124), ADAIR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 13 35 N
LONGITUDE: 118 05 54 W
ELEVATION: 1830 Metres

NORTHING: 5675574
EASTING: 423307

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol 5, Map 12-1984 (GSC Paper 84-32, p. 30).

COMMODITIES: Lead Zinc Copper Silver

MINERALS

SIGNIFICANT: Sphalerite Galena
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Irregular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Badshot	

LITHOLOGY: Limestone
Dolomite
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The showings occur in northeasterly dipping limestones and dolomites. The carbonates and adjoining phyllites to the southeast are isoclinally folded and highly sheared.

Four or five lenses of sphalerite and galena are exposed along the dolomite band for about 60 metres and are concentrated in a poorly defined zone a few metres wide.

BIBLIOGRAPHY

EMPR AR 1898-1060; 1899-672; 1900-809; 1910-248; 1917-152; *1959-117-118
EMPR ASS RPT *5724, 6522
EMPR EXPL 1975-E56
EMR MP CORPFILE (Le Man's Resources Ltd.)
GSC MAP 12-1964, 4404G
GSC OF 637
GSC P 84-32, p. 30
GSC SUM RPT 1928, Part A, p. 190
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/27

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 095**

NATIONAL MINERAL INVENTORY: 082M1 Zn8

NAME(S): **COPELAND CREEK**, BONGO

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 09 40 N
LONGITUDE: 118 27 59 W
ELEVATION: 2100 Metres

NORTHING: 5668763
EASTING: 397463

LOCATION ACCURACY: Within 500M

COMMENTS: Fig. 2, (Bulletin 57, pp. 37, 58).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Epigenetic
SHAPE: Regular
MODIFIER: Fractured
DIMENSION: 0046 x 0002 Metres STRIKE/DIP: 015/70E TREND/PLUNGE:
COMMENTS: Attitude of fracture.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Gneiss
Granitic Gneiss
Lamprophyre

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence lies on the southern flank of the Frenchman Cap Dome, along the eastern margin of the Shuswap Metamorphic Complex. Underlying rocks include dominantly granite orthogneiss and minor paragneiss of the core of the dome. Mineralization occurs along a fracture which strikes 015 degrees and dips 70 degrees east. The mineralized core is up to 2 metres wide and extends along the western slope of a cliff for approximately 46 metres. Masses of galena and sphalerite up to 60 centimetres thick lie on either side of a lamprophyre dyke. The dyke is highly altered, suggesting that the sulphide mineralization is later than the dyke.

BIBLIOGRAPHY

EMPR BULL 57, pp. 37,58
EMPR MAP 43
GSC MAP 12-1964; 4404G
GSC OF 637
GSC P 64-32
PR REL International Arimex Resources Inc., November 28, 2002

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 728
REPORT: RGEN0100

MINFILE NUMBER: **082M 096**

NATIONAL MINERAL INVENTORY: 082M1 Zn7

NAME(S): **HIREN CREEK**, BINGO

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 02 N
LONGITUDE: 118 22 54 W
ELEVATION: 1120 Metres

NORTHING: 5660062
EASTING: 403226

LOCATION ACCURACY: Within 500M

COMMENTS: (Bulletin 57, pp. 37, 57-58, Fig. 2).

COMMODITIES: Lead Zinc Fluorite

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Fluorite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Industrial Min.
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Regular
MODIFIER: Faulted
DIMENSION: 0006 x 0002 Metres STRIKE/DIP: 360/75W TREND/PLUNGE:
COMMENTS: Attitude of fracture.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Marble
Mica Schist
Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence lies on the southern flank of the Frenchman Cap Dome, along the eastern margin of the Shuswap Metamorphic Complex. Underlying rocks include calc-silicate gneiss and marble comprising part of the domal covering gneisses.

A north trending fracture, adjacent to a major north trending fault, dips 75 degrees west and transects grey mica schist and a layer of buff-weathered fine-grained dolomite. Galena, sphalerite and pyrite are disseminated over a 2 by 6 metre area west of the fracture. South of this showing are masses of purple fluorite.

BIBLIOGRAPHY

EMPR BULL *57, pp. 37,57-58
EMPR MAP 43
EMPR OF 1992-16
GSC MAP 12-1964; 4404G
GSC OF 637
GSC P 64-32
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 096**

MINFILE NUMBER: **082M 097**

NATIONAL MINERAL INVENTORY:

NAME(S): **WEST COLUMBIA**, COLUMBIA RIVER

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

Open Pit

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 39 20 N
LONGITUDE: 118 37 34 W
ELEVATION: 500 Metres

NORTHING: 5723981
EASTING: 387515

LOCATION ACCURACY: Within 1 KM
COMMENTS: From descriptions.

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee

PHYSIOGRAPHIC AREA: Monashee Mountains

CAPSULE GEOLOGY

The area is underlain by metasediments of the Shuswap Metamorphic Complex.

BIBLIOGRAPHY

EMPR AR 1889-267,279; 1894-743; 1895-691
EMPR BULL *28, p. 53, Fig. 3
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 34

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 098**

NATIONAL MINERAL INVENTORY:

NAME(S): **MONARCH**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 40 00 N
LONGITUDE: 118 37 04 W
ELEVATION: 600 Metres

NORTHING: 5725204
EASTING: 388119

LOCATION ACCURACY: Within 500M

COMMENTS: Near the mouth of Goldstream Creek on east side of the Columbia River,
112 kilometres north of Revelstoke.

COMMODITIES: Asbestos Talc

MINERALS

SIGNIFICANT: Asbestos Talc
ASSOCIATED: Magnetite Actinolite
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound
CLASSIFICATION: Hydrothermal Industrial Min.
TYPE: M07 Ultramafic-hosted talc-magnesite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Lardeau

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Talc Schist
Serpentinite
Graphitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

The area is underlain by probable Lower Paleozoic Lardeau Group metasediments and metavolcanics.

Serpentine layers occur in talc and graphitic schists. Some of the serpentine contains stringers and veinlets of asbestos of actinolitic variety. The rocks strike north-westerly and dip 25 to 40 degrees northeast. Limestone occurs a short distance to the east of the showing.

Exposures in three crosscut tunnels show graphitic and talc schists with serpentine layers. Several "layers" of talcose material are reported. The rocks strike northwest and dip moderately northeast. At the No. 1 adit, 50 metres above the Columbia River, a 2.1 metre width of "fair quality" talc is reported. Impurities include fine-grained magnetite. An analysis of this material yielded the following percentages (O'Grady, 1922).

Silica	61.0
Fe-oxide	4.9
Alumina	0.6
Magnesia	32.0
Lime	trace
Loss on ignition	1.0

Similar material obtained from further within the same tunnel were analysed and found not to be composed of talc.

Some of the serpentine contains stringers and veinlets of asbestos of actinolitic variety.

BIBLIOGRAPHY

EMPR AR *1922-215
EMPR ASS RPT 15484
EMPR OF 1988-19; 1995-25
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 34

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 731
REPORT: RGEN0100

BIBLIOGRAPHY

GSC SUM RPT 1928, p. A193

DATE CODED: 1985/07/24
DATE REVISED: 1988/01/12

CODED BY: GSB
REVISED BY: MM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 099**

NATIONAL MINERAL INVENTORY: 082M8 Zn3

NAME(S): **A & E**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 19 30 N
LONGITUDE: 118 09 14 W
ELEVATION: 2000 Metres

NORTHING: 5686599
EASTING: 419600

LOCATION ACCURACY: Within 500M

COMMENTS: Map symbol GSC Map 12-1964 (GSC Paper 64-32, pp. 31-32).

COMMODITIES: Zinc Lead Silver Gold

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Arsenopyrite Tetrahedrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Massive
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Irregular
COMMENTS: Width of zone is variable.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Lardeau	Badshot	

LITHOLOGY: Limestone
Marble
Slate
Sericite Schist

HOSTROCK COMMENTS: Near the contact with black slate of the Lardeau Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

The showings consist of two principle zones of mineralization. The southwestern zone occurs at the contact of northeast-dipping Badshot marble lying structurally on black slate of the Lardeau Group. Sixty to 90 centimetre lenses of pyrite, sphalerite and galena have replaced the limestone near the contact. Smaller veins intersect the main zone at small angles.

The second zone, 60 metres stratigraphically higher, consists of pyrrhotite, sphalerite, and galena with minor tetrahedrite and arsenopyrite. It occurs in limestone which contains a thin bed of grey sericite schist. The zone has been traced for 46 metres varying from 76 to 183 centimetres in width.

BIBLIOGRAPHY

EMPR AR 1929-330; 1930-259; 1931-148; *1933-211-212; 1964-136
EMPR ASS RPT 10664, 12616, *14405
EMPR BULL 1, pp. 119-120
EMPR EXPL 1982-118; 1986-C121
GSC MAP 12-1964; 237A
GSC OF 637
GSC P *64-32, pp. 31-32
GSC SUM RPT 1928, Part A, pp. 171,173
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 100**

NATIONAL MINERAL INVENTORY: 082M16 Pb1

NAME(S): **KINBASKET**, TIMBASKET

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 56 00 N
LONGITUDE: 118 02 54 W
ELEVATION: 850 Metres

NORTHING: 5754143
EASTING: 427925

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Replacement Sedimentary
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Proterozoic	Horsethief Creek	Undefined Formation	

LITHOLOGY: Limestone
Quartzite
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Rocks in the area are probable Upper Proterozoic Horsethief Creek Group consisting of crystalline limestone overlain by quartzite and underlain by metamorphosed black argillite. The rocks are isoclinally folded, striking northwest and dipping about 50 degrees to the southwest.

"Limestone in the northwesterly limb of a fold is acutely dragfolded and appears to terminate in a series of sharp fingers about 300 metres northwest of the Mogul showing. Continuity farther to the northwest had not been established, but it is probable that the limestone is greatly thinned by squeezing. Replacement by sphalerite and galena occurs over much of this distance, in thin bands up to 10 centimetres wide, and in local aggregates of such bands across widths of a few metres. Mineralization is apparently concentrated in the dragfold 'fingers'" (Annual Report 1951).

BIBLIOGRAPHY

EMPR AR 1893-1064,1066; 1894-749; 1895-673; 1896-533,593; 1899-594,673; 1900-980; 1902-133; 1921-164,346; 1948-153; 1949-208; 1950-158; *1951-192; *1959-90,99,104
EMPR PF (*Russel, F.T. (1956): Report on #223 Prospecting 1956)
EMR MP CORPFILE (Kootenay Explorations Limited)
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, pp. 27,35
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/13

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 101**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARBONATE CHIEF**, JENNY 1 - 4, JEN 1,
JEN 2, JEN 4, JEN 5,
LISE 1, LISE 2, LISE 6

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W
BC MAP:
LATITUDE: 51 25 20 N
LONGITUDE: 118 21 14 W
ELEVATION: 1950 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Trench, Figure 6C (Assessment Report 10768). Location is poorly defined in older references.

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)
NORTHING: 5697649
EASTING: 405865

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein Stratabound
CLASSIFICATION: Epigenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Lardeau	Undefined Formation	
Lower Cambrian	Hamill	Undefined Formation	

LITHOLOGY: Quartzite
Schist
Phyllite

HOSTROCK COMMENTS: Probably correlative with lower Paleozoic Lardeau Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP:
GRADE:

CAPSULE GEOLOGY

The area is underlain by quartzite and metavolcanic phyllite rocks of the Lardeau Group. Small crosscutting to irregular quartz veins contain pyrite, pyrrhotite, galena, sphalerite, chalcopyrite, and possibly molybdenite.

A stratabound zone related to a limestone horizon contains pyrrhotite, pyrite, sphalerite, galena, and chalcopyrite. Rock and soil samples from the property indicate that gold, silver, lead, zinc, and copper are present in anomalous concentrations.

BIBLIOGRAPHY

EMPR AR 1898-1059; 1921-155
EMPR ASS RPT *10768, 11517
EMPR EXPL 1982-119
GSC MAP 12-1964; 279A
GSC OF 637
GSC P 64-32, p. 33
GSC SUM RPT 1929, part A, p. 159
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 102**

NATIONAL MINERAL INVENTORY: 082M1 Zn6

NAME(S): **FRISBY RIDGE**, BIG SLIDE AREA, NORA,
JOHN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:
LATITUDE: 51 08 35 N
LONGITUDE: 118 17 14 W
ELEVATION: 1690 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Northeast end of sulphide layer, (Bulletin 57-8, 40-41, Fig. 2).

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)
NORTHING: 5666521
EASTING: 409956

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrrhotite Pyrite
ASSOCIATED: Quartz Barite Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Concordant Disseminated Massive
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular
MODIFIER: Folded
DIMENSION:
COMMENTS: Eastern end of Copeland Synform. STRIKE/DIP: TREND/PLUNGE: 200/45

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Quartzite
Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

Disseminated galena, sphalerite, pyrrhotite and pyrite occur as discontinuous layers in calc-silicate gneiss of the cover rocks of the Monashee Complex. The layer is less than 30 centimetres thick and can be traced for 1000 metres on surface.

BIBLIOGRAPHY

EMPR ASS RPT *1788
EMPR BULL 57, pp. 8,40-41
EMPR MAP 43
GSC MAP 12-1964; 4404G
GSC OF 637
GSC P 64-32
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 103**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRENCH CR**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:
LATITUDE: 51 39 10 N
LONGITUDE: 118 26 04 W
ELEVATION: 750 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Symbol, Preliminary Map 25.

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

NORTHING: 5723395
EASTING: 400767

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

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

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Upper Proterozoic

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Schist
Marble
Amphibolite
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Underlying rocks in the area belong to the Upper Proterozoic Horsethief Creek Group. They consist of calcareous pelitic schists, amphibolites, marbles and quartzites.

Gold occurs in quartz veins around the heads of McCulloch and Graham Creeks. These veins are thought to have been the source of the placer gold. The placer gold occurs as coarse grains and nuggets, close to the bedrock and as fine colours in the gravels and surface soil. The gold is also angular and slightly porous.

BIBLIOGRAPHY

EMPR AR 1885-499; 1886-203,204; 1887-268,269; 1889-267,279;
1890-356; 1893-1043; 1894-743; 1895-689, 1896-534,536;
1898-1057,1058,1059,1061; 1906-149,150; 1908-91; 1912-
K14; 1917-151; *1922-213,214; 1924-204; 1925-259; 1926-
270; 1928-311; 1929-330; 1930-258; 1931-147; 1934-E34
EMPR BULL 21 p. 23; 28 pp. 52-53, Fig. 3
EMPR MAP 25
GSC ANN RPT 1887-88, v. III, part II, pp. 133R-134R
GSC MAP 12-1964; 237A
GSC OF 637
GSC P 64-32, p. 34
GSC SUM RPT *1928, part A, pp. 158,192

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 104**

NATIONAL MINERAL INVENTORY: 082M3 Ag1

NAME(S): **BET**, FLUKE, EVELYN,
VENUS

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03E
BC MAP:
LATITUDE: 51 03 40 N
LONGITUDE: 119 14 54 W
ELEVATION: 1880 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Shaft?

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5659026
EASTING: 342451

COMMODITIES: Silver Lead Zinc Gold Tin

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Chlorite Schist
Limestone
Diorite Dike
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1927
SAMPLE TYPE: Rock	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	2400.0000 Grams per tonne
Lead	28.0000 Per cent
Zinc	17.0000 Per cent

COMMENTS: Also traces of gold.
REFERENCE: Annual Report 1927, page 201.

CAPSULE GEOLOGY

The property is underlain by Devonian age chloritic schists and minor limestone, that are probably equivalent to the Eagle Bay Formation. Foliation in the schist strike 055 to 085 degrees and dips 42 degrees north. The rocks are intruded by diorite dykes. Mineralization occurs as replacement of limestone and marble bands. A sample of ore assayed 28 per cent lead, 17 per cent zinc, 2400 grams per tonne silver, and trace gold.

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 307-320
EMPR AR *1927-201; 1929-217,218; 1930-188; 1931-105,106;
1932-145; 1964-99,100
EMPR ASS RPT *609, 3819, 3821, 4031, *5133, 6230, 6857, 12836,
12849, *13240
EMPR EXPL 1976-58,59; 1978-101
EMPR FIELDWORK 1984, pp. 67-76
EMPR GEM 1972-85
EMR MP CORPFILE (Edoran Oil Corp. Ltd., Commercial Oil & Gas
Ltd., Invex Resources Limited, Rapid Canadian Resource
Corporation)
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 738
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637
Vollo, N.B. (1984a): Report on the KE claims in Rapid Canadian
Resource Corporation Prospectus, 21/08/84
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/04

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 105**

NATIONAL MINERAL INVENTORY: 082M3 Pb1

NAME(S): **SAUL**, FLUKE, KE

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 30 N
LONGITUDE: 119 15 24 W
ELEVATION: 1860 Metres

NORTHING: 5656882
EASTING: 341801

LOCATION ACCURACY: Within 500M
COMMENTS: Assessment Report 13240.

COMMODITIES: Lead Silver Zinc Copper Tin
 Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite Stannite
ASSOCIATED: Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant
CLASSIFICATION: Replacement
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Regular
DIMENSION:
COMMENTS: North vein. STRIKE/DIP: 085/85S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Basalt
 Tuff
 Limestone
 Chlorite Schist
 Marble

HOSTROCK COMMENTS: Probably Eagle Bay Fm.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The property is underlain by Cambrian aged basalt, tuffite, and minor limestone that is probably equivalent to the Eagle Bay Formation. The sequence strikes southwesterly, dips to the north-west at low to moderate angles and forms the southeast limb of a syncline.

Mineralization consists of two quartz filled veins, 13 metres apart, in green chloritic schist. The south vein, 35 metres in length and 20 to 30 centimetres wide, strikes 065 and dips near vertical. The north vein, 12 metres in length and 10 centimetres wide, strikes 085 and dips 85 degrees south.

The veins are mineralized with galena and sphalerite with minor pyrite, chalcopyrite and "tin" minerals.

Mineralization also occurs as replacement of limestone and marble bands.

BIBLIOGRAPHY

EMPR AR *1964-99,100
EMPR ASS RPT *609, 3819, 3821, 4031, *5133, 6230, 6857, 12836, 12849, *13240
EMPR EXPL 1978-101
EMPR GEM 1972-85; *1974-95
EMR MP CORPFILES (Edoran Oil Corp. Ltd., Commercial Oil & Gas Ltd., Invox Resources Limited, Rapid Canadian Resource Corporation)
GSC EC GEOL 28, p. 82
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 740
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637
American Mineralogist, V. 38, 1953, p. 548
Vollo, N.B. (1984a): *Report on the KE claims in Rapid Canadian
Resource Corporation Prospectus, 21/08/84
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/04

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 106**

NATIONAL MINERAL INVENTORY:

NAME(S): **REG**, EXHALITE

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 35 55 N
LONGITUDE: 119 34 24 W
ELEVATION: 1190 Metres

NORTHING: 5719534
EASTING: 321777

LOCATION ACCURACY: Within 500M

COMMENTS: Skarn, Map by Newmont Exploration of Canada Limited, 1985, Property File.

COMMODITIES: Copper

MINERALS

SIGNIFICANT:	Chalcopyrite	Pyrite	Pyrrhotite	Sphalerite	Magnetite
ASSOCIATED:	Quartz				
ALTERATION:	Quartz	Calcite	Mariposite	Actinolite	Hornblende
ALTERATION TYPE:	Quartz-Carb.		Skarn		
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Argillite
Calc-silicate
Skarn
Andesite
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY: Copper

YEAR: 1985

GRADE: 0.0190 Per cent

COMMENTS: Two metre sample width.
REFERENCE: Assessment Report 13557.

CAPSULE GEOLOGY

The area is underlain by a highly contorted and metamorphosed assemblage of felsic to intermediate volcanics, limestone, shale, and minor conglomerate of the Paleozoic Eagle Bay Formation. Rock units include siliceous metasediments overlain by andesite, chlorite schist, argillite, phyllite and carbonate.

Disseminated chalcopyrite, pyrite, pyrrhotite, sphalerite, manganese and magnetite occur in a calc-silicate horizon within argillite and phyllite. A 2.0 metre chip sample assayed 0.019 per cent copper (Assessment Report 13557). About 1350 metres to the west-southwest, an actinolite hornblende skarn contains chalcopyrite.

BIBLIOGRAPHY

EMPR ASS RPT *6933, *13557
EMPR EXPL 1978-113; 1985-108-109; 1985-C108
EMPR OF 1986-5
EMPR PF (Map by Newmont Exploration of Canada Limited, 1985)
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 742
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 107**

NATIONAL MINERAL INVENTORY:

NAME(S): **STAKE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 08 00 N
LONGITUDE: 119 52 04 W
ELEVATION: 730 Metres

NORTHING: 5668563
EASTING: 299364

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, Plate 2 - Assessment Report 6679.

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION:
COMMENTS: Strata.

STRIKE/DIP: 090/40N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Paleozoic

Undefined Group

Eagle Bay

LITHOLOGY: Phyllite
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1977

SAMPLE TYPE: Grab

COMMODITY

GRADE

Lead

0.7200

Per cent

Zinc

0.4300

Per cent

REFERENCE: Assessment Report 6679.

CAPSULE GEOLOGY

The area is underlain by Devonian and/or Mississippian Eagle Bay Formation rocks consisting of intermediate to felsic meta-volcanics with a general strike of 090 degrees and dip of 40 degrees north.

A quartz vein within the chlorite schists is mineralized with galena and sphalerite and minor pyrite and chalcopyrite. A grab sample contained 0.72 per cent lead and 0.43 per cent zinc.

BIBLIOGRAPHY

EMPR ASS RPT *6679, 13041
EMPR EXPL 1978-E107; 1984-123
EMPR MAP 56
GSC MAP 48-1963
GSC OF 637
WWW <http://www.orphanboy.com/gstream.html>

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 108**

NATIONAL MINERAL INVENTORY:

NAME(S): **FOGGY 3**

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 31 50 N
LONGITUDE: 119 57 54 W
ELEVATION: 1920 Metres

NORTHING: 5712995
EASTING: 294350

LOCATION ACCURACY: Within 500M

COMMENTS: Gossan area, Drawing 193-4 (Assessment Report 7813).

COMMODITIES: Silver Lead Zinc Copper Gold

MINERALS

SIGNIFICANT:	Galena	Sphalerite	Pyrite	Chalcopyrite		
ASSOCIATED:	Quartz					
ALTERATION:	Limonite	Chlorite	Sericite			
ALTERATION TYPE:	Chloritic	Sericitic		Carbonate		Oxidation
MINERALIZATION AGE:	Unknown					

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Hydrothermal
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Phyllite
Chert
Gossan
Chlorite Sericite Schist
Sericite Quartzite
Crystal Tuff
Porphyritic Flow
Basalt
Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1979	
SAMPLE TYPE: Drill Core		
<u>COMMODITY</u>	<u>GRADE</u>	
Silver	27.5000	Grams per tonne
Gold	0.1400	Grams per tonne
Copper	0.2500	Per cent
Lead	0.1100	Per cent
Zinc	0.0300	Per cent

COMMENTS: 10.5 metre width.
REFERENCE: Assessment Report 8530.

CAPSULE GEOLOGY

Foghorn Mountain is underlain by metavolcanics derived largely from intermediate crystal-lithic tuffs and porphyritic flows of the Devonian to Mississippian Eagle Bay Formation. The rocks are pale to medium green chlorite-sericite schists, quartz-sericite schist, chert phyllite and sericitic quartzite. These comprise a relatively flat lying plate, occurring as a gentle north plunging synform. To the west, separated by an east-dipping thrust fault, are basalt, gabbro chert and minor sediments of the Fennell Formation. The Middle Cretaceous Baldy Batholith lies to the south.

A large hydrothermally altered zone (gossan) of heavily limonitic sericite schist contains disseminated and massive pyrite

CAPSULE GEOLOGY

and minor galena, sphalerite and chalcopyrite. A sample of selected pieces of white quartz with minor pyrite assayed 0.10 per cent copper and 18 grams per tonne silver (Assessment Report 7813). A drill hole intersected 5 metres assaying .02 per cent lead and 0.02 per cent zinc (Assessment Report 7757). Another hole, 200 metres to the south, intersected 10.5 metres of 27.5 grams per tonne silver, 0.11 per cent lead, 0.03 per cent zinc, 0.25 per cent copper and 0.14 grams per tonne gold (Assessment Report 8530).

BIBLIOGRAPHY

EMPR ASS RPT 7404, *7757, 7813, *8530, 9716, 11381
EMPR EXPL 1979-114-115; 1983-168
EMPR MAP 53; 56
EMPR OF 1986-5; 1999-2
GSC MAP 48-1963
GSC OF 637
EMPR PF (Foghorn Mountain Property, April 29, 1988, Prospectus, Gold Spring Resources Ltd.)

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/10

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 109**

NATIONAL MINERAL INVENTORY:

NAME(S): **VM**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 30 50 N
LONGITUDE: 119 43 54 W
ELEVATION: 1430 Metres

NORTHING: 5710512
EASTING: 310461

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralization, Plate 2 (Assessment Report 6878).

COMMODITIES: Copper

MINERALS

SIGNIFICANT:	Chalcopyrite	Pyrite	Pyrrhotite		
ASSOCIATED:	Quartz	Feldspar			
ALTERATION:	Malachite	Limonite	Manganite	Chlorite	Sericite
ALTERATION TYPE:	Oxidation		Chloritic	Sericitic	
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Devonian

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Sericite Phyllite
Chlorite Phyllite
Graphitic Phyllite
Chert
Quartz Sericite Schist
Sericite Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by metavolcanics and metasediments of the Devonian to Mississippian Eagle Bay Formation. Copper mineralization occurs in quartz-sericite phyllite derived largely from felsic to intermediate volcanics. Other rock units include chloritic phyllite, dark grey graphitic phyllite, quartz-sericite schist, sericitic quartzite and chert. The strata strikes northeast and dips gently to the north. A north northeast trending fault separates quartz-feldspar augen gneiss to the east.

Chalcopyrite, pyrite and minor pyrrhotite occurs as disseminations along foliation planes and fractures. Low grade mineralization occurs over about 500 metres, with selected trench samples assaying up to 0.43 per cent copper.

BIBLIOGRAPHY

EMPR ASS RPT 2988, 3195, *3525, *6878
EMPR EXPL 1978-112-113
EMPR FIELDWORK 1985, p. 93
EMPR GEM 1970-297; 1971-442; 1972-90
EMPR OF 1986-5
EMPR PF (Maps by N.B. Vollo, 1971)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/21

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 110**

NATIONAL MINERAL INVENTORY: 082M5 Cu1

NAME(S): **B & B**, NLSS, LESLY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5690377
EASTING: 303123

LATITUDE: 51 19 50 N
LONGITUDE: 119 49 34 W
ELEVATION: 960 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Drill Hole, map 6 (Assessment Report 7254).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite
ASSOCIATED: Chlorite Quartz Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Graphitic Argillite
Intermediate Meta Volcanic
Chlorite Schist
Phyllite
Quartz Sericite Schist
Limestone
Dioritic Dike
Skarn
Granodiorite Dike

HOSTROCK COMMENTS: Minor amounts skarnified limestone.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE:

INVENTORY

ORE ZONE: DRILLHOLE
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core
COMMODITY: Copper
YEAR: 1979
GRADE: 0.1650 Per cent
COMMENTS: 1.5 metre sample width.
REFERENCE: Assessment Report 7254.

CAPSULE GEOLOGY

The property is underlain by a sequence of interlayered and interlaminated chlorite schist, phyllite, quartz-sericite schist and minor amounts of skarnified limestone. These rocks are tentatively included within the Paleozoic Eagle Bay Formation (Map 56). The sequence is likely derived from mafic to intermediate volcanic and volcanoclastic rocks.

The metavolcanics and metasediments are intruded by diorite to granodiorite dykes ranging from a few centimetres to tens of metres in thickness.

Pyrite, chalcopyrite and pyrrhotite mineralization is disseminated and semi-massive within felsic to intermediate metavolcanics and graphitic argillite. Mineralization occurs along the south shore of North Barriere Lake and was intersected in a drill hole 750 metres south east of the lake. The best intersection in the drill hole was 0.16 per cent copper over 1.5 metres at 82 metres depth (Assessment Report 7254).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 748
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *2679, 3431, 3884, 4685, *7254
EMPR EXPL 1978-E108
EMPR FIELDWORK 1979, pp. 28-36
EMPR GEM 1970-314; 1971-438,439; 1972-87,88
EMPR MAP *56
EMPR OF 1999-2; 2000-7
GSC MAP 48-1963
GSC OF 637
Dickie, G.J.; Preto, V.A. and Schiarizza, P. (in preparation):
Mineral Deposits of the Adams Plateau - Clearwater area.
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral
Deposits of the Adams Plateau - Clearwater Region; GSA
Cordilleran Section Meeting, May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 111**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIC 1**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5658893
EASTING: 309709

LATITUDE: 51 03 00 N
LONGITUDE: 119 42 54 W
ELEVATION: 425 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Trench, Map 3 (Assessment Report 2650); also grab sample location plate 2 (Assessment Report 6680).

COMMODITIES: Lead Copper Zinc Silver

MINERALS

SIGNIFICANT: Galena Chalcopyrite Pyrite

ASSOCIATED: Chlorite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated

CLASSIFICATION: Volcanogenic

TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

DIMENSION:

STRIKE/DIP: 090/44N

TREND/PLUNGE:

COMMENTS: Foliation.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1977

SAMPLE TYPE: Rock

COMMODITY

GRADE

Lead

2.7500

Per cent

COMMENTS: 10 centimetre width; also minor copper, silver, and zinc values.

REFERENCE: Assessment Report 6680.

CAPSULE GEOLOGY

The property is underlain by Devonian to Mississippian rocks of the Eagle Bay Formation. The rocks consist of phyllites and schists (Unit EBA, Map 56), derived from felsic to intermediate volcanic and volcanoclastic rocks. The strata strikes 070 to 110 degrees and dips 25 to 45 degrees north.

The Vic 1 showing is located 400 metres north of the Beca showing (082M 055). A 10 centimetre pyrite-galena bed, assaying 2.75 per cent lead with minor copper, zinc and silver, occurs within chloritic schist.

BIBLIOGRAPHY

EMPR ASS RPT 1114, *2650, 4504, *6680, 11353, 12959, 13138
EMPR EXPL 1984-115; 1985-C99
EMPR GEM 1970-317
EMPR MAP *56
EMPR OF 1999-2
GSC MAP 48-1963; 5320G
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 112**

NATIONAL MINERAL INVENTORY:

NAME(S): **VAL**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 22 20 N
LONGITUDE: 119 52 24 W
ELEVATION: 950 Metres

NORTHING: 5695138
EASTING: 300015

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, Figure 2 (Assessment Report 3298).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrite Pyrrhotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: L05 Porphyry Mo (Low F- type)
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cretaceous			Baldy Batholith

LITHOLOGY: Quartz Monzonite
Granitic Dike
Biotite Granite
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The area is underlain by Mid-Cretaceous Baldy Batholith rocks consisting of biotite granite, pegmatite, monzonitic granite and aplitic granite dykes.

Molybdenite occurs as disseminations and blebs in reddish brown monzonitic granite.

About 1800 metres to the west are contacts between felsic dykes and intrusives which are mineralized with pyrite, pyrrhotite and chalcopyrite.

BIBLIOGRAPHY

EMPR AR 1969-169
EMPR ASS RPT 1669, *3298
EMPR GEM 1971-439,440
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 113**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIC 21**, BECA

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 20 N
LONGITUDE: 119 42 24 W
ELEVATION: 600 Metres

NORTHING: 5657636
EASTING: 310248

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrop, Map 3 (Assessment Report 3321).

COMMODITIES: Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Schist
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1971
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 4.0000 Grams per tonne
Copper 0.0100 Per cent
Lead 0.0400 Per cent
Zinc 0.1500 Per cent

REFERENCE: Assessment Report 3321.

CAPSULE GEOLOGY

The property is underlain by Devonian to Mississippian rocks of the Eagle Bay Formation. The rocks consist of phyllites and schists derived from felsic to intermediate volcanic and volcani-clastic rocks. The strata strikes 070 to 110 degrees and dips 25 to 45 degrees north.

The Vic 21 showing occurs as disseminated galena and sphalerite conformable along bedding within the metavolcanics. A near-by geochemical sample assayed 4 grams per tonne silver, 0.15 per cent zinc, 0.04 per cent lead and 0.01 per cent copper.

BIBLIOGRAPHY

EMPR ASS RPT 1114, 2650, *3321, 4504, 6680, 7040
EMPR EXPL 1978-E102,E103; 1979-109,110
EMPR GEM 1971-437
EMPR MAP *56
EMPR OF 1999-2
GSC MAP 48-1963; 5320G
GSC OF *637

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/23

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 114**

NATIONAL MINERAL INVENTORY:

NAME(S): **HILLTOP**, LUCKY STRIKE

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 29 00 N
LONGITUDE: 119 38 29 W
ELEVATION: 1460 Metres

NORTHING: 5706884
EASTING: 316602

LOCATION ACCURACY: Within 500M

COMMENTS: Showing #1, Map 4 (Assessment Report 3430).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Pyrrhotite Bornite Covellite

Pyrolusite

ASSOCIATED: Quartz

ALTERATION: Chlorite K-Feldspar Bornite Covellite

ALTERATION TYPE: Silicific'n Pyrite Potassic Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

Disseminated

CLASSIFICATION: Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Schist
Greenstone
Limestone
Quartz Feldspar Chlorite Gneiss
Sericite Chlorite Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1971

SAMPLE TYPE: Chip

COMMODITY

Copper

GRADE

0.7200

Per cent

COMMENTS: 2.4 metre chip sample width.

REFERENCE: Assessment Report 3430.

CAPSULE GEOLOGY

The area is underlain largely by Lower Cambrian metamorphic rocks of the Eagle Bay Formation in contact with the Cretaceous Baldy Batholith. Four distinct units include quartz-feldspar chlorite gneiss, sericite chlorite phyllite, limestone and green chlorite schist to massive greenstone. All units normally strike northeast and dip northwest at moderate angles. Major north trending and minor northwest trending faults displace the units.

Copper mineralization, with accompanying silicification, pyritization and potassium feldspar alteration, occurs in the stratigraphically lower zone of the chlorite schist to greenstone unit, just east of its faulted contact with the intrusive. Chalcopyrite, pyrite and lesser pyrolusite, pyrrhotite, bornite and covellite occur as disseminations and fracture fills in largely brecciated and sheared host rocks. Seven showings occur within a 650 by 250 metre area. A 2.4 metre chip sample of showing #1 assayed 0.72 per cent copper (Assessment Report 3430).

BIBLIOGRAPHY

EMPR ASS RPT *3430, 5929, *6792
EMPR EXPL 1976-63; 1978-109
EMPR FIELDWORK 1985, p. 90

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 753
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR GEM 1971-437-438; 1972-90
EMPR OF 1986-5; 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/21

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 115**

NATIONAL MINERAL INVENTORY:

NAME(S): **HILLTOP 9**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 29 07 N
LONGITUDE: 119 37 04 W
ELEVATION: 1390 Metres

NORTHING: 5707042
EASTING: 318248

LOCATION ACCURACY: Within 500M

COMMENTS: Showing #8, Map 4 (Assessment Report 3430).

COMMODITIES: Copper

MINERALS

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

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement
TYPE: K01 Cu skarn
Skarn

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Limestone
Chlorite Schist
Skarn
Greenstone
Quartz Feldspar Chlorite Gneiss
Sericite Chlorite Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1971

Copper

GRADE

0.1400

Per cent

REFERENCE: Assessment Report 3430.

CAPSULE GEOLOGY

Metamorphic rocks consisting of quartz-feldspar chlorite gneiss, sericite chlorite phyllite, limestone and chlorite schist to greenstone of the Lower Cambrian part of the Eagle Bay Formation lie adjacent to the Cretaceous Baldy Batholith.

A pod of skarn, 18 by 9 metres, occurs within massive crystalline limestone. It consists of epidote, diopside, calcite, chlorite and garnet with minor pyrrhotite, pyrite and chalcopyrite. A sample assayed 0.14 per cent copper (Assessment Report 3430).

About 500 metres to the east, pods and lenses of pyrrhotite with minor pyrite and traces of chalcopyrite occur in highly fractured and sheared chlorite schist.

BIBLIOGRAPHY

EMPR ASS RPT *3430
EMPR GEM 1971-437-438; 1972-90
EMPR OF 1986-5; 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/21

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 115**

MINFILE NUMBER: **082M 116**

NATIONAL MINERAL INVENTORY:

NAME(S): **RIO, CAN**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 19 30 N
LONGITUDE: 119 11 04 W
ELEVATION: 1040 Metres

NORTHING: 5688233
EASTING: 347800

LOCATION ACCURACY: Within 500M

COMMENTS: Upper limit of mineralized float, Fig. 2 and mineralized granitic dyke. (Assessment Report 9169).

COMMODITIES: Tungsten Copper

MINERALS

SIGNIFICANT: Chalcopyrite Scheelite Pyrrhotite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement Skarn
TYPE: K05 W skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Schist
Limestone
Quartz Monzonite
Skarn
Granitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The property is underlain by Shuswap Metamorphic Complex rocks consisting of quartz-biotite schist with local bands of marmorized limestone.

A probably Cretaceous porphyritic biotite quartz monzonite intrudes the metasediments developing a garnet-diopside and scheelite-pyrrhotite-chalcopyrite skarn.

Mineralization occurs in numerous boulders up to 1000 metres along Canyon Creek. Similar mineralization occurs with a rusty granitic dyke at 1040 metres elevation.

BIBLIOGRAPHY

EMPR ASS RPT *9169
EMPR EXPL 1980-141
EMPR GEM 1971-441
EMPR OF 1991-17
GSC MAP 48-1968
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/01

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 117**

NATIONAL MINERAL INVENTORY:

NAME(S): **FENNELL ZONE**, BEX

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 10 N
LONGITUDE: 119 44 19 W
ELEVATION: 1020 Metres

NORTHING: 5685205
EASTING: 309033

LOCATION ACCURACY: Within 500M

COMMENTS: Trench, Figure 3 (Assessment Report 2232).

COMMODITIES: Copper Gold Molybdenum Nickel

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Sphalerite Marcasite
Molybdenite
ASSOCIATED: Hematite Hornblende Garnet Tourmaline Magnetite
ALTERATION: Hematite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
CLASSIFICATION: Unknown
SHAPE: Tabular
DIMENSION: 0200 x 0035 x 0020 Metres STRIKE/DIP: 120/20W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Undefined Group	Spapilem-Deadfall Creeks	
Upper Devonian			Unnamed/Unknown Informal

ISOTOPIC AGE: 126 +/- 4 Ma
DATING METHOD: Potassium/Argon
MATERIAL DATED: Biotite

LITHOLOGY: Quartzite
Phyllite
Calc-silicate Schist
Para Gneiss
Hornfels
Staurolite Garnet Mica Schist
Amphibolite
Grit

HOSTROCK COMMENTS: Dating from Okulitch, 1979.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by probable Lower Cambrian to Hadrynian age Spapilem Creek-Deadfall Creek Succession (unit SDQ Map 56). The rocks consist of quartzite, micaceous quartzite, grit and phyllite, with lesser staurolite-garnet-mica schist, calc-silicate schist and amphibolite. These rocks are cut by Late Devonian orthogneiss and sillimanite bearing paragneiss (unit Dgnp). To the north east the rocks are cut by post-tectonic granitic rocks of the Mid-Cretaceous Baldy Batholith.

The mineralized zone lies within paragneiss rocks consisting of highly argillaceous hornfels with lesser interbands and lenses of arenaceous material yielding impure quartzites and feldspatic gneisses. Sulphide mineralization occurs in the upper 20 metres of a 30 metre thick bed of hornfels dipping west at 17 to 22 degrees. The hornfels is bounded by 7 to 8 metre quartzite beds.

Mineralization consists of pyrrhotite, chalcopyrite and pyrite. Five grab samples across the surface exposed zone ranged from 0.04 to 0.56 per cent copper (Assessment Report 6720).

Pyrrhotite, hematite, pyrite, marcasite, chalcopyrite, and sphalerite were recognized in the main showing area. Drill holes returned assays of up to 0.82 per cent copper over 1.62 metres and 0.87 per cent nickel over 15 centimetres. Two quartz veins, 13 centimetres and 20 centimetres wide, assayed 0.17 and 0.34 grams

CAPSULE GEOLOGY

per tonne gold respectively. Up to 0.005 per cent molybdenum was associated with copper values.

BIBLIOGRAPHY

EMPR AR 1967-134; 1968-168
EMPR ASS RPT *1634, *2230, *2231, *2232, 3432, *6720, *10480,
*11149, 12081, *14124
EMPR EXPL 1978-E109; 1982-111; 1983-159
EMPR GEM 1971-438
EMPR MAP 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral
Deposits of the Adams Plateau - Clearwater Region; GSA
Cordilleran Section Meeting, May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/02

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 118**

NATIONAL MINERAL INVENTORY:

NAME(S): **STEEP**, PAT 2, ADAM

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M04E 082M04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 20 N
LONGITUDE: 119 44 44 W
ELEVATION: 640 Metres

NORTHING: 5654031
EASTING: 307384

LOCATION ACCURACY: Within 500M

COMMENTS: Pit #3, Map 1 (Assessment Report 3510).

COMMODITIES: Zinc Lead Copper Silver Gold

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Galena Chalcopyrite Silver

Gold Magnetite Bismuth Telluride

ASSOCIATED: Amphibole Plagioclase Epidote Garnet

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant

CLASSIFICATION: Skarn

TYPE: J01 Polymetallic manto Ag-Pb-Zn G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

SHAPE: Tabular

COMMENTS: Skarn zone is several hundred metres wide and at least 10 kilometres along strike.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Sicamous

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillaceous Limestone
Calcareous Phyllite
Quartz Porphyry Schist
Calc-silicate
Garnet Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Thompson Plateau

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

SAMPLE TYPE: Drill Core

YEAR: 1988

COMMODITY

GRADE

Zinc	1.5000	Per cent
Copper	0.3800	Per cent
Gold	5.8000	Grams per tonne
Lead	0.6900	Per cent
Silver	22.0000	Grams per tonne

COMMENTS: Maximum assay values.

REFERENCE: Miller et al, 1988.

CAPSULE GEOLOGY

The Steep property is located on the west side of Adams Lake, approximately 55 kilometres northeast of Kamloops. The regional geology is described by Okulitch (1979) (Geological Survey of Canada Open File 637), and by Schiarizza and Preto (Preliminary Map 65, Paper 1987-2). The mineralization is hosted by northeast-dipping argillaceous limestones and black calcareous phyllites of the Sicamous Formation, close to their contact with the structurally overlying Eagle Bay assemblage. The Sicamous Formation was assigned a Late Triassic age by Okulitch (1979), but is now thought to be of Paleozoic age (Okulitch, 1985). It is inferred to be a facies equivalent of part of the Early Cambrian to Mississippian Eagle Bay assemblage (Schiarizza and Preto, 1984, 1987). Eagle Bay rocks, which sit structurally above the Sicamous Formation in the vicinity of the Steep property, comprise Devonian felsic metavolcanics and associated metasediments together with Devonian orthogneiss presumed

CAPSULE GEOLOGY

to be comagmatic with the metavolcanics. Quartz porphyry schists which occur locally within the skarn-altered Sicamous Formation are thought by Schiarizza and Preto (1987) to be feeder sills related to the overlying metavolcanic rocks.

Recent exploration work on the property, including some diamond drilling, has been conducted by National Resources Explorations Limited, and a summary of the skarn mineralization and geochemistry has been presented by Miller et al (1988). A concordant zone of skarn alteration that reaches several hundred metres in width is traceable for a least 10 kilometres along strike. It includes calc-silicate and garnet-rich skarn; the former is up to 80 metres thick, and mainly comprises fine-grained amphibole, plagioclase, and epidote with lesser amounts of biotite, sphene, chlorite, apatite, plagioclase and potassium feldspar. Minor amounts of pyroxene have been identified in thin section although it is mainly altered to chlorite and epidote (D. Miller, personal communication, 1989).

Pyrrhotite average 5 per cent and is the dominant sulphide. Layers of massive pyrrhotite and minor magnetite occur together locally. Other sulphides include pyrite, chalcopyrite and rare sphalerite and galena which may form fine intergrowths with the pyrrhotite. Miller et al (1988) reports that the gold forms minute grains, 5 to 15 microns in diameter, which generally occurs with the pyrrhotite. The gold is also associated with minute grains of native bismuth and bismuth tellurides. Mineralization tends to be found close to the outer margin of the skarn zone.

Soil sampling suggests that the areas of higher gold values coincide with anomalous values of arsenic and copper, and to a lesser extent with lead and zinc. The best drillhole intersection recorded 3 metres of 5.8 grams per tonne gold. However maximum assay values for other elements were 22 grams per tonne silver, 2000 parts per million arsenic, 272 parts per million bismuth, 3830 parts per million copper, 6910 parts per million lead, 1.5 per cent zinc and 173 parts per million antimony (Miller et al, 1988). A visual examination of the assay results suggests that gold has a relatively poor correlation with silver, arsenic, antimony and lead but a strong positive correlation with bismuth. Copper, lead, zinc, arsenic and antimony all exhibit a good positive correlation with each other.

The age and origin of the Steep property mineralization is unknown, and it is uncertain whether it represents an intrusion-related, epigenetic skarn, or a syngenetic, exhalative "stratiform skarn" deposit.

BIBLIOGRAPHY

- EMPR ASS RPT *3510, 6672, 12640, 16651, *19514
- EMPR EXPL 1984-115
- EMPR GEM 1972-86
- EMPR MAP 56
- EMPR P 1987-2; *1989-3, p. 95; 1992-1
- EMPR PF (*Miller, D.C., et al (1988): Report on the Geology and Mineralogy of the Steep Gold-skarn Property, Kamloops Mining Division, British Columbia, unpublished report for National Resource Explorations Limited, May 10, 1988, 13 pages)
- GSC MAP 48-1963
- GSC OF 637
- CJES Vol. 22, pp. 1409-1424 (1985 (Okwitch, A.V.): Paleozoic Plutonian in Southeastern B.C.)

DATE CODED: 1985/07/24
DATE REVISED: 1991/11/19

CODED BY: GSB
REVISED BY: ICLW

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 119**

NATIONAL MINERAL INVENTORY:

NAME(S): **PAT**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 00 N
LONGITUDE: 119 44 14 W
ELEVATION: 425 Metres

NORTHING: 5653391
EASTING: 307945

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 1 (Assessment Report 3510).

COMMODITIES: Asbestos

MINERALS

SIGNIFICANT: Serpentine Asbestos
ALTERATION: Serpentine
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Industrial Min.
TYPE: M06 Ultramafic-hosted asbestos

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Greenstone
Phyllite
Gneiss
Chlorite Schist

HOSTROCK COMMENTS: Okulitch, 1979: Permian Kaslo Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The area is underlain by Devonian or older Eagle Bay Formation rocks consisting of chlorite schist, phyllites, siliceous gneiss and greenstone.

Serpentine occurs within greenstone as sparse short, 0.3 to 0.6 centimetre, asbestos fibres.

BIBLIOGRAPHY

EMPR ASS RPT *3510
EMPR FIELDWORK 1980, pp. 15-23
EMPR GEM 1972-86
EMPR MAP 56
EMPR OF 1995-25
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 120**

NATIONAL MINERAL INVENTORY:

NAME(S): **PINE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 00 N
LONGITUDE: 119 47 24 W
ELEVATION: 1400 Metres

NORTHING: 5657236
EASTING: 304383

LOCATION ACCURACY: Within 1 KM
COMMENTS: No definite location available.

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Pyrrhotite
ASSOCIATED: Quartz Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Skarn
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn J01 Polymetallic manto Ag-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Devonian	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The area is underlain by Devonian age rocks of the Eagle Bay Formation consisting of sericitic-quartzo-feldspathic schist and gneiss derived from felsic intrusive rocks.

Chalcopyrite, galena and sphalerite occur in fracture within the metavolcanics. Pyrrhotite and minor chalcopyrite occurs in skarn.

BIBLIOGRAPHY

EMPR ASS RPT 6890, 15908
EMPR EXPL 1977-E92
EMPR GEM *1972-87
EMPR MAP 56
EMPR OF 2000-31
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/11/09

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 121**

NATIONAL MINERAL INVENTORY:

NAME(S): **REG 7**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 32 50 N
LONGITUDE: 119 31 44 W
ELEVATION: 1120 Metres

NORTHING: 5713712
EASTING: 324657

LOCATION ACCURACY: Within 500M

COMMENTS: Sample site, Map 2 (Assessment Report 13557).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Undefined Group	Eagle Bay	

LITHOLOGY: Quartzite
Grit
Chlorite Sericite Quartz Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1985

GRADE
0.0900 Per cent

COMMENTS: 1.5 metre sample width.
REFERENCE: Assessment Report 13557.

CAPSULE GEOLOGY

The area is underlain by Lower Cambrian part of the Eagle Bay Formation consisting of quartzite, grit and chlorite-sericite-quartz schist. Disseminated chalcopyrite and pyrite occurs in sericitic quartzite. A 1.5 metre sample assayed 0.09 per cent copper (Assessment Report 13557).

BIBLIOGRAPHY

EMPR ASS RPT 13557
EMPR EXPL 1985-108-109
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/23

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 122**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROB**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 35 00 N
LONGITUDE: 119 31 04 W
ELEVATION: 1280 Metres

NORTHING: 5717701
EASTING: 325566

LOCATION ACCURACY: Within 5 KM
COMMENTS: Old claim centre.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Undefined Group	Eagle Bay	

LITHOLOGY: Andesite
Chlorite Schist
Quartz Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

Disseminated pyrite, pyrrhotite and chalcopyrite occur in andesite, chlorite schist and quartz-sericite schist of the Lower Cambrian part of the Eagle Bay Formation.

BIBLIOGRAPHY

EMPR GEM 1972-91
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/23

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 123**

NATIONAL MINERAL INVENTORY: 082M13 W1

NAME(S): **DIMAC**, SILENCE LAKE, GOTCHA,
BOULDER

STATUS: Past Producer Open Pit

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082M13E

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 51 50 00 N

LONGITUDE: 119 41 34 W

ELEVATION: 1140 Metres

NORTHING: 5745930

EASTING: 314470

LOCATION ACCURACY: Within 500M

COMMENTS: Workings approximately 32 kilometres northeast of Clearwater
(Assessment Report 7607).

COMMODITIES: Tungsten

Wollastonite

MINERALS

SIGNIFICANT: Scheelite Wollastonite

ASSOCIATED: Quartz Calcite Pyrrhotite Wollastonite Diopside

Garnet Idocrase Actinolite

ALTERATION: Quartz Calcite Garnet Diopside Actinolite

Idocrase Wollastonite

ALTERATION TYPE: Skarn

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive Concordant

CLASSIFICATION: Skarn Industrial Min.

TYPE: K05 W skarn K09 Wollastonite skarn

SHAPE: Tabular

MODIFIER: Folded Faulted

DIMENSION: 120 x 60 x 50 Metres STRIKE/DIP: 050/55N

TREND/PLUNGE:

COMMENTS: Approximate dimensions of the skarn zone. Attitude of the northern
skarn zone.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz. Cretaceous-Tertiary			Shuswap Metamorphic Complex Unnamed/Unknown Informal

ISOTOPIC AGE: 65 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Muscovite

LITHOLOGY: Calc-silicate
Calcareous Biotite Schist
Biotite Schist
Biotite Quartzite
Skarn
Biotite Quartz Monzonite
Quartz Monzonite
Granodiorite
Quartz Diorite
Pegmatite

HOSTROCK COMMENTS: Age date by Ryan, B.C. (1979). The stock is probably related to the
Cretaceous Raft batholith which occurs to the north.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

Pre-mineralization

COMMENTS: Eastern border of the Interior Plateau.

INVENTORY

ORE ZONE: TAILINGS POND

REPORT ON: Y

CATEGORY: Indicated YEAR: 1984

QUANTITY: 18142 Tonnes

COMMODITY _____ GRADE _____

Tungsten 0.2300 Per cent

COMMENTS: In tailings pond. Grade given is 0.3 per cent Wo3. Conversion used
is 1.2611 to obtain W.

REFERENCE: Filing Statement 21/84, Toudor Resources Inc.

CAPSULE GEOLOGY

are up to 100 centimetres across and consist of massive fresh-looking white wollastonite with fibres up to 3 centimetres long. Clusters of red-brown garnet, up to 6 centimetres across, commonly form 20 to 30 per cent of the total volume. Thin (10 to 100 centimetres) quartzite beds are intercalated with the calc-silicates. A sample analyzed by image analysis contained 75.9 per cent wollastonite (Open File 1991-17).

A total of 18350 tonnes of tungsten ore was produced from this deposit (Open File 1991-17). Indicated reserves of the stockpile are 1360 tonnes grading 1.5 per cent W_3O_6 ; indicated reserves in the open pit is 4535 tonnes grading 1.2 percent W_3O_6 ; indicated reserves of open pit material is 9071 tonnes grading 1.2 per cent W_3O_6 ; indicated reserves in the tailings pond are 18,142 tonnes grading 0.3 per cent W_3O_6 ; conversion used for all calculations is 1.2611 to obtain W (Filing Statement 21/84, Troudor Resources Inc.). The wollastonite potential has not been evaluated.

BIBLIOGRAPHY

- EMPR ASS RPT *4270, 5189, *7607, *7884, *15696
- EMPR EXPL 1978-115,116; 1979-117; 1980-145,146
- EMPR FIELDWORK 1978, pp. 93,94; 1988, pp. 493-495; 1991, pp. 247,248
- EMPR GEM 1972-94; 1973-117,118
- EMPR MAP 65, 1989
- EMPR OF *1991-17; 1992-1; 1992-9; 1998-8-M, pp. 1-74
- EMPR PF (*United Mineral Services Ltd. (1977): A Geological Evaluation and Preliminary Economic Evaluation of the Gotcha 2 Mineral Claim; *Elwell, J.P. (1978): Percussion Drilling Results and Preliminary Cost Study, Gotcha Property; *Dickinson, R.A. and McClaren, M. (1978): Documentation Physical Work, Gotcha, Gotcha 2, Max 1 and Max 2 - MEIP Contract No. 6; *Ryan, B.D. (1979): A Report of Detailed Geological Mapping Program with Proposed Drill Program, Gotcha Tungsten Property; *United Mineral Services Ltd. (1979): A Summary Report and Compilation of Data, Gotcha Tungsten Property; *Dickinson, R.A. (1980): Diamond Drilling Summary, Gotcha Claims)
- EMR MIN BULL MR 223 B.C. 80
- EMR MP CORPFILE (Dimac Resource Corp.)
- GSC MAP 48-1963
- GSC OF 637
- CMJ Oct. 1981
- GCNL #241, 1977; #40, 1978; #50,#75, 1979; #163, 1981; #118,#139, #172, 1982; #154, 1983
- IPDM May/June 1984
- MIN REV May/June 1983, p. 52
- N MINER Sept.10, 1981; July 8,29, 1982; Jan.19, 1984
- W MINER Oct. 1981

DATE CODED: 1985/07/24
DATE REVISED: 1991/08/14

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 124**

NATIONAL MINERAL INVENTORY:

NAME(S): **ART**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 06 10 N
LONGITUDE: 119 57 24 W
ELEVATION: 600 Metres

NORTHING: 5665412
EASTING: 293010

LOCATION ACCURACY: Within 500M
COMMENTS: Adit, Map 1 (Assessment Report 4449).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stockwork
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Quartzite
Phyllitic Sandstone
Grit

HOSTROCK COMMENTS: Okulitch, 1979: Carboniferous Milford Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Thompson Plateau

CAPSULE GEOLOGY

The area is underlain by Devonian or older Eagle Bay Formation rocks consisting of phyllitic sandstone and grit, phyllite and quartzite.

Scattered galena mineralization is associated with a quartz-stockwork within quartz-sericite rocks.

BIBLIOGRAPHY

EMPR ASS RPT *4449, 13298
EMPR MAP 56
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 125**

NATIONAL MINERAL INVENTORY: 082M7 Zn2

NAME(S): **COMPLEX, ZAN, MCLEOD,
 NEVADA, T, COTTONBELT,
 CAMP MCLEOD, GRAND MOGUL, STEEPLE JACK,
 EAGLE'S NEST**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 082M07W
 BC MAP:

Underground

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 27 30 N
 LONGITUDE: 118 49 54 W
 ELEVATION: 1450 Metres

NORTHING: 5702386
 EASTING: 372748

LOCATION ACCURACY: Within 500M

COMMENTS: South east end of sulphide deposit - Preliminary Map 43; see also Cottonbelt (082M 086) and Copper King (082M 144).

COMMODITIES: Zinc Copper Lead Silver Iron Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Magnetite Pyrite
 Chalcopyrite
 ASSOCIATED: Calcite Garnet Biotite Pyroxene Amphibole
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Stratiform Massive
 CLASSIFICATION: Replacement Industrial Min.
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 DIMENSION: 0020 x 0004 Metres STRIKE/DIP: 155/40W TREND/PLUNGE:
 COMMENTS: Varies in width 1.0 to 4.1 metres and at least 20 metres long and possibly 600 metres long.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate
 Quartzite
 Limestone
 Marble
 Carbonatite
 Pelitic Schist
 Calcareous Schist
 Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
 TERRANE: Monashee
 METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: OUTCROP REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1966
 SAMPLE TYPE: Chip
 COMMODITY _____ GRADE _____
 Silver 97.0000 Grams per tonne
 Lead 5.3700 Per cent
 Zinc 6.5100 Per cent
 COMMENTS: Average of 21 surface chip samples across 1.4 metres along zone.
 REFERENCE: Property File (Report by A.R. Allen, 1966).

CAPSULE GEOLOGY

The property lies within the Shuswap Metamorphic Complex along the northwestern margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age. The dome is mantled by unconformably overlying metasedimentary rocks consisting of quartzites, calcareous schists, marbles and pelitic schists and locally intruded by carbonatite.

The metasediments comprise the limbs of the Grace Mountain

CAPSULE GEOLOGY

syncline, a tight isoclinal fold trending southeasterly.

The mineralized zones occur on both limbs of the syncline within the "Cottonbelt sequence", a heterogeneous package of dominantly calcareous rocks (Fieldwork, 1978). At the base of the Cottonbelt sequence is a buff-weathering carbonatite layer overlain by calcareous schists and a calcareous to relatively pure white quartzite. A distinctive grey-weathering, white limestone overlies the quartzite, which is overlain by interlayered micaeous and calcareous schists and an impure grey-weathering crumbly limestone. The sulphide layer, enveloped by a thin layer of very siliceous calcareous schist and a garnet sillimanite schist, defines the top of the Cottonbelt sequence.

The stratabound mineralization comprises an oxide-sulphide layer traced intermittently through a strike length of 5 kilometres in the western (upper) limb (Cottonbelt zone) of the Grace Mountain syncline and 2 kilometres in the lower limb (Copper King and McLeod zones). It varies in thickness from a few tens of centimetres to approximately 2 metres. Mineralization generally consists of disseminated to massive coarse-grained sphalerite, magnetite, galena and minor pyrrhotite in a dark green, pyroxene-amphibole-quartz-garnet "skarn" rock or, as layers within a lighter coloured, more siliceous calcareous gneiss or as disseminated grains in a siliceous granular marble.

The McLeod zone lies about 460 metres northeast of the Cottonbelt zone (082M 086). The zone is intermittently exposed for a length of 600 metres. The hanging wall is chiefly dark biotite gneiss and the footwall crystalline limestone. Mineralized sections of the zone contain galena, sphalerite and magnetite with lesser pyrite and chalcopyrite. Twenty-one surface chip samples along the exposed length of the zone, returned an average of 5.37 per cent lead, 6.51 per cent zinc, 97 grams per tonne silver across an average of 1.4 metres (Property File Report by Allen, A.R., 1966).

Twenty-one surface chip samples along the exposed length of the zone, returned an average of 5.37 per cent lead, 6.51 per cent zinc, 92 grams per tonne silver across an average of 1.4 metres (Property File Report by Allen, A.R., 1966).

CanQuest Resource Corporation surveyed the area from 1994 to 1996. See Cottonbelt (082M 086) and Copper King (082M 144).

BIBLIOGRAPHY

- EMPR AR 1906-175; 1907-131-133; 1908-123; 1909-141; 1910-128, 129; 1911-182; 1912-184; 1913-181,182,203,204; 1917-236; 1918-236; 1919-191; 1922-149,151,152; 1927-197
EMPR ASS RPT 486, 2637, 4367, 5953, 6207, *6377, *13822, *14034, 23568, 23985, 24367, 24841
EMPR BULL *80, p. 83
EMPR EXPL 1976-64; 1977-94; 1985-C107
EMPR FIELDWORK *1978, pp. 18-23
EMPR GEM 1970-318; 1973-116
EMPR MAP *43
EMPR OF 1994-8
EMPR PF (*Allen, A.R. (1966): Report on Cottonbelt Property)
EMR MP CORPFILE (Great Northern Petroleums & Mines Ltd.)
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 28
WWW <http://www.canquest.bc.ca/cottonbe.htm>
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 126**

NATIONAL MINERAL INVENTORY:

NAME(S): **TRIDENT MOUNTAIN KYANITE** MT. NEPTUNE

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 54 33 N
LONGITUDE: 118 06 30 W
ELEVATION: 2260 Metres

NORTHING: 5751516
EASTING: 423760

LOCATION ACCURACY: Within 1 KM

COMMENTS: North part of Area 2, Figure 4, Open File 1988-26.

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Quartz Garnet Biotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Layered Vein Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian	Horsethief Creek	Undefined Formation	

LITHOLOGY: Kyanite Garnet Biotite Schist
Quartz Kyanite Vein

HOSTROCK COMMENTS: Formation is lower aluminous pelite division.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

CAPSULE GEOLOGY

In the Trident Mountain area, 15 kilometres east-southeast of Mica Creek kyanite is extremely abundant in pelitic schists and quartz-kyanite segregation veins; kyanite often comprises in excess of 10 per cent of the rock. This area is underlain by the Lower Aluminous Pelite division of the Horsethief Creek Group (Perkins, 1983), a unit which commonly contains abundant aluminosilicate minerals.

BIBLIOGRAPHY

EMPR OF *1988-26, p. 11; 1991-10
GSC MAP 12-1964
GSC P 64-32
*Perkins, M.J. (1983): Structural Geology and Stratigraphy, Big Bend of the Columbia River, Selkirk Mountains, British Columbia; unpublished Ph.D. thesis, Carleton University, Ottawa, Ontario, 239 pages

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 127**

NATIONAL MINERAL INVENTORY:

NAME(S): **NSP**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 20 N
LONGITUDE: 119 37 14 W
ELEVATION: 1400 Metres

NORTHING: 5685213
EASTING: 317275

LOCATION ACCURACY: Within 1 KM

COMMENTS: Geology, Exploration and Mining 1972-89.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Unknown

Stratiform

Disseminated

DIMENSION:
COMMENTS: Foliation.

STRIKE/DIP: 135/40W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Cambrian

Undefined Group

Spapilem-Deadfall Creeks

Upper Devonian

Unnamed/Unknown Informal

ISOTOPIC AGE: 98 +/- 4 Ma

DATING METHOD: Potassium/Argon

MATERIAL DATED: Biotite

LITHOLOGY: Quartzite

Grit

Phyllite

Calc-silicate Schist

Quartz Biotite Gneiss

HOSTROCK COMMENTS: Dating by Okulitch, 1979.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area is underlain by probable Lower Cambrian to Hadrynian age Spapilem Creek-Deadfall Creek Succession (unit SDQ Map 56). The rocks consist of quartzite, micaceous quartzite, grit and phyllite, with lesser staurolite-garnet-mica schist, calc-silicate schist and amphibolite. These rocks are cut by Late Devonian orthogneiss (unit Dgn). To the north the rocks are cut by post-tectonic granitic rocks of the Mid-Cretaceous Baldy Batholith.

Chalcopyrite occurs as disseminations and in thin quartz stringers parallel to the foliation in quartz-biotite gneiss.

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 225-236
EMPR GEM 1972-89; 1973-115,116
EMPR MAP 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/05

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 128**

NATIONAL MINERAL INVENTORY:

NAME(S): **GABRO**, SONJA 11

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 39 30 N
LONGITUDE: 119 39 04 W
ELEVATION: 450 Metres

NORTHING: 5726367
EASTING: 316632

LOCATION ACCURACY: Within 1 KM

COMMENTS: Geology, Exploration and Mining 1972-91.

COMMODITIES: Copper

Cobalt

Silver

Gold

Tungsten

MINERALS

SIGNIFICANT: Chalcopyrite Scheelite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Cretaceous

Raft Batholith

LITHOLOGY: Gabbro

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The area is underlain by the Early Cretaceous Raft Batholith. Gold, copper, silver and cobalt occur in quartz carbonate veins in a gabbroic intrusive rock in the river bed of the North Thompson River. Copper and tungsten mineralization occurs on the south side of Forestry Road 30, above the river.

BIBLIOGRAPHY

EMPR EXPL *1978-E113; *1979-114; *1980-143,144
EMPR GEM 1972-91
EMPR OF 1991-17
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 129**

NATIONAL MINERAL INVENTORY: 082M4 Ag3

NAME(S): **A, SILVER KING**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 40 N
LONGITUDE: 119 32 14 W
ELEVATION: 1700 Metres

NORTHING: 5661537
EASTING: 322274

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of claim; no evidence of mineral occurrence location.

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

This showing is described as a replacement deposit in limestone of the Eagle Bay Formation. However no original evidence exists as a reference.

BIBLIOGRAPHY

EMPR ASS RPT 4048, 14410
EMPR EXPL 1986-C109
EMPR GEM *1971-436; *1972-86
EMR MP CORPFILE (Orell Copper Mines Ltd.)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 130**

NATIONAL MINERAL INVENTORY:

NAME(S): **BROKEN RIDGE**

MINING DIVISION: Kamloops

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M05W
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 20 30 N
 LONGITUDE: 119 53 04 W
 ELEVATION: 790 Metres

NORTHING: 5691771
 EASTING: 299108

LOCATION ACCURACY: Within 500M

COMMENTS: Broken Ridge Prospect, Fig. No. 357-3 (Assessment Report 14707).

COMMODITIES: Copper Lead Zinc Silver

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Galena Sphalerite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive
 CLASSIFICATION: Volcanogenic Syngenetic
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 DIMENSION: STRIKE/DIP: 090/30S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Calc-silicate
 Quartz Sericite Schist
 Granodiorite
 Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1985
SAMPLE TYPE: Chip	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	4.2000 Grams per tonne
Copper	0.1500 Per cent
Zinc	0.0100 Per cent

COMMENTS: 8.0 metre sample width.
 REFERENCE: Assessment Report 14707.

CAPSULE GEOLOGY

The area is underlain by metavolcanics and lesser meta-sedimentary rocks of the Eagle Bay Formation of Devonian to Mississippian age. The volcanics include felsic tuffs and flows, metamorphosed to quartz-sericite schists and quartz-chlorite schists. The metavolcanics are intercalated with and overlain by limestone and graphitic argillite and phyllite.

The rocks trend northwest, with a prominent foliation dipping moderately to the southwest.

Small stocks of fine-grained, porphyritic granodiorite to quartz diorite intrude the metavolcanics. The Cretaceous Baldy Batholith of quartz monzonite to granodiorite composition lies north of the area.

The Broken Ridge showing consists of disseminated to massive pyrite-pyrrhotite-chalcopyrite mineralization with minor galena, sphalerite or magnetite within dark green actinolitic (calc-silicate) schist intercalated with sericite-quartz schist. The zone is about 2 metres wide, strikes east-west and dips 30 degrees south, conforming to local stratigraphy. An 8.0 metre chip sample assayed 0.15 per cent copper, 0.01 per cent zinc and 4.2 grams per tonne silver (Assessment Report 14707).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 775
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 3333, 14388, *14707
EMPR EXPL 1971-440; 1976-E62; 1982-113,114; 1986-C115,C120
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR MAP *53; 56
EMPR OF 1999-2; 2000-7; 2000-31
GSC MAP 48-1963
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation
1986): *Mineral Deposits of the Adams Plateau - Clearwater area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral
Deposits of the Adams Plateau - Clearwater Region; GSA Cordilleran
Section Meeting, May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 131**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAY**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 20 15 N
LONGITUDE: 119 53 24 W
ELEVATION: 840 Metres

NORTHING: 5691323
EASTING: 298703

LOCATION ACCURACY: Within 500M

COMMENTS: May Prospect, Fig. No. 357-3 (Assessment Report 14707).

COMMODITIES: Copper Lead Zinc Silver

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Galena Sphalerite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Calc-silicate
Quartz Sericite Schist
Granodiorite
Argillite
Phyllite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 5.0000 Grams per tonne
Copper 0.4000 Per cent
Zinc 0.0300 Per cent
REFERENCE: Assessment Report 14707.

CAPSULE GEOLOGY

The area is underlain by metavolcanics and lesser meta-sedimentary rocks of the Eagle Bay Formation of Devonian to Mississippian age. The volcanics include felsic tuffs and flows, metamorphosed to quartz-sericite schists and quartz-chlorite schists. The metavolcanics are intercalated with and overlain by limestone and graphitic argillite and phyllite.

The rocks trend northwest, with a prominent foliation dipping moderately to the southwest.

Small stocks of fine-grained, porphyritic granodiorite to quartz diorite intrude the metavolcanics. The Cretaceous Baldy Batholith of quartz monzonite to granodiorite composition lies north of the area.

The May showing consists of disseminated to massive pyrite-pyrrhotite-chalcopyrite mineralization with minor galena, sphalerite or magnetite within dark green actinolitic (calc-silicate) schist intercalated with sericite-quartz schist. A chip sample assayed over 0.4 per cent copper, 0.03 per cent zinc and 5.0 grams per tonne silver (Assessment Report 14707).

BIBLIOGRAPHY

EMPR ASS RPT 3333, 14388

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 777
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1971-440,441; 1976-E62; 1982-114; 1986-C115
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR MAP *53; 56
EMPR OF 1999-2; 2000-7
GSC MAP 48-1963
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation
1986): *Mineral Deposits of the Adams Plateau - Clearwater area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral
Deposits of the Adams Plateau - Clearwater Region; GSA Cordilleran
Section Meeting, May 1985, pp. 16-1 to 16-11

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 132**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARS CR**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 21 00 N
LONGITUDE: 118 22 04 W
ELEVATION: 835 Metres

NORTHING: 5689635
EASTING: 404749

LOCATION ACCURACY: Within 1 KM
COMMENTS: Paper 1982-1-57.

COMMODITIES: Zinc Lead Cadmium

MINERALS

SIGNIFICANT: Sphalerite Pyrite
COMMENTS: Zinc with secondary hydrozincite.
ALTERATION: Hydrozincite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Sedimentary
TYPE: E05 Sandstone Pb
SHAPE: Tabular
MODIFIER: Folded
DIMENSION:

STRIKE/DIP: 170/25E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Lardeau Undefined Formation

LITHOLOGY: Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Grab
COMMODITY GRADE
Cadmium 0.0100 Per cent
Lead 0.1500 Per cent
Zinc 2.2300 Per cent

REFERENCE: Fieldwork 1981, page 57.

CAPSULE GEOLOGY

The showing is underlain by sericite-chlorite schist, sericite-quartz-albite schist, biotite-chlorite schist and minor amounts of sericitic quartzite. The rocks strike 170 degrees and dip 25 degrees east.

Sphalerite and pyrite, in a manganese-dioxide-stained siliceous metasediments, occur in one metre bands over an exposed strike length of 10 metres.

Analysis of a grab sample gave 2.23 per cent zinc, 0.15 per cent lead, and 0.01 per cent cadmium (Fieldwork 1981, page 57).

BIBLIOGRAPHY

EMPR ASS RPT 11778
EMPR FIELDWORK *1981, p. 57
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1985/07/24
DATE REVISED: 1987/11/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 133**

NATIONAL MINERAL INVENTORY:

NAME(S): **SIN**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 31 00 N
LONGITUDE: 119 41 04 W
ELEVATION: 1800 Metres

NORTHING: 5710699
EASTING: 313749

LOCATION ACCURACY: Within 1 KM
COMMENTS: Old claim centre.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

Disseminated chalcopyrite is reported in sericite schist of the Devonian to Mississippian Eagle Bay Formation. No other information is available.

BIBLIOGRAPHY

EMPR GEM 1971-442
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/21

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 780
REPORT: RGEN0100

MINFILE NUMBER: **082M 134**

NATIONAL MINERAL INVENTORY: 082M12 Cu3

NAME(S): **KEYSTONE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 30 40 N
LONGITUDE: 119 57 04 W
ELEVATION: 1890 Metres

NORTHING: 5710794
EASTING: 295225

LOCATION ACCURACY: Within 1 KM
COMMENTS: Annual Report 1925-152.

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>
Devonian-Mississipp.	Undefined Group
Cretaceous	

<u>FORMATION</u>
Eagle Bay

<u>IGNEOUS/METAMORPHIC/OTHER</u>
Baldy Batholith

LITHOLOGY: Schist
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1925

<u>GRADE</u>
2.4000 Per cent

Copper
COMMENTS: 10 metre sample width.
REFERENCE: Annual Report 1925, page 152.

CAPSULE GEOLOGY

A zone of copper mineralization occurs along the contact between granite of the Cretaceous Baldy Batholith and schists of the Devonian to Mississippian part of the Eagle Bay Formation. A value of 2.4 per cent copper was reported to occur across 10 metres (Annual Report 1925-152).

BIBLIOGRAPHY

EMPR AR 1924-152
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/02/04

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 134**

MINFILE NUMBER: **082M 135**

NATIONAL MINERAL INVENTORY:

NAME(S): **SAN, POP, LEEMAC,
WR, LUCKY BEAR, ZEB**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

Underground

MINING DIVISION: Kamloops

LATITUDE: 51 21 30 N
LONGITUDE: 119 44 34 W
ELEVATION: 760 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5693245
EASTING: 309043

LOCATION ACCURACY: Within 500M
COMMENTS: Trench 3, plate No. 2 and 3 - Assessment Report 5939.

COMMODITIES: Silver Lead Gold Zinc Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Syngenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION:
COMMENTS: Quartz vein.

STRIKE/DIP: 025/45W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	
Cretaceous			Baldy Batholith

LITHOLOGY: Granite
Quartzite
Mica Schist
Argillite
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

A strongly porphyritic, reddish granite of the Cretaceous Baldy Batholith intrudes Upper Paleozoic metasediments consisting of mica schists, quartzites, argillites and slates. Mineralization occurs within the granite near the contact with the metasediments. Pyrite and minor galena, sphalerite and chalcopyrite occurs as blebs and streaks in a sheared quartz vein up to 1.1 metre wide along a 100 metre north east strike. A 1 metre sample gave 278 grams per tonne silver, 0.47 per cent lead, 0.39 per cent zinc and trace gold.

BIBLIOGRAPHY

EM FIELDWORK 1999, pp. 193-206, 225-236; 2001, pp. 237-246
EMPR AR 1966-145,248
EMPR ASS RPT *807, *5939, *7532, *12115, 18182
EMPR EXPL 1976-E63; 1979-111; 1983-158
EMPR GEM 1970-315,316
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 136**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOSQUITO**, BUG, MAX

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 51 30 N
LONGITUDE: 119 40 24 W
ELEVATION: 1400 Metres

NORTHING: 5748661
EASTING: 315911

LOCATION ACCURACY: Within 500M

COMMENTS: Main showing, Drawing No. MC 76-9 (Assessment Report 6071).

COMMODITIES: Copper Molybdenum Gold Silver

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Molybdenite
ASSOCIATED: Amphibole Epidote Actinolite Magnetite
ALTERATION: Epidote
ALTERATION TYPE: Epidote
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
CLASSIFICATION: Syngenetic
SHAPE: Irregular
COMMENTS: Main showing.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian Shuswap Metamorphic Complex

LITHOLOGY: Amphibolite
Schist
Granitic Gneiss
Quartz Feldspar Pegmatite
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1975
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 2.4000 Grams per tonne
Gold 0.1700 Grams per tonne
Copper 0.2400 Per cent
COMMENTS: 10 metre sample width.
REFERENCE: Assessment Report 5836.

CAPSULE GEOLOGY

The property is underlain by rocks of the Shuswap Metamorphic Complex of unknown but probable Paleozoic age. The rocks comprise granite gneiss, biotite-muscovite-quartz schist, amphibolite, muscovite-chlorite schist and marble. They are interbedded in layers from 1 to 15 metres thick and strike north to northwesterly and dip from vertical to 35 degrees east. Quartz-feldspar pegmatite and quartz-diorite are both conformable to and disruptive of the normal bedding and schistosity.

Sulphide mineralization, consisting of disseminations, blebs and layers of pyrite, pyrrhotite and chalcopyrite, occurs within amphibolite and schists. Within the amphibolite, chalcopyrite occurs with epidote and magnetite in locally rich pods up to 10 metres long by 3 metres across. A 10 metre wide chip sample of the main showing assayed 0.24 per cent copper, 2.4 grams per tonne silver and 0.17 grams per tonne gold (Assessment Report 5836).

Intermittent sulphide mineralization occurs over a 500 metre strike length in a north northwest direction. Molybdenite is noted in a few localities in pegmatite dykes.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 783
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 5189, *5836, *6071, 7561, *11093
EMPR EXPL 1976-E74; 1979-117,118; 1982-123,124
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 137**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - MAIN BOULDER**

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 55 00 N
LONGITUDE: 119 35 04 W
ELEVATION: 1100 Metres

NORTHING: 5754926
EASTING: 322262

LOCATION ACCURACY: Within 500M

COMMENTS: Drilling area, Plate 2 (Assessment Report 8317).

COMMODITIES: Zinc Lead Copper

MINERALS

SIGNIFICANT:	Sphalerite	Pyrrhotite	Galena	Chalcopyrite	Pyrite
ASSOCIATED:	Quartz	Calcite	Diopside	Amphibole	
ALTERATION:	Quartz				
ALTERATION TYPE:	Silicific'n				
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER:	Stratiform	Disseminated	Massive
CLASSIFICATION:	Sedimentary	Syngenetic	
TYPE:	E14	Sedimentary exhalative Zn-Pb-Ag	
SHAPE:	Irregular		
MODIFIER:	Folded		
DIMENSION:	0120 x 0020	Metres	STRIKE/DIP: 115/41N
COMMENTS:	Mineralized zone.		TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Amphibolite
Quartzite
Quartz Feldspar Hornblende Gneiss
Marble
Granitic Intrusive
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Barkerville	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Post-mineralization
	GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1979
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Copper	0.0400 Per cent
Lead	4.8800 Per cent
Zinc	23.4500 Per cent

COMMENTS: 0.6 metre sample width.
REFERENCE: Fieldwork 1979, pages 23-27.

CAPSULE GEOLOGY

The area is underlain by metasedimentary rocks of the Shuswap Metamorphic Complex consisting of quartz-feldspar-hornblende gneiss, amphibolite, calc-silicate gneiss and minor quartzite and marble of unknown but probable Paleozoic age. The metasediments are cut by pegmatites and granitic intrusives.

The general structure of the area is composed of an east-facing succession folded into a broad open, east-plunging synformal structure. Locally the structures are complex resulting in dip reversals and repetition and omission of lithologies.

Sphalerite, pyrrhotite and minor galena occur in a north-east trending massive sulphide layer generally less than 1 metre thick. The layer is confined to a calcareous horizon consisting of calc-silicate gneiss and carbonates which is structurally

CAPSULE GEOLOGY

underlain by well-layered hornblende gneiss and amphibolite and overlain by quartz-feldspar gneiss and pelitic schist.

The Main Boulder showing is probably a continuation of the same sulphide horizon that occurs in the New showing (082M 224), inferring the presence of a fault in the creek separating them. Structural complexities at the Main Boulder showing hinder tracing a small trenched outcrop of massive sulphides for more than a few metres.

A 0.6 metre chip sample assayed 23.45 per cent zinc, 4.88 per cent lead and 0.04 per cent copper (Fieldwork, 1979).

BIBLIOGRAPHY

EMPR ASS RPT *5189, *5192, *6756, *6909, *7299, *7644, *8317,
16030, 25641
EMPR BULL *80, p. 87
EMPR EXPL 1976-E75; 1978-E116; 1979-E118; 1980-146,147
EMPR FIELDWORK *1979, pp. 23-27
EMPR GEM 1974-99
EMPR PF (*White, G. (1974): Reports (3) on the CK Property; Geologic
notes in letter to N.C. Carter from T. Hoy, 1979)
GSC MAP 48-1963
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 138**

NATIONAL MINERAL INVENTORY: 082M4 Zn2,Cu1

NAME(S): **CU 1, ZINC, BOWLER CREEK**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 082M04E
 BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 20 N
 LONGITUDE: 119 30 14 W
 ELEVATION: 1500 Metres

NORTHING: 5653427
 EASTING: 324336

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of zinc zone, Fig. 1 (Assessment Report 11254).

COMMODITIES: Silver Zinc Lead Copper Iron
 Molybdenum Gold Cadmium

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Magnetite Pyrite
 Pyrrhotite
 ASSOCIATED: Chlorite Quartz Epidote
 ALTERATION: Pyrrhotite Epidote
 ALTERATION TYPE: Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
 CLASSIFICATION: Volcanogenic Industrial Min.
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Tabular
 DIMENSION: 1600 x 0600 Metres STRIKE/DIP: 060/20N TREND/PLUNGE:
 COMMENTS: Area of exposed sulphide zones.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Andesite
 Tuff
 Rhyolite
 Ignimbrite
 Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional
 PHYSIOGRAPHIC AREA: Adams Plateau
 RELATIONSHIP:
 GRADE: Greenschist

INVENTORY

ORE ZONE: CU 1 REPORT ON: Y

CATEGORY: Indicated	YEAR: 1985
QUANTITY: 148000 Tonnes	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	49.7000 Grams per tonne
Cadmium	0.2500 Per cent
Copper	0.1900 Per cent
Molybdenum	0.1400 Per cent
Lead	0.5300 Per cent
Zinc	2.4300 Per cent

REFERENCE: Property File - Black, 1976; Assessment Report 13381, page 17.

CAPSULE GEOLOGY

The property is underlain by north east trending metavolcanics of the Cambrian to Ordovician part of the Eagle Bay Formation. The metavolcanics consist of bedded andesitic fragmentals and flows, siliceous tuffites with some rhyolite ignimbrites, tuffs, and fragmentals. The andesite and tuffite contain abundant siliceous and/or cherty layers. Small amounts of pyrite, pyrrhotite, chalcopyrite and sphalerite are disseminated in the rocks. Northeast-north trending quartz feldspar porphyry dykes cut the metavolcanics. Numerous zones of massive galena, sphalerite, pyrrhotite, pyrite and magnetite with minor chalcopyrite occur in conformable chlorite and/or epidote rich layers. Layers of massive sulphides are 4 metres or more.

CAPSULE GEOLOGY

The zinc zone covers an area measuring about 1600 by 600 metres in an east northeast trend with 20 to 35 degree dips to the north-west. This zone lies about 1 kilometre southeast of the BC zone (082M 139).

A drillhole intersected 1.53 per cent lead, 1.09 per cent zinc and 10.9 grams per tonne silver over 1.13 metres (Assessment Report 14681). Indicated reserves are 148,000 tonnes grading 49.7 grams per tonne silver, 0.25 per cent cadmium, 0.19 per cent copper, 0.14 per cent molybdenum, 0.53 per cent lead and 2.43 per cent zinc (Property File - Black, 1976; Assessment Report 13381, page 17).

BIBLIOGRAPHY

- EMPR ASS RPT *5132, *6313, *6764, *6891, *8139, *11254, 13381, 14681
EMPR EXPL *1976-E59; *1977-E87; *1978-E101; *1979-E109; *1982-107,108; 1986-C110
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR GEM *1974-95,96
EMPR MAP 56
EMPR OF 1999-2
EMPR PF (Black, J.M. (1976): Orell Copper Mines Ltd. Prospectus)
EMR MP CORPFILE (Consolidated Giant Metallics Ltd., Orell Copper Mines Ltd.)
GSC MAP 48-1963; 5320G
GSC OF 637
GCNL Apr.11, July 7, 1979; Apr.15, Nov.4, 1980; Oct. 21, 1982; June 14, 1983; Feb. 15, Oct. 9, 1985
IPDM March/April 1984, p. 9
N MINER July 5, 1984
Black, J.M. (1981): Report on the Mosquito King and Bowler Creek Groups, April 15, 1981, in Orell Resources Ltd. Statement of Material Facts 109/81
Dickie, G.J., Preto, V.A., and Schiarizza, P. (in preparation 1986): Mineral Deposits of the Adams Plateau - Clearwater area
Hainsworth, W.G. (1973): *Report on Giant Metallics Mines, Adams Plateau, pp. 11,15 in Consolidated Giant Metallics Statement of Material Facts, July 13, 1973
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau - Clearwater Region; GSA Cordilleran Section Meeting, May 1985, pp. 16-1 to 16-11
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 139**

NATIONAL MINERAL INVENTORY: 082M4 Zn2,Cu1

NAME(S): **CU 5, BC, BOWLER CREEK**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 082M04E
 BC MAP:

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5654071
 EASTING: 323577

LATITUDE: 51 00 40 N
 LONGITUDE: 119 30 54 W
 ELEVATION: 1600 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of BC zone, Fig. 1 (Assessment Report 11254).

COMMODITIES: Zinc Silver Lead Copper Iron

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Sphalerite Magnetite
 Galena
 ASSOCIATED: Quartz Chlorite Epidote
 ALTERATION: Pyrrhotite Epidote
 ALTERATION TYPE: Silicific'n Epidote
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
 CLASSIFICATION: Volcanogenic Industrial Min.
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Tabular
 DIMENSION: 1400 x 0400 Metres STRIKE/DIP: 060/20N TREND/PLUNGE:
 COMMENTS: Area of exposed sulphide zones; mineralized lenses up to 1.5 metres.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Andesite
 Tuff
 Rhyolite
 Ignimbrite
 Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: CU 5 REPORT ON: Y
 CATEGORY: Indicated YEAR: 1985
 QUANTITY: 181000 Tonnes

COMMODITY	GRADE	
Silver	54.9000	Grams per tonne
Copper	0.2000	Per cent
Lead	1.0000	Per cent
Zinc	2.7200	Per cent

 REFERENCE: Assessment Report 13381, page 17; Property File - Black, 1976.

CAPSULE GEOLOGY

The property is underlain by north east trending metavolcanics of the Cambrian to Ordovician part of the Eagle Bay Formation. The metavolcanics consist of bedded andesitic fragmentals and flows, siliceous tuffites with some rhyolite ignimbrites, tuffs, and fragmentals. The andesite and tuffite contain abundant siliceous and/or cherty layers. Small amounts of pyrite, pyrrhotite, chalcopyrite and sphalerite are disseminated in the rocks. Northeast north trending quartz feldspar porphyry dykes cut the metavolcanics. Numerous zones of massive galena, sphalerite, pyrrhotite, pyrite and magnetite with minor chalcopyrite occur in conformable chlorite and/or epidote rich layers. Layers of massive sulphides are 4 metres or more. The BC zone covers an area measuring about 1400 metres by 400 metres in an east-northeast trend with 15 degrees to 30 degrees dips to the northwest. This zone lies about 1 kilometre northeast of the

CAPSULE GEOLOGY

Zinc zone (082M 138). The best drill intersection (Diamond Drill Hole Harry 1-85) assayed 1.2 per cent zinc, 1.0 grams per tonne silver and .08 per cent copper over 0.84 metres (Assessment Report 14681). A drillhole (Diamond Drill Hole Harry 3-85), 250 metres south west of the first, intersected 0.3 per cent zinc, 7.9 grams per tonne silver and 0.16 per cent copper over 0.27 metre. Indicated reserves are 181,000 tonnes grading 54.9 grams per tonne silver, 0.2 per cent copper, 1.0 per cent lead and 2.72 per cent zinc (Assessment Report 13381, page 17; Property File - Black, 1976).

BIBLIOGRAPHY

EMPR ASS RPT *5132, *6313, *6764, *6891, *8139, *11254, 13381, 14681
EMPR EXPL *1976-E59; *1977-E87; *1978-E101; *1979-E109; *1982-107,108; 1986-C110
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR GEM *1974-95,96
EMPR MAP 56
EMPR OF 1999-2
EMPR PF (Black, J.M. (1976): Orell Copper Mines Ltd. Prospectus)
EMR MP CORPFILE (Consolidated Giant Metallics Ltd., Orell Copper Mines Ltd.)
GSC MAP 48-1963; 5320G
GSC OF 637
GCNL Apr.11, July 7, 1979; Apr.15, Nov.4, 1980; Oct. 21, 1982; June 14, 1983; Feb. 15, Oct. 9, 1985
IPDM March/April 1984, p. 9
N MINER July 5, 1984
Black, J.M. (1981): Report on the Mosquito King and Bowler Creek Groups, April 15, 1981, in Orell Resources Ltd. Statement of Material Facts 109/81
Dickie, G.J., Preto, V.A., and Schiarizza, P. (in preparation 1986): Mineral Deposits of the Adams Plateau - Clearwater area
Hainsworth, W.G. (1973): *Report on Giant Metallics Mines, Adams Plateau, pp. 11,15 in Consolidated Giant Metallics Statement of Material Facts, July 13, 1973
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau - Clearwater Region; GSA Cordilleran Section Meeting, May 1985, pp. 16-1 to 16-11
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 140**

NATIONAL MINERAL INVENTORY: 082M4 Cu2

NAME(S): **ORO, MK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 40 N
LONGITUDE: 119 30 54 W
ELEVATION: 1690 Metres

NORTHING: 5659630
EASTING: 323767

LOCATION ACCURACY: Within 500M

COMMENTS: Drill Hole, Map (Assessment Report 4932, 6420).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Sedimentary

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Limestone
Porphyritic Dike
Andesitic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by Lower Cambrian rocks of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestones and greenschist. The metavolcanics and meta-sediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

The ORO showing occurs within thinly bedded light and dark argillaceous phyllites cut by andesite and hornblende porphyry dykes.

Mineralization consists of disseminated and veinlets of pyrite, pyrrhotite and chalcopyrite with very minor sphalerite in a drill hole.

BIBLIOGRAPHY

EMPR ASS RPT *4932, 6420, 6788, 6913, 7019, 11264
EMPR EXPL *1974-96; 1977-E90; 1982-109; 1984-110
EMPR MAP 56
GSC MAP 48-1963; 5320G
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986): Mineral Deposits of the Adams Plateau - Clearwater area

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 141**

NATIONAL MINERAL INVENTORY: 082M9 Cu2

NAME(S): **GOLDSTREAM**, GOLDSTREAM MINE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:
LATITUDE: 51 37 30 N
LONGITUDE: 118 25 44 W
ELEVATION: 700 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

NORTHING: 5720298
EASTING: 401091

COMMODITIES: Copper Silver Gold Zinc Cadmium
Antimony

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Sphalerite Pyrite
ASSOCIATED: Quartz Chlorite Calcite
ALTERATION: Malachite Azurite Hydrozincite
COMMENTS: Sulphides occur in an altered envelope.
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive Stratabound Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 1500 x 400 x 3 Metres STRIKE/DIP: 110/35N TREND/PLUNGE:
COMMENTS: Goldstream deposit.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian Lardeau Undefined Formation

LITHOLOGY: Sericitic Quartzite
Calcareous Phyllite
Chloritic Phyllite
Quartzitic/Quartzose Phyllite
Greenstone
Pelitic Schist
Limestone
Calc-silicate Gneiss
Biotite Gneiss
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: GOLDSTREAM REPORT ON: Y
CATEGORY: Proven YEAR: 1996
QUANTITY: 22000 Tonnes
COMMODITY GRADE
Copper 3.5000 Per cent
Zinc 2.1500 Per cent
COMMENTS: Reserves estimated as of January 1, 1995.
REFERENCE: Information Circular 1997-1, page 10.

CAPSULE GEOLOGY

The Goldstream property is underlain by Lower Cambrian and younger metasediments and metavolcanics of the Lardeau Group. It is flanked on the west by the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex and on the east by Hadrynian Horsethief Creek Group rocks.

The metasedimentary and metavolcanic rocks comprise five major lithologic packages. The lowest unit consists of dominantly pelitic and calcareous schists and marble and lies to the east of the property. This unit is overlain by a succession of rocks consisting

CAPSULE GEOLOGY

of four main divisions (Bulletin 71).

The lower quartzite-schist division consists dominantly of pelitic schist and micaceous quartzite. The overlying calc-silicate gneiss division is comprised of calcareous phyllite and quartzite, marble and biotite gneiss. The metavolcanic-phyllite division, consisting of massive greenstone units, chloritic phyllite, ultramafic pods and dark calcareous to pelitic schists, is the host for the Goldstream deposit. The final carbonate-phyllite division consists of dolomite and limestone.

The dominant structure in the area are large, tight to isoclinal, east dipping to recumbent phase 2 folds. The average strike in the deposit area is 290 degrees with 35 degree northeast dips.

The Goldstream deposit is a thin, conformable sheet of massive sulphides in sericitic quartzite and calcareous and chloritic phyllite within the metavolcanic-phyllite division. Regional structures suggest the succession is inverted, with the oldest rocks in the hanging wall of the deposit.

The massive sulphide layer averages from 1 to 3 metres in thickness, has a strike length of 400 metres and continues down plunge for 1500 metres, dipping at 30-35 degrees. Near its western and eastern limits it splits into two layers separated by a narrow zone of quartzitic phyllite. The contacts of the sulphide zone with hanging wall and footwall rocks vary from sharp to gradational and from smooth to highly contorted and brecciated.

The sulphide layer consists mainly of intimately intermixed pyrrhotite, chalcopyrite and sphalerite with numerous subrounded inclusions of quartz, phyllite and carbonate. The layer has a pronounced lateral zonation with zinc (zinc + copper) increasing to the east. No vertical zonation is apparent within the layer.

The metal contents of hanging wall rocks are variable, with copper and zinc value ranging from 0.1 to 2.5 per cent and silver averaging 2 to 7 grams per tonne. Grades and thickness of mineralization is less in the footwall.

The Goldstream mine was reactivated and milling of ore began on May 2, 1991 with commercial production beginning June 1, 1991. To the end of November 1991, 237,532 tonnes of ore had been milled and 8,380,527 kilograms of copper recovered. Although zinc was not yet being recovered, a smelting contract was signed with Cominco Ltd., and zinc recovery was expected to begin by March 31, 1992. Preproduction mineable reserves were calculated to be 1,859,555 tonnes averaging 4.81 per cent copper and 3.06 per cent zinc, sufficient for a 5 year mine life. Drilling early in 1991 traced the deposit to further depths, adding reserves (George Cross News Letter No.5 (January 8), 1992).

Since mine start-up in May 1991, to the end of September 1992, some 571,496 tonnes of ore had been milled and 19,051,200 kilograms of copper in concentrates shipped to Nippon Mining Co. in Japan. Copper recovery continues to average 91 per cent with the production of a copper concentrate containing about 24 per cent copper. The zinc circuit started in April 1992 and is producing a zinc concentrate which is being sold to Cominco Ltd.'s smelter at Trail, B.C. Zinc recovery is 22 per cent producing a concentrate with an average grade of 47 per cent zinc. To the end of September 1992, 816,480 kilograms of zinc has been sold (George Cross News Letter No. 202 (October 20), 1992).

The proven reserves at the mine were recalculated as of April 1993 and stand at 1.436 million tonnes grading 4.48 per cent copper, 3.03 per cent zinc and 8.2 grams per tonne silver. There are 840,000 tonnes above the 350-metre interval, with the remainder within the 350-100 metre interval (George Cross News Letter No.93 (May 14), 1993; Information Circular 1994-1, page 7).

Reserves as of January 1, 1994 were reported to be approximately 1 million tonnes grading 4.31 per cent copper, 2.94 per cent zinc and 12 grams per tonne silver (Information Circular 1994-19, page 7).

Reserves estimated by the company were approximately 600,000 tonnes grading 4.2 per cent copper, 2.3 per cent zinc and 18.0 grams per tonne silver as of January 1, 1995. In mid-July 1995, milling operations were temporarily shut down following slow ramp development and poorer than expected ore recovery in the 250-metre panel. Milling resumed in September and is scheduled to continue until January 31, 1996 when the economic limits of the existing orebody will have been reached (Information Circular 1995-9, page 7).

In 1995, partly with Explore B.C. Program support, Bethlehem Resources Corporation, a subsidiary of Imperial Metals Corporation, completed a surface and underground diamond drilling program with a threefold objective: deep drilling east of the orebody, test the western extension of the Goldstream stratigraphy, and test the stratigraphy below the ore horizon. The program consisted of 2

CAPSULE GEOLOGY

surface and 4 underground holes totalling 1611.77 metres. None of the holes intersected economic mineralization. The two surface holes intersected the mine stratigraphy east and west of the orebody but no massive sulphides. Deep drilling by the four underground holes intersected a garnet-bearing sulphide horizon at the lower contact of the greenstone unit. This zone contains up to 50 per cent pyrrhotite and has a skarn-like mineralogy with garnets, epidote and tremolite within the sulphide horizon but was found not to be of economic grade (Explore B.C. Program 95/96 - A105). The mine was closed in January, 1996.

Reserves stand at 22,000 tonnes grading 3.5 per cent copper and 2.15 per cent zinc (Information Circular 1997-1, page 10).

Production from 1983 to 1996 totalled 2,224,387 tonnes yielding 26,228,450 grams of silver, 42,363 grams of gold, 78,269,389 kilograms of copper and 7,988,112 kilograms of zinc.

BIBLIOGRAPHY

- EM EXPL 2001-33-43
EMPR ASS RPT *5161, 5310, *5566, 5899, *5918, 6196, 6205, 6290, 6300, 6347, 6696, 9358, 12509, 15484, 18980, 22212, 22712, 23419, *23725
EMPR BULL *71, pp. 28,33-45
EMPR ENG INSP Annual Report 1989, 1990
EMPR EXPL 1975-E57,E58; 1976-E69; 1978-E111; 1979-11; 1996-D6
EMPR Explore B.C. Program 95/96 - A105
EMPR FIELDWORK *1976, pp. 23-29; *1976, pp. 17-22
EMPR GEOL *1976, pp. 18-36
EMPR INF CIRC 1993-13; 1994-19, p. 7; 1997-1, p. 10
EMPR MAP *25; 65 (1989)
EMPR MINING 1981-1985
EMPR OF 1992-1; 1994-1; 1999-2
EMPR P 1991-4, pp. 107,108
EMPR PF (*Gibson, G. (1980): A Mineralographic Study of the Goldstream Massive Cu-Zn Sulfide Deposit; Letter to T. Hoy from Prime Explorations dated Dec.14 1992; *R.B. Humphrey, Mining at Goldstream, Prepared for presentation at the District 6 Meeting of the CIM)
EMR MP CORPFILE (Noranda Mines Limited; Noranda Exploration Company, Limited)
GSC MAP 12-1964
GSC OF 637
BC MINING NEWS March 2, 1976
CMH 1983-84, p. 256; 1984-85, pp. 279,281
CMJ *Vol.99, No.4, pp. 39-42 (Reinertson, L.C. (1978)); Oct. 1981, p. 53; April 1992
ECON GEOL *Vol.79, No.5, pp. 789-814 (Hoy, T., Gibson, G. and Berg, N.W. (1984))
GCNL Mar.2, May 12, June 14,24, 1976; Oct.11, 1978; Mar.20, 1979; Mar.12, 1980; #70(Apr.12),#127(Jul.4),#145(Jul.28),#162(Aug.23), #237(Dec.11),#240(Dec.14), 1989; #93(May 14),#112(Jun.11), #135(Jul.13),#222(Nov.16),#232(Nov.30),#246(Dec.20), 1990; #8(Jan.11),#33(Feb.15),#34(Feb.18),#59(Mar.25),#78(Apr.23), #110(June 7),#114(June 13),#129(Jul.5),#135(Jul.15), 1991; #3(Jan.6),#5(Jan.8),#115(June 15),#202(Oct.20),#245(Dec.21), 1992; #62(Mar.30),#93(May 14), 1993
N MINER Mar.4,18, 1976; June 9,16, 1983; March 8, 1984; Jul.31, Dec.18, 1989; Jul.23, 1990; May 13, July 15,22, 1991; Jan.20, June 15,22, Oct.19, Dec.28, 1992; May 24, 1993; Feb. 23, 1998
W MINER Apr. 1980, p.110; July 1983, pp.9-15; April 1984
WWW <http://www.orphanboy.com/gstream.html>;
http://www.infomine.com/index/properties/GOLDSTREAM_MINE.html
*Hoy, T. and Berg, N. (1983): Goldstream Deposit in Stratabound Base Metal Deposits in Southeast B.C.- GAC MAC CGU 1983, pp. 11-1 to 11-9
*Hoy, T. and Nelson, W.I. (1977): Goldstream: a massive sulphide Cu-Zn deposit in Eocambrian metasediments, southeastern B.C. - Abstract, GAC 1977 Annual Meeting, p. 25
Imperial Metals Corporation, 1995 Annual Report
*Lane, L.S. (1977): Structure and stratigraphy, Goldstream River-Downie Creek area, Selkirk Mountains, B.C.; Unpublished M.Sc. Thesis, Ottawa, Carleton University
Placer Dome File
EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1996/11/13

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 142**

NATIONAL MINERAL INVENTORY:

NAME(S): **TRIO**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 50 30 N
LONGITUDE: 119 20 04 W
ELEVATION: 1300 Metres

NORTHING: 5746005
EASTING: 339185

LOCATION ACCURACY: Within 1 KM
COMMENTS: Showings, Map 1 (Assessment Report 5125).

COMMODITIES: Copper Silver Gold Molybdenum Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Molybdenite Pyrite Malachite
ASSOCIATED: Quartz Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Replacement Epigenetic
SHAPE: Irregular
DIMENSION: 15 x 6 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Main showing.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Shuswap Metamorphic Complex

LITHOLOGY: Quartz Sericite Schist
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1973
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 85.0000 Grams per tonne
Gold 0.0300 Grams per tonne
Copper 7.8500 Per cent
Zinc 0.0300 Per cent

COMMENTS: Traces of molybdenum.
REFERENCE: Assessment Report 5125.

CAPSULE GEOLOGY

The property is underlain by the Proterozoic Shuswap Metamorphic Complex with granite to quartz monzonite intrusives. The main showing is a 15 by 6 metre zone containing malachite, pyrite and chalcopyrite within quartz sericite schist. About a kilometre south are several molybdenite showings within quartz veins in granite. One location contained silver, lead, zinc and molybdenite mineralization with a grab sample assaying 7.85 per cent copper, 0.03 per cent zinc, 85 grams per tonne silver, 0.03 grams per tonne gold and less than .001 per cent molybdenum.

BIBLIOGRAPHY

EMPR ASS RPT *5125, 7127
EMPR EXPL 1975-E60
GSC MAP 48-1963

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 143**

NATIONAL MINERAL INVENTORY:

NAME(S): **PET**, SILVERBELL

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 40 N
LONGITUDE: 119 32 04 W
ELEVATION: 1600 Metres

NORTHING: 5657824
EASTING: 322341

LOCATION ACCURACY: Within 500M

COMMENTS: Assessment Report 10794, p. 9.

COMMODITIES: Lead Zinc Silver Gold Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Pyrite Chalcopyrite
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
DIMENSION:
COMMENTS: Approximate attitude of strata. STRIKE/DIP: 060/30N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Undefined Group Eagle Bay

LITHOLOGY: Phyllite
Tuff
Gossan
Porphyritic Dike
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Granulite

INVENTORY

ORE ZONE: GOSSAN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1982
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 38.4000 Grams per tonne
Gold 1.8000 Grams per tonne
Copper 0.0900 Per cent
Lead 2.9900 Per cent
Zinc 5.5400 Per cent

COMMENTS: Traces of tungsten. 2.1 metre wide sample.
REFERENCE: Assessment Report 10794.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestones and greenschist. The metavolcanics and metasediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

A mineralized gossan, 100 by 10 metres, occurs within silicified tuffs and phyllites along a north 060 degree trend. Mineralization consists of pyrite, pyrrhotite, sphalerite, galena, and minor chalcopyrite. A 2.1 metre wide sample gave 2.99 per cent lead, 5.54 per cent zinc, 0.09 per cent copper, 38.4 grams per tonne silver and 1.8 grams per tonne gold.

BIBLIOGRAPHY

EM FIELDWORK 1998, pp. 307-320
EMPR ASS RPT 5919, 7019, *10794, 11264

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 796
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1976-E59; 1982-110
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984,
pp. 67-76
EMPR MAP 56
EMPR OF 1999-2
GSC MAP 48-1963; 5320G
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/04/14

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 144**

NATIONAL MINERAL INVENTORY: 082M7 Cu1

NAME(S): **COPPER KING**, VEGAS, SNAKE EYES,
COPPER QUEEN, CHALCOCITE, QUEST,
COTTONBELT

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082M07W
BC MAP:
LATITUDE: 51 28 00 N
LONGITUDE: 118 50 24 W
ELEVATION: 1200 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Northwest end of sulphide deposit - Preliminary Map 43 - also see
also Cottonbelt (082M 086) and Complex (082M 125).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5703328
EASTING: 372192

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Sphalerite Bornite Chalcocite
ASSOCIATED: Quartz Garnet Sillimanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Disseminated
CLASSIFICATION: Replacement
TYPE: E04 Sediment-hosted Cu
SHAPE: Tabular
DIMENSION: Metres STRIKE/DIP: 156/40W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Shuswap Metamorphic Complex

LITHOLOGY: Quartzite
Marble
Gneiss
Schist
Carbonatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The property lies within the Shuswap Metamorphic Complex along the northwestern margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age. The dome is mantled by unconformably overlying metasedimentary rocks consisting of quartzites, calcareous schists, marbles and pelitic schists, and locally intruded by carbonatite.

The mineralized zones occur on both limbs of the syncline within the "Cottonbelt sequence", a heterogeneous package of dominantly calcareous rocks (Fieldwork, 1978). At the base of the Cottonbelt sequence is a buff-weathering carbonatite layer overlain by calcareous schists and a calcareous to relatively pure white quartzite. A distinctive grey-weathering, white limestone overlies the quartzite, which is overlain by interlayered micaceous and calcareous schists and an impure grey-weathering crumbly limestone. The sulphide layer, enveloped by a thin layer of very siliceous calcareous schist and a garnet sillimanite schist, defines the top of the Cottonbelt sequence.

The main copper showing suggests a zone comprising several bands of quartz mineralized with chalcopyrite and minor bornite, sphalerite and pyrite alternating with beds of mica-schist and crystalline limestone. The chalcopyrite occurs as blebs and disseminations in the quartz.

A sample taken in 1913 assayed trace gold, 6.8 grams per tonne silver, and 7.3 per cent copper (Annual Report 1913, page 203).

CanQuest Resource Corporation surveyed the area from 1994 to 1996. See Cottonbelt (082M 086) and Complex (082M 125).

BIBLIOGRAPHY

EMPR AR 1907-131,132,133; 1909-139,140,141; 1912-184, *1913-181,
182,202,203; 1917-236; 1918-236; 1919-191; 1922-149,151,152
EMPR ASS RPT 486, 958, 1768, 2637, 4367, *5952, 6207, 6377,
*14034, 23568, 23985, 24367, 24841
EMPR BULL *80, p. 83
EMPR EXPL 1976-64,65; 1977-94; 1985-C107
EMPR FIELDWORK *1978, pp. 18-23
EMPR GEM 1970-318; 1973-116
EMPR MAP 43
EMPR OF 1994-8
EMR MP CORPFILE (Great Northern Petroleum & Mines Ltd.)
GSC MAP 12-1964
GSC OF 637
WWW <http://www.canquest.bc.ca/cottonbe.htm>

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 145**

NATIONAL MINERAL INVENTORY:

NAME(S): **STANDARD 4**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 22 35 N
LONGITUDE: 118 14 34 W
ELEVATION: 2140 Metres

NORTHING: 5692415
EASTING: 413504

LOCATION ACCURACY: Within 500M

COMMENTS: Drill site - Assessment Report 6070.

COMMODITIES: Copper Zinc Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite

ASSOCIATED: Calcite Talc

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Index	

LITHOLOGY: Greenstone
Limestone
Phyllite
Chlorite Schist

HOSTROCK COMMENTS: Probably correlative with lower Paleozoic Lardeau Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Standard 4 claims are underlain by probable Lower Paleozoic metasedimentary and metavolcanic rocks. The dominant structure in the area is a north-south trending isoclinal anti-form, plunging gently (3 to 4 degrees) to the north.

Chalcopyrite, associated with pyrrhotite and carbonate banding, occurs in a talc-rich chlorite schist. This is part of a greenstone sequence comprising the east limb of the antiform.

BIBLIOGRAPHY

EMPR ASS RPT *6070, 6187
EMPR BULL 71
EMPR EXPL 1976-66; 1977-95,96
EMPR OF 1999-2
GSC MAP 12-1964
GSC OF 637
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 146**

NATIONAL MINERAL INVENTORY:

NAME(S): **FIM**, FR1

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 31 40 N
LONGITUDE: 118 15 04 W
ELEVATION: 2095 Metres

NORTHING: 5709260
EASTING: 413211

LOCATION ACCURACY: Within 500M

COMMENTS: Area of drilling, Fig. 2 (Assessment Report 12687).

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite
ASSOCIATED: Garnet Diopside Quartz
ALTERATION: Diopside
ALTERATION TYPE: Silicific'n Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Replacement Hydrothermal Skarn
TYPE: K05 W skarn
SHAPE: Tabular
MODIFIER: Folded
COMMENTS: Surface exposure length of skarn zone investigated by diamond drilling

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Index	

LITHOLOGY: Marble
Argillite
Phyllite
Skarn
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The property is underlain by phyllites, carbonates, argillites, volcanic flow rocks and minor quartzites of probable Lower Paleozoic Lardeau Group. The rocks are variously hornfelsed.

The metasediments and metavolcanics are intruded by a quartz monzonite pluton of Cretaceous (?) age. Massive garnet-diopside skarn is developed along the contact of the pluton. The skarn occurs as a conformable replacement along the base of marble units.

Several lead and zinc vein and replacement showings exist in the area.

BIBLIOGRAPHY

EMPR ASS RPT *10398, *11164, *12687
EMPR BULL 71
EMPR MAP 25
EMPR OF 1991-17
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/10

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 147**

NATIONAL MINERAL INVENTORY:

NAME(S): **KJ**

MINING DIVISION: Revelstoke

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M09W
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 33 20 N
 LONGITUDE: 118 25 39 W
 ELEVATION: 2280 Metres

NORTHING: 5712573
 EASTING: 401036

LOCATION ACCURACY: Within 500M

COMMENTS: Symbol, Bulletin 71-28, 33; Figure 2, (Assessment Report 5810).

COMMODITIES: Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Pyrite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Disseminated
 CLASSIFICATION: Volcanogenic
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 DIMENSION: 0200 x 0035 Metres STRIKE/DIP: TREND/PLUNGE:
 COMMENTS: Drill results indicate true width 35 metres and its continuity
 down dip greater than 200 metres.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Lardeau	Index	

LITHOLOGY: Marble
 Calc-silicate Gneiss
 Phyllite
 Limestone

HOSTROCK COMMENTS: Probably correlative with lower Paleozoic Lardeau Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1977
 SAMPLE TYPE: Drill Core
 COMMODITY GRADE
 Silver 21.0000 Grams per tonne
 Gold 1.8500 Grams per tonne
 Lead 1.8500 Per cent
 Zinc 0.8700 Per cent
 COMMENTS: 5 metre width, weighted, and averaged.
 REFERENCE: Assessment Report 6712.

CAPSULE GEOLOGY

Host rocks for the mineralization are dolomitized limestone within the metavolcanic-phyllite division (Bulletin 71) which is probably correlative to the Index formation of the Lardeau Group (Lower Paleozoic).
 Mineralization occurs as narrow stringers or blebs of galena, sphalerite, pyrrhotite or pyrite, with silver in calcite marble, calc-silicate gneiss or quartz veins that cut the marble and gneiss. The mineralization appears to be stratabound, distributed erratically through a pure to very siliceous marble/calc-silicate gneiss layer several tens of metres thick.
 A second, similar type of mineralization occurs about 1000 metres to the east, within a limestone unit which is a member of the carbonate-phyllite division (Bulletin 71). Mineralization consists of stringers of pyrrhotite with associated sphalerite adjacent and below the limestone unit. The zone can be traced for 350 metres across cliff faces and appears to be up to 4 metres wide (Assessment Report 6712).

CAPSULE GEOLOGY

A weighted 5 metre drill hole assay averaged 1.85 grams per tonne gold, 21.0 grams per tonne silver, 1.85 per cent lead, and 0.87 per cent zinc (Assessment Report 6712).

BIBLIOGRAPHY

EMPR ASS RPT 5810, *6712, *9081, 10180, *11021, 15484
EMPR BULL 71, pp. 28,33, Fig. 2
EMPR EXPL 1976-67,68; 1978-111; 1982-120
EMPR MAP 25
EMPR PF (*Ramani, S.V. (1974): Geological Report on the KJ
1-20 Claim Group in Centpac Development Inc Prospectus)
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 32
GSC SUM RPT 1929, part A, pp. 155,157,160-163
GCNL Apr. 10, 1980
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 148**

NATIONAL MINERAL INVENTORY:

NAME(S): **O'REILLY**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 31 30 N
LONGITUDE: 118 24 34 W
ELEVATION: 1500 Metres

NORTHING: 5709151
EASTING: 402222

LOCATION ACCURACY: Within 500M

COMMENTS: High geochemical anomaly (Assessment Report 6103).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Massive
CLASSIFICATION: Sedimentary Syngenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Cambrian

GROUP

Lardeau

FORMATION

Index

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Pelitic Schist
Quartzite
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

The property is underlain by a thick sequence of siliceous metasedimentary rocks consisting predominantly of quartz-mica schist, grey quartzite and micaceous quartzite with minor interbeds of carbonate-graphite phyllite.

Mineralization occurs as sparse pockets of massive pyrite, pyrrhotite and chalcopyrite within quartz blebs and as finely disseminated stratabound pyrrhotite and chalcopyrite within quartzites.

BIBLIOGRAPHY

EMPR ASS RPT *6103, 11056, 15484
EMPR BULL 71, p. 28
EMPR EXPL 1976-68; 1978-110,111; 1982-120,121
EMPR MAP 25
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
GCNL #51, 1980

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 149**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEND, GR**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 38 40 N
LONGITUDE: 118 32 34 W
ELEVATION: 700 Metres

NORTHING: 5722621
EASTING: 393253

LOCATION ACCURACY: Within 500M

COMMENTS: Map 1, (Assessment Report 6176).

COMMODITIES: Copper Zinc Talc

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite Pyrite Talc

ASSOCIATED: Quartz Graphite Chlorite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Volcanogenic Hydrothermal Industrial Min.
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Lardeau	Index	

LITHOLOGY: Muscovite Schist
Dolomite
Quartzite
Chlorite Schist
Greenschist
Graphitic Schist
Talc Schist
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

<u>CATEGORY:</u>	<u>Assay/analysis</u>	<u>YEAR:</u>
<u>SAMPLE TYPE:</u>	<u>Drill Core</u>	<u>1977</u>
<u>COMMODITY</u>	<u>GRADE</u>	
Copper	0.0050	Per cent
Zinc	0.1500	Per cent

COMMENTS: 2.8 metre sample width.
REFERENCE: Assessment Report 6371.

CAPSULE GEOLOGY

The area is underlain by metasediments and metavolcanics of the Lower Paleozoic Upper Index Formation of the Lardeau Group. The rocks include north-dipping interbanded graphitic schist, chlorite schist, talc schist, quartz-mica schist, quartzite, and marble.

The volcanic sequence is represented by a twenty metre thick section of quartz-talc-tremolite-garnet schist, forming an envelope around a core of chlorite rich schists which contain sulphide mineralization consisting of pyrrhotite with minor chalcopyrite.

A drill hole (DH #1) intersected 0.005 per cent copper and 0.15 per cent zinc over 2.8 metres (Assessment Report 6371)

BIBLIOGRAPHY

EMPR ASS RPT *6176, 6329, 6371, 7867, 11578, 15484
EMPR BULL 71, p. 28
EMPR EXPL 1976-E71,E72; 1977-99; 1983-165
GSC MAP 12-1964
GSC OF 637

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 805
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL Apr. 22, May 12, June 3, 7, 1976; Jan. 6, Feb. 1, June 3,
Sept. 26, 1977
WWW <http://orphanboy.com/gstream.html>

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/20

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 150**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARBIDE**, FISSURE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 32 00 N
LONGITUDE: 118 38 14 W

NORTHING: 5710407
EASTING: 386442

ELEVATION: 1950 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of mineralized zone, Assay plan (Assessment Reports 6229, 12092).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Chalcopyrite Tetrahedrite

ASSOCIATED: Quartz Calcite Dolomite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive

CLASSIFICATION: Replacement

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

SHAPE: Tabular

COMMENTS: Mineralized pods up to 2 by 10 metres along 1800 metre strike length.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Cambrian

Shuswap Metamorphic Complex

LITHOLOGY: Marble
Quartzite
Schist
Carbonatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Monashee

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

55.2100

Grams per tonne

Lead

2.7000

Per cent

Zinc

5.0000

Per cent

COMMENTS: Average of 26 samples over average width of 0.7 metres.

REFERENCE: Assessment Report 12092.

CAPSULE GEOLOGY

The property lies within the Shuswap Metamorphic Complex along the northeastern margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age. The dome is mantled by unconformably overlying metasedimentary rocks consisting of quartzites, calcareous schists, marbles and pelitic schists, and locally intruded by carbonatite. The metasediments are flat gently dipping and are repeated across the closure of a major Phase 1 recumbent anticline which has its closure to the east.

Stratabound sulphide mineralization occurs within a fetid white marble unit on the upper limb of the anticline. The marble unit ranges from 2 metres to 50 metres thick and grades into overlying calc-silicates. The upper part of the marble unit is mineralized over a strike length of 1800 metres by discrete elongate pods of sphalerite and galena, typically 0.7 to 2 metres wide and up to 10 metres long. Lesser amounts of tetrahedrite, pyrite and chalcopyrite also occur within the pods.

Twenty-six samples were taken along the 1800 metre strike length. Sample width ranged from 0.1 to 4.7 metres and averaged

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 807
REPORT: RGEN0100

CAPSULE GEOLOGY

0.7 metres. Assay results averaged 55.21 grams per tonne silver,
5.00 per cent zinc and 2.70 per cent lead.

BIBLIOGRAPHY

EMPR ASS RPT *6229, *12092, *15991
EMPR EXPL 1976-E70; 1977-E99; 1983-165
EMPR MAP 43
EMPR PF (Leask, G. (1984): Geology of the Carbide Carbonate-hosted
Ag-Zn-Pb Deposit)
GSC MAP 12-1964
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/11/09

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 151**

NATIONAL MINERAL INVENTORY:

NAME(S): **VAV (NORTH)**, CHI, NICANEX ZONE,
ESP

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:
LATITUDE: 51 35 45 N
LONGITUDE: 119 37 34 W
ELEVATION: 920 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Nicanex zone, Fig. 156-14 (Assessment Report 6933).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5719355
EASTING: 318111

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Molybdenite Magnetite
ASSOCIATED: Quartz
ALTERATION: Chlorite Sericite
ALTERATION TYPE: Chloritic Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Quartz Sericite Phyllite
Quartzite
Chlorite Muscovite Schist
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by an east-west striking, shallow to moderate dipping sequence of Devonian to Mississippian meta-sedimentary and metavolcanic rocks of the Eagle Bay Formation. Quartzite and chlorite-muscovite-quartz schist are overlain by sericite-quartz phyllite, quartz-chlorite-sericite schist and sericitic quartzite, which are overlain by dark grey phyllite. A thrust fault separates these rocks with calcareous chlorite schist and greenstone to the south.

Disseminated chalcopyrite, pyrite and minor molybdenite occur along foliation planes and on fractures within quartz-chlorite-sericite schists. The mineralized zone trends east-west and measures 800 by 150 metres. Grab samples assayed 0.3 to 0.4 per cent copper (Assessment Report 6933). However, mineralization is irregular and generally low grade.

BIBLIOGRAPHY

EMPR ASS RPT 2676, 2677, 2678, 5909, *6933, 12465
EMPR EXPL 1976-72; 1978-113; 1983-167
EMPR FIELDWORK 1985, p. 93
EMPR GEM 1970-296
EMPR OF 1986-5; 1999-2
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/23

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 152**

NATIONAL MINERAL INVENTORY:

NAME(S): **VAV (SOUTH)**, CHI, AFR ZONE,
ESP

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5718751
EASTING: 317705

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:
LATITUDE: 51 35 25 N
LONGITUDE: 119 37 54 W
ELEVATION: 800 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: AFR Zone, Fig. 156-14 (Assessment Report 6933).

COMMODITIES: Copper Molybdenum

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Molybdenite
ASSOCIATED: Quartz
ALTERATION: Sericite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
DIMENSION: 1000 x 0150 x 0030 Metres STRIKE/DIP: TREND/PLUNGE: 270/20
COMMENTS: Sub-grade ore deposit.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE: Paleozoic GROUP: Undefined Group FORMATION: Eagle Bay IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Phyllite
Quartz Sericite Schist
Quartzite
Greenstone
Chlorite Muscovite Quartz Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1978
SAMPLE TYPE: Drill Core
COMMODITY: Copper GRADE: 0.0940 Per cent
COMMENTS: 19.8 metre sample interval.
REFERENCE: Assessment Report 7119.

CAPSULE GEOLOGY

An east-west striking, shallow to moderate dipping sequence of metasediments and metavolcanics of the Devonian to Mississippian Eagle Bay Formation underlies the area. Quartzite and chlorite-muscovite-quartz schist are overlain by sericite-quartz phyllite, quartz-chlorite-sericite schist and sericite quartzite. These are overlain by dark grey phyllite, which are separated by a thrust fault, with calcareous chlorite schist and greenstone to the south.

The AFR zone trends westerly, plunges about 20 degrees and consists of several mineralized outcrops in an area of 1000 metres by 150 metres. Disseminated chalcopyrite, pyrite and minor molybdenite occur in silvery phyllite and slightly calcareous quartz-chlorite-sericite schist. A 1.0 metre chip sample assayed 0.109 per cent copper (Assessment Report 13557) and a percussion hole drilled in the west part of the zone intersected .094 per cent copper over 19.8 metres (Assessment Report 7119). A hole 170 metres to the west intersected 0.036 per cent copper over 39.6 metres and 0.004 per cent molybdenum over 12.2 metres (Assessment Report 7119).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 810
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 2676, 2677, 2678, 5909, *6933, 7119, 12465, 13557
EMPR EXPL 1976-72; 1978-113; 1983-167; 1985-108-109
EMPR FIELDWORK 1985, p. 93
EMPR GEM 1970-296
EMPR OF 1999-2
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/23

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 153**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLAIS**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 30 30 N
LONGITUDE: 118 48 24 W
ELEVATION: 1490 Metres

NORTHING: 5707903
EASTING: 374622

LOCATION ACCURACY: Within 500M
COMMENTS: Figure 2, (Assessment Report 7602).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate
Marble
Garnet Gneiss
Biotite Gneiss
Quartzite
Pelitic Schist
Carbonatite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Post-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The property lies within the Shuswap Metamorphic Complex along the northwestern margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age. The dome is mantled by unconformably overlying metasedimentary rocks consisting of quartzites, calcareous schists, marbles and pelitic schists, and locally intruded by carbonatite.

The mineralized zone occurs on the lower (eastern) limb of a northeast trending part of the Grace Mountain syncline - a tight isoclinal fold. Disseminated galena, 15 centimetres thick and about 20 metres in length, occurs in limestone bounded by grey banded garnet biotite gneiss and muscovite biotite gneiss.

BIBLIOGRAPHY

EMPR ASS RPT *7602
EMPR BULL *80, p. 84
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 154**

NATIONAL MINERAL INVENTORY:

NAME(S): **RED, FIR, DON,**
PAT, JOE, SILVER LICHEN

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:
LATITUDE: 51 05 20 N
LONGITUDE: 119 23 44 W
ELEVATION: 1650 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Geology map - Assessment Report 11253; Trench Drawing 2 - Assessment Report 13760.

NORTHING: 5662439
EASTING: 332236

COMMODITIES: Lead Zinc Silver Manganese Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Tetrahedrite Magnetite
 Argentite Psilomelane
ASSOCIATED: Quartz
COMMENTS: Manganese oxides, psilomelane.
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Disseminated Massive
CLASSIFICATION: Volcanogenic Epigenetic Industrial Min.
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Cylindrical
MODIFIER: Folded
DIMENSION:
COMMENTS: Attitude of host rocks. STRIKE/DIP: 060/30N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Phyllite
Limestone
Chlorite Schist
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: STOCKWORK REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 700.0000 Grams per tonne
Gold 0.6000 Grams per tonne
Lead 10.4000 Per cent
Zinc 3.5300 Per cent
COMMENTS: The sample was taken over 1.7 metres.
REFERENCE: Bachelor, D. (1984).

CAPSULE GEOLOGY

The property is underlain by sediments and volcanics of the Eagle Bay Formation of Devonian-Mississippian age. The dominant structural trend in the area is 060 degrees with moderate (25-30 degree) dips to the northwest. Phyllitic sediments intercalated with dolomitized and silicified carbonates are overlain by a highly pyritic chlorite schist. Separating the two units is a thin (0.5 metre) conformable calc-silicate alteration zone. Cutting the phyllitic sediments is a 6 by 9 metre, north-trending, quartz stockwork containing disseminations and irregular pods of galena, sphalerite and pyrite. The stockwork has a sooty black exposed surface. A 1.7 metre chip sample assayed 700 grams

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 813
REPORT: RGEN0100

CAPSULE GEOLOGY

per tonne silver, 10.4 per cent lead, 3.53 per cent zinc and 0.6 grams per tonne gold (Bachelor, 1984).

BIBLIOGRAPHY

EMPR ASS RPT *6388, *7371, *8348, *11253, *12848, *13760, 14126
EMPR EXPL 1976-59; 1977-87; *1978-102; *1979-108; 1982-108;
1984-111,112; 1985-C97
GSC MAP 48-1963
GSC OF 637
Bachelor, D. (1984): Orell Resources Joint Venturing with
Noranda at Adams Plateau; IPDM v. 7, No. 2, March/April 1984,
p. 9
GCNL Apr. 15, Nov. 4, 1980; Oct. 21, 1982; June 14, 1983;
Feb. 15, 1985
N MINER July 5, 1984

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 155**

NATIONAL MINERAL INVENTORY:

NAME(S): **SEYMOUR**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 29 30 N
LONGITUDE: 118 48 04 W
ELEVATION: 1780 Metres
LOCATION ACCURACY: Within 500M
COMMENTS:

NORTHING: 5706041
EASTING: 374962

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Magnetite
ASSOCIATED: Calcite Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular
DIMENSION:

STRIKE/DIP: 045/24N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate
Marble
Garnet Gneiss
Biotite Gneiss
Quartzite
Calcareous Schist
Pelitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1978
SAMPLE TYPE: Chip
COMMODITY GRADE
Lead 16.1000 Per cent
Zinc 0.8000 Per cent
COMMENTS: 2 metre sample.
REFERENCE: Bulletin 80, page 83.

CAPSULE GEOLOGY

The property lies within the Shuswap Metamorphic Complex along the northwestern margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age. The dome is mantled by unconformably overlying metasedimentary rocks consisting of quartzites, calcareous schists, marbles and pelitic schists.

The mineralized zone occurs on the lower (eastern) limb of a northeast trending part of the Grace Mountain syncline - a tight isoclinal fold. Chalcopyrite and coarse-grained galena occur in a 10 centimetre quartz layer within marble for a 30 metre length. A galena-rich section, 2 metres long assayed 16.1 per cent lead and 0.8 per cent zinc (Bulletin 80). The carbonate unit is bounded by grey banded garnet-biotite gneiss and muscovite biotite gneiss.

Several small occurrences occur over an 800 metre strike length and a minor occurrence lies 1700 metres to the west.

BIBLIOGRAPHY

EMPR ASS RPT *7602

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 815
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL *80, pp. 83-84
EMPR EXPL 1977-94
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/24

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 156**

NATIONAL MINERAL INVENTORY:

NAME(S): RUGER, SORCERER CREEK, RAIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

MINING DIVISION: Revelstoke

LATITUDE: 51 29 10 N
LONGITUDE: 118 11 44 W
ELEVATION: 670 Metres

UTM ZONE: 11 (NAD 83)

LOCATION ACCURACY: Within 500M

NORTHING: 5704562
EASTING: 416989

COMMENTS: Skarn, Drawing 2 - (Assessment Report 8591).

COMMODITIES: Tungsten Copper Lead Silver Molybdenum

MINERALS

SIGNIFICANT: Scheelite Pyrrhotite Chalcopyrite Molybdenite Pyrite
 Magnetite
ASSOCIATED: Quartz Calcite Garnet Pyroxene
ALTERATION: Garnet Pyroxene
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated Massive
CLASSIFICATION: Replacement Skarn
 TYPE: K05 W skarn G04 Besshi massive sulphide Cu-Zn
SHAPE: Tabular
MODIFIER: Faulted

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Cambrian
Middle Jurassic

GROUP

Lardeau

FORMATION

Index

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Phyllite
Limestone
Chert
Granodiorite
Quartz Monzonite
Skarn

HOSTROCK COMMENTS: Probably lower Paleozoic metasediments of Lardeau Group.
Probably mid-Jurassic pluton (Bigmouth Creek Stock).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Selkirk Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Contact

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The property is underlain by probable Lower Paleozoic Lardeau Group phyllites and limestones. A probable Mid-Jurassic pluton of monzonite to granodiorite intrudes the metasediments, developing a mineralized skarn.

Skarn mineralization consists of garnets, pyroxene, calcite, magnetite, pyrite, pyrrhotite, molybdenite and scheelite. Mineralization also occurs in pods or fault gouge zones cutting and paralleling the limestone bedding. A fault parallels Downie Creek.

Soil geochemistry performed over the property has outlined anomalous zones of tungsten, copper, lead, silver, and molybdenum (Assessment Report 8591).

Imperial Metals Corporation optioned the Rain property from Keystone Resources in 1995. In 1996, Select Ventures Inc. drilled 3 holes totalling 900 metres on this apparent Besshi-type massive sulphide target.

BIBLIOGRAPHY

EMPR ASS RPT *6306, *8591, 22738, 24221
EMPR EXPL 1977-96,97; 1980-142; 1996-D5
EMPR OF 1991-17; 1999-2
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 156**

MINFILE NUMBER: **082M 157**

NATIONAL MINERAL INVENTORY:

NAME(S): **PAT 1300**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 35 00 N
LONGITUDE: 118 19 24 W
ELEVATION: 1500 Metres

NORTHING: 5715527
EASTING: 408313

LOCATION ACCURACY: Within 500M

COMMENTS: Skarn sample location, drawing 1 (Assessment Report 6188).

COMMODITIES: Zinc Copper Silver

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Sphalerite
ASSOCIATED: Garnet Epidote Dolomite
ALTERATION: Garnet Epidote
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement Skarn
TYPE: K01 Cu skarn K02 Pb-Zn skarn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Lardeau	Index	Unnamed/Unknown Informal
Triassic			

LITHOLOGY: Meta Sediment/Sedimentary
Skarn
Quartz Monzonite
Hornfels
Granitic Intrusive

HOSTROCK COMMENTS: Probably Index Fm.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Contact RELATIONSHIP: GRADE: Hornfels

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1976
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 0.6900 Grams per tonne
Copper 0.0200 Per cent
Zinc 0.0200 Per cent

REFERENCE: Assessment Report 6188.

CAPSULE GEOLOGY

The Pat 1300 claim is partially underlain by a complexly deformed sequence of metasedimentary lithologies tentatively assigned to the Lower Paleozoic Lardeau Group. Granitic intrusions in the form of small stocks, dykes and sills cut the metasediments and appear to represent part of the complex northern contact zone of a large Triassic (?) aged intrusive body exposed further to the south and southeast. Thermal metamorphism at the margins of the intrusive has altered the host rocks to swirled contact gneiss, hornfels and skarn.

Sulphide mineralization consists of pyrite and pyrrhotite, with occasional sphalerite, within garnet-epidote-dolomite skarns. Skarns are locally developed within dominantly calcareous host rocks near intrusive contacts. A channel sample assayed 0.02 per cent copper, 0.02 per cent zinc and 0.69 grams per tonne silver.

BIBLIOGRAPHY

EMPR ASS RPT *6188

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 818
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL 71
EMPR EXPL 1976-E69; 1977-E97
EMPR MAP 25
GSC MAP 12-1964
GSC OF 637
EG, V. 79, No. 5, pp. 789-814 (Hoy, T., Gibson, G., and Berg,
N.W. 1984)

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/26

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 158**

NATIONAL MINERAL INVENTORY: 082M12 Mn1

NAME(S): **SMUGGLER MANGANESE**, REXSPAR

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:
LATITUDE: 51 34 15 N
LONGITUDE: 119 54 04 W
ELEVATION: 1070 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Trench over bog manganese, Geology map by Gandhi (Property File).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5717296
EASTING: 298958

COMMODITIES: Manganese

MINERALS

SIGNIFICANT: Wad Manganite
ASSOCIATED: Pyrite Siderite Calcite Quartz
ALTERATION: Limonite
COMMENTS: Manganese oxides.
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: B07 Bog Fe, Mn, U, Cu, Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Feldspar Porphyry
Quartz Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE
CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY: Manganese
REFERENCE: Annual Report 1929, page 224.
REPORT ON: N
YEAR: 1929
GRADE: 53.0000 Per cent

CAPSULE GEOLOGY

A trachytic unit of alkali-feldspar porphyry, lithic tuff, tuff breccia and pyritic schist is structurally underlain by quartz-sericite schist, chlorite schist and interlayered meta-sediments of the Devonian to Mississippian Eagle Bay Formation. A surficial deposit of bog manganese (wad) occurs as a subsoil deposit, of variable grade and thickness (up to 3 metres) over a 1200 metre northwest trend. The material is very heterogeneous, comprising mainly rock fragments in a light to dark brown earthy ground mass consisting largely of limonite with small localized patches of wad. Assays up to 53 per cent manganese are reported (Annual Report 1929-224). Higher on the hillside occurs a zone of altered rock mineralized with pyrite and siderite with minor mangano-siderite associated with calcite and quartz. Rocks of this type may have been the source of the manganese oxides.

BIBLIOGRAPHY

EMPR AR *1929-224; 1930-193; 1931-107; 1949-251
EMPR ASS RPT 1737, 1912, 1913, 2337-2340, 4032, 10207, 10934
EMPR EXPL 1982-122-123
EMPR PF (Maps by P. Pisani, 1970 and S.S. Gandhi, 197? in Rexspar File)
EMR MP CORPFILE (Rexspar Uranium & Metals Mining Co. Limited - Annual Report, 1957)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 820
REPORT: RGEN0100

BIBLIOGRAPHY

GSC EC GEOL *Series No. 12, 1932, p. 114
GSC MAP 48-1963
GSC OF 637
GSC SUM RPT *1930-147-148
CANMET IR 58-53

DATE CODED: 1985/07/24
DATE REVISED: 1987/01/16

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 159**

NATIONAL MINERAL INVENTORY:

NAME(S): **CW, WATER**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 37 50 N
LONGITUDE: 119 59 34 W
ELEVATION: 430 Metres

NORTHING: 5724192
EASTING: 292879

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized zone (Assessment Report 13559).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite
ASSOCIATED: Quartz Kyanite
ALTERATION: Sericite Silica
ALTERATION TYPE: Sericitic Silicific'n Pyrite Argillic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular
DIMENSION: 0100 x 0100 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralized horizon.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Quartz Sericite Schist
Dacite
Tuff
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 7.5000 Grams per tonne
Gold 2.2000 Grams per tonne
Copper 0.1270 Per cent

COMMENTS: The sample was taken over 1 metre of width.
REFERENCE: Assessment Report 13559.

CAPSULE GEOLOGY

A stratabound siliceous and pyritic horizon, thought to be an exhalite, occurs within yellowish-white quartz sericite schist derived from rhyolitic to trachytic tuffs of the Devonian to Mississippian Eagle Bay Formation. These felsic volcanic rocks grade upward into a more intermediate rock or dacite and are underlain by argillites.

The siliceous horizon contains a 100 by 100 metre pyritic zone with minor disseminated chalcopyrite. A 1.0 metre chip sample assayed 0.127 per cent copper, 2.2 grams per tonne gold, and 7.5 grams per tonne silver (Assessment Report 13559).

BIBLIOGRAPHY

EMPR ASS RPT *6862, *7575, *13559, 14485
EMPR EXPL 1977-101; 1978-115; 1979-116; 1985-C109-110; 1986-C123
EMPR FIELDWORK 1985, p. 93
EMPR OF 1986-5; 1999-2
EMPR PF (Map by Newmont Exploration of Canada Limited)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 822
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 160**

NATIONAL MINERAL INVENTORY:

NAME(S): **SLIDE**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 31 10 N
LONGITUDE: 118 31 34 W
ELEVATION: 707 Metres

NORTHING: 5708696
EASTING: 394116

LOCATION ACCURACY: Within 500M

COMMENTS: Drill Hole WS-1 and mineralized float Fig. 2 (Assessment Report 7602).

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrrhotite Pyrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Massive

CLASSIFICATION: Sedimentary

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Muscovite Schist
Biotite Schist
Marble
Quartzite
Calc-silicate Gneiss
Hornblende Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Monashee

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the eastern margin of the Frenchman Cap Dome. The core of the dome is mantled by an unconformably overlying succession of meta-sedimentary rocks consisting of calc-silicate gneiss, quartzite, hornblende gneiss and marble.

Massive and disseminated galena, sphalerite, pyrrhotite and pyrite occur as small bands within muscovite schist adjacent to biotite schist and marble.

BIBLIOGRAPHY

EMPR ASS RPT *7602
EMPR EXPL 1976-E70; 1977-E98
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
Placer Dome File
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/19

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 161**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER SHIELD**, SILVER BELL

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 27 30 N
LONGITUDE: 118 15 44 W
ELEVATION: 2100 Metres

NORTHING: 5701551
EASTING: 412307

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol - GSC Summary Report 1928, part A 189; Map 237A.

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Index	

LITHOLOGY: Limestone
 Quartzite
 Phyllite
 Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area is underlain by quartzites, phyllites and schists of the probable Lower Paleozoic Lardeau Group and inliers of Badshot limestone. Showings of lead-zinc ore were reported by Gunning (1929).

BIBLIOGRAPHY

EMPR AR 1900-809
EMPR BULL 71
EMPR EXPL 1982-117
GSC MAP 12-1964; 237A
GSC OF 637
GSC SUM RPT 1928, part A, p. 189

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/13

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 162**

NATIONAL MINERAL INVENTORY: 082M11 Be1

NAME(S): **BISCHOFF LAKES**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 36 00 N
LONGITUDE: 119 02 04 W
ELEVATION: 2100 Metres

NORTHING: 5718511
EASTING: 359100

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description, GSC Economic Geology Series #23, pp. 59-60.

COMMODITIES: Beryllium

MINERALS

SIGNIFICANT: Vesuvianite
ASSOCIATED: Garnet Epidote
ALTERATION: Garnet Epidote
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Skarn Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Limestone
Skarn
Pegmatitic Muscovite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

Beryllium vesuvianite, which contains about 0.02 to 0.05 per cent beryllium, occurs as coarse crystalline masses with garnet and epidote in skarn at the contact between crystalline limestone of the Shuswap Metamorphic Complex and pegmatitic muscovite granite.

BIBLIOGRAPHY

GSC EG *1968, No. 23, pp. 59-60
GSC MAP 48-1963
GSC OF 637
GSC P *65-1, p. 152

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/28

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 826
REPORT: RGEN0100

MINFILE NUMBER: **082M 163**

NATIONAL MINERAL INVENTORY: 082M14 Ni1

NAME(S): **AVOLA**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 46 20 N
LONGITUDE: 119 19 44 W
ELEVATION: 900 Metres

NORTHING: 5738271
EASTING: 339321

LOCATION ACCURACY: Within 1 KM
COMMENTS: EMR.

COMMODITIES: Nickel

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY: Nickel

YEAR: 1955

GRADE: 0.4300 Per cent

REFERENCE: EMR MP Corfile, Resource File, 1955.

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex.
Assays of 9 samples taken in 1955 ranged from 0.12 to 0.43 per cent nickel.

BIBLIOGRAPHY

EMR MP CORPFILE, Resource File: MR-Ni-301:00 (British Columbia)-
Letter from R.F. McLeod (1955)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 163**

MINFILE NUMBER: **082M 164**

NATIONAL MINERAL INVENTORY:

NAME(S): **MIKE, MARGE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 10 N
LONGITUDE: 119 24 24 W
ELEVATION: 1650 Metres

NORTHING: 5660303
EASTING: 331388

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of Claims (Assessment Report 7371).

COMMODITIES: Silver Lead Zinc Manganese Iron

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Cerussite Pyrolusite
 Arsenopyrite Argentite
ASSOCIATED: Quartz Epidote Chlorite Calcite Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Replacement Industrial Min.
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Limestone
Schist
Phyllite
Greenstone
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The area is underlain by rocks of the Cambrian to Ordovician part of the Eagle Bay Formation consisting of limestone, argillaceous limestone, greenstone schist, quartz sericite schist, quartzite and phyllite.

Replacement zones of mineralization occur within the meta-volcanics and metasediments. The minerals include sphalerite, galena, pyrrhotite, arsenopyrite, chalcopyrite, tetrahedrite and argentite with minor quartz, epidote, chlorite, calcite and mica.

BIBLIOGRAPHY

EMPR ASS RPT 2776, 6388, 7371, 8348, 13760, 14126
EMPR EXPL 1978-102; 1979-108; 1982-108; 1984-111,112; 1985-C97
EMPR GEM *1970-318
GSC MAP 48-1963
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 828
REPORT: RGEN0100

MINFILE NUMBER: **082M 165**

NATIONAL MINERAL INVENTORY:

NAME(S): **COLUMBIA RIVER**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 08 00 N
LONGITUDE: 118 11 04 W
ELEVATION: 750 Metres

NORTHING: 5665319
EASTING: 417128

LOCATION ACCURACY: Within 5 KM

COMMENTS: Near Ford River? Symbol on figure 1 - Bulletin 30-53.

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R02 Expanding shale

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary			Unnamed/Unknown Informal

LITHOLOGY: Clay

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

The clay is a grey, plastic laminated sandy clay.

BIBLIOGRAPHY

EMPR BULL *30, p. 53, Fig. 1
GSC MAP 12-1964
GSC MEM 47, pp. 49-50
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/12

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 165**

MINFILE NUMBER: **082M 166**

NATIONAL MINERAL INVENTORY:

NAME(S): **STANDARD**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 22 50 N
LONGITUDE: 118 15 09 W
ELEVATION: 2180 Metres

NORTHING: 5692890
EASTING: 412835

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, GSC Summary Report 1928, Part A, 165, 193, Figure 8.

COMMODITIES: Asbestos Thallium Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Pyrrhotite Chrysotile Sphalerite
ASSOCIATED: Quartz Calcite Talc
ALTERATION: Serpentine Talc
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Replacement Industrial Min.
TYPE: G04 Besshi massive sulphide Cu-Zn
SHAPE: Irregular
MODIFIER: Sheared

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Lardeau	Index	

LITHOLOGY: Greenstone
Limestone
Chlorite Schist

HOSTROCK COMMENTS: Probably correlative with lower Paleozoic Lardeau Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The area is underlain by probable Lower Paleozoic meta-sedimentary and metavolcanic rocks. The dominant structure is a north-south trending isoclinal antiform, plunging gently to the north.

Small quantities of slip-fibre asbestos and larger amounts of pure, light green talc are exposed along shear zones in the greenstones of the west limb of the antiform. The talc also occurs with carbonates and serpentine along broad zones of alteration in the greenstone.

Mineralized lenses up to 1.5 metres wide contain pyrite, pyrrhotite, chalcopyrite, and minor sphalerite as fine-grained mixtures.

BIBLIOGRAPHY

EMPR ASS RPT 614, 6070
EMPR OF 1995-25; 1999-2
GSC MAP 12-1964
GSC OF 637
GSC SUM RPT *1928, part A, pp. 165,193, Fig. 8
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 167**

NATIONAL MINERAL INVENTORY:

NAME(S): **ORPHAN BOY**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 41 50 N
LONGITUDE: 118 26 44 W
ELEVATION: 1800 Metres

NORTHING: 5728352
EASTING: 400096

LOCATION ACCURACY: Within 500M

COMMENTS: Location of shaft, figure 6 (Assessment Report 11860).

COMMODITIES: Gold Tungsten

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Gold Scheelite
ASSOCIATED: Quartz
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I01 Au-quartz veins I02 Intrusion-related Au pyrrhotite veins
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Upper Proterozoic
GROUP: Horsethief Creek
FORMATION: Undefined Formation
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Pelitic Schist
Quartzite
Phyllite
Calcareous Schist
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP:
GRADE:

INVENTORY

ORE ZONE: VEIN
REPORT ON: N
CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY: Gold
GRADE: 8.3700 Grams per tonne
YEAR: 1984
COMMENTS: The sample was taken from a 35 centimetre wide vein.
REFERENCE: Assessment Report 11860.

CAPSULE GEOLOGY

Underlying rocks types consist of metasedimentary rocks interlayered with mafic volcanic rocks. The metasediments consist of quartzites, schists, phyllites, calcareous schists and carbonates. The metavolcanics are tholeiitic flows and mafic tuffs metamorphosed to greenstone and chloritic phyllite. The rocks exposed are correlated to Hoy's (1979) Metavolcanic-Phyllite Division and Quartzite Schist Division of probable Lower Paleozoic Hamill Group and Upper Proterozoic Horsethief Creek Group (Assessment Report 11860).

Phase 2 and Phase 3 folds are developed in an inverted stratigraphic panel. Predominant schistosity is east to south-east with dips commonly at 20 degrees east.

Two sets of quartz veins occur in the area. The commonly mineralized discordant veins strike 010 to 020 degrees and dip 70 to 85 degrees west. They range 0.15 to 4 metres in width. Barren veins, concordant with bedding, although with steeper dips, are up to 3 metres thick.

The mineralized veins consist essentially of milky quartz with pyrite, lesser pyrrhotite and gold. Scheelite occurs in some of the auriferous veins.

In the Orphan Boy shaft area several north-northeast quartz

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 831
REPORT: RGEN0100

CAPSULE GEOLOGY

veins occur within pelitic schists. Quartz veins in the Orphan Boy adit area, 150 metres to the east, are closely associated with greenstones. A 35 centimetre sample of a vein in the shaft area gave 8.37 grams per tonne gold.

BIBLIOGRAPHY

EM OF 1999-3
EMPR AR 1896-535; 1898-1059,1192; 1922-215; 1959-105,106
EMPR ASS RPT *10393, *11101, *11860, *13235
EMPR BULL 1, p. 119; 20, part II, p. 17
EMPR FIELDWORK 2000, pp. 231-252
EMPR OF 1991-17, 1999-3
EMPR PF (*Newmarch, C.B. (1942): Ole Bull Tungsten)
GSC MAP 12-1964
GSC OF 637
GSC SUM RPT 1928, part A, pp. 154,155,158,159

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/12

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 832
REPORT: RGEN0100

MINFILE NUMBER: **082M 168**

NATIONAL MINERAL INVENTORY:

NAME(S): **YELLOW CREEK**, COLUMBIA

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M16W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 59 20 N
LONGITUDE: 118 22 04 W
ELEVATION: 2100 Metres

NORTHING: 5760686
EASTING: 406080

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Mica Beryllium Kyanite

MINERALS

SIGNIFICANT: Mica Beryl Kyanite
ASSOCIATED: Quartz Garnet Muscovite Biotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O01 Rare element pegmatite - LCT family P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Lardeau Undefined Formation

LITHOLOGY: Mica Schist
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The area is underlain by probable Lardeau Group consisting of mica-schist cut by quartz veins and pegmatites. Mica is associated with the quartz veins and kyanite occurs in pegmatite dykes and the schists. Beryllium occurs in muscovite and biotite of pegmatites and in kyanite and garnet of schist.

BIBLIOGRAPHY

EMPR AR 1912-K143; 1952-A258
GSC EC GEOL 23, p. 60
GSC MAP 12-1964
GSC OF 637
GSC P 66-1, p. 51
CANMET IR 285, pp. 42-49
Watson, K de P. (1947): American Mineralogist, v. 32, p. 94

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/13

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 168**

MINFILE NUMBER: **082M 169**

NATIONAL MINERAL INVENTORY:

NAME(S): **ADAM 10**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 10 N
LONGITUDE: 119 34 44 W
ELEVATION: 1700 Metres

NORTHING: 5658858
EASTING: 319259

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, Drawing No. 6 (Assessment Report 14277).

COMMODITIES: Zinc Copper Lead Silver

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Sphalerite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Epigenetic

TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Greenstone
Phyllite
Limestone
Schist
Porphyritic Dike
Felsic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver	14.8000	Grams per tonne
Copper	0.0500	Per cent
Lead	0.0500	Per cent
Zinc	6.5000	Per cent

COMMENTS: The sample was taken over 3 centimetres of width.

REFERENCE: Assessment Report 14277.

CAPSULE GEOLOGY

The area is underlain by a Lower Cambrian part of the Eagle Bay Formation rocks consisting of greenstone schists, phyllites and quartz schists. A mafic felsic volcanic contact trends north eastward across the area and is truncated to the east by a north-south fault. Rocks east of the fault consist of mixed greenstones, phyllites and limestone. The rocks are cut by north-south trending quartz-feldspar porphyry dykes and plugs.

Lenses and disseminations of pyrite with traces of chalcopyrite, and minor stringers and fracture fillings of sphalerite occur in felsic volcanics. A 3.0 centimetre sample assayed 6.5 per cent zinc, 0.05 per cent lead, 0.05 per cent copper and 14.8 grams per tonne silver (Assessment Report 14277).

BIBLIOGRAPHY

EMPR ASS RPT 46, 6513, 7693, *14277
EMPR EXPL 1977-E89; 1978-E103; 1979-110; 1985-C98
EMPR MAP 56
EMPR OF 1999-2; 1999-14
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 834
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 170**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRENCHMANS CAP**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M02E 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 13 30 N
LONGITUDE: 118 43 24 W
ELEVATION: 2150 Metres

NORTHING: 5676257
EASTING: 379664

LOCATION ACCURACY: Within 5 KM
COMMENTS: Preliminary Map 43.

COMMODITIES: Nepheline Syenite

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R13 Nepheline syenite

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Nepheline Syeno Gneiss
Para Gneiss
Ortho Gneiss
Quartz
Calc-silicate Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area lies along the western margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age, and is mantled by an unconformably overlying succession of metasediments locally intruded by a suite of nepheline syenite gneiss.

The nepheline syenite gneisses are grey weathering, medium to coarse-grained rocks, forming a concordant, north trending, west dipping body within the metasedimentary envelope of the Dome.

BIBLIOGRAPHY

EMPR MAP 43
EMPR OF 1991-10
GSC BULL 239, p. 173
GSC MAP 12-1964
GSC OF 637; 2447
GSC P 64-32
CJES Vo. 11, 1974, p. 304
GAC Spec. Paper 6-87

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/18

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 171**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEWS CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 10 50 N
LONGITUDE: 118 29 14 W
ELEVATION: 1700 Metres

NORTHING: 5670955
EASTING: 396050

LOCATION ACCURACY: Within 500M
COMMENTS: Confirm location.

COMMODITIES: Gemstones

MINERALS

SIGNIFICANT: Biotite Muscovite Tourmaline
ASSOCIATED: Quartz Feldspar Garnet
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O03 Muscovite pegmatite O04 Feldspar-quartz pegmatite
Q GEMS AND SEMI-PRECIOUS STONES (diamonds under N)

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Quartzite
Marble
Mica Schist
Granitic Gneiss
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the south margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age, and is unconformably overlain by a succession of metasedimentary rocks, which are intruded by a porphyritic granite gneiss.

Blocky, medium to coarse-grained granitic rocks contain widely scattered lenses of granitic pegmatite. The lenses are a few metres thick and several metres long and consist of medium to coarse-grained quartz and potash, commonly in large intergrown crystals. Biotite, muscovite and rarely black tourmaline and brown garnet are present in crystals up to 4 centimetres across.

BIBLIOGRAPHY

EMPR BULL *57, pp. 20-21
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/14

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 172**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER CITY**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 20 N
LONGITUDE: 118 12 04 W
ELEVATION: 981 Metres

NORTHING: 5660396
EASTING: 415881

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond Drill Hole E-5, Figure 2 (Assessment Report 14270).

COMMODITIES: Silver

Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite

ALTERATION: Chlorite Epidote

ALTERATION TYPE: Propylitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Unknown

SHAPE: Irregular

MODIFIER: Fractured Sheared

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic

Shuswap Metamorphic Complex

LITHOLOGY:

Gneiss
Calc-silicate Gneiss
Quartzite
Sill
Pegmatite
Aplite
Mylonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Monashee

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1985

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Silver

13.4000

Grams per tonne

COMMENTS: 1.0 metre sample interval.

REFERENCE: Assessment Report 14270.

CAPSULE GEOLOGY

A moderately eastward dipping and highly folded sequence of gneisses of the Shuswap Metamorphic Complex which mantles the Frenchman Cap Dome. The dominant rock type is a massive, white, muscovite and tourmaline-bearing quartzite which is overlain by an impure calc-silicate gneiss. Biotite rich gneisses lie above and below the quartzite. Other rocks include intermediate to basic sills, and pegmatites and aplites.

The rocks lie several hundred metres beneath the gently east dipping Columbia River Fault zone. Mylonite and mylonitic gneiss splay from the fault zone.

Minor sulphides consisting of pyrite, chalcopyrite and pyrrhotite lie within the mylonitic foliation and in steeply dipping, undeformed late fractures which cut the foliation. The mylonitic zones are chloritized, epidotized and carbonated, yielding a propylitic alteration assemblage which contrasts sharply with and overprints the high grade sillimanite zone regional metamorphism of the unaltered rocks (Assessment Report 14270).

Drill hole E-5 intersected a protoclastic biotite-muscovite-quartz-feldspar gneiss with silver values averaging 13.4 grams

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 838
REPORT: RGEN0100

CAPSULE GEOLOGY

per tonne silver over 1 metre (Assessment Report 14270).

BIBLIOGRAPHY

EMPR ASS RPT *11765, *14270
EMPR BULL 57
EMPR EXPL 1980-106,107
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1986/05/29
DATE REVISED: 1986/05/29

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 173**

NATIONAL MINERAL INVENTORY:

NAME(S): **TRIDENT MOUNTAIN**

MINING DIVISION: Golden

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 082M16E

BC MAP:

LATITUDE: 51 54 20 N

LONGITUDE: 118 09 04 W

ELEVATION: 2300 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: Main stock (Geological Survey of Canada Map 12-1964 and Paper 64-32, p. 14).

UTM ZONE: 11 (NAD 83)

NORTHING: 5751160

EASTING: 420811

COMMODITIES: Nepheline Syenite Feldspar

MINERALS

SIGNIFICANT: Nepheline Microcline Albite
ASSOCIATED: Biotite Ilmenite Sodalite Cancrinite Calcite
Apatite Sphene Pyrochlore

COMMENTS: Also zircon.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Concordant
CLASSIFICATION: Magmatic Industrial Min.

TYPE: R13 Nepheline syenite

DIMENSION: 3000 x 700 Metres

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER

Hadrynian Horsethief Creek Undefined Formation

Devonian-Mississipp.

Unnamed/Unknown Informal

ISOTOPIC AGE: 380 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

LITHOLOGY: Nepheline Syenite
Gneiss
Pelitic Schist
Psammitic Schist

HOSTROCK COMMENTS: Dating age from Open File 1987-17.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: TRIDENT MOUNTAIN

REPORT ON: Y

CATEGORY: Inferred YEAR: 1989

QUANTITY: 330750000 Tonnes

COMMODITY GRADE

Nepheline Syenite 100.0000 Per cent

COMMENTS: Reserves estimated to a depth of 75 metres.

REFERENCE: F. Reyes, personal communication, 1991.

CAPSULE GEOLOGY

Nepheline syenite gneiss occurs as a concordant lenticular mass at Trident Mountain, approximately 85 kilometres northeast of Revelstoke.

The area surrounding Trident Peak consists of a light coloured banded nepheline syenite body. The syenites were emplaced circa 380 Ma (uranium-lead isotope date from zircons, Open File 1991-10) and intrude psammitic and kyanite-bearing pelitic schists of the Hadrynian Horsethief Creek Group.

The nepheline syenite-gneiss occurs in the core of an undulating, recumbent nappe forming a lenticular body, diminishing in thickness to the northwest and southeast. The syenite gneisses are concordant with the host rocks. The rock is white to grey, medium (1 to 5 millimetres) to coarse-grained (greater than 5 millimetres) and consists of microcline, albite and nepheline with minor biotite, ilmenite, sodalite, cancrinite, calcite, apatite, sphene, pyrochlore

CAPSULE GEOLOGY

and zircon (Open File 1987-17). The composition of three samples collected is:

Major oxides	Weight (per cent)
SiO ₂	55.59 - 63.70
Al ₂ O ₃	20.73 - 24.69
Fe ₂ O ₃	0.17 - 0.59
CaO	0.56 - 1.20
Na ₂ O	8.16 - 8.39
K ₂ O	3.12 - 8.22

A 20-kilogram sample, sent to CANMET, was crushed and passed through a magnetic separator with the following results:

Mesh	Magnetic concentrate (Weight in per cent)	Nonmagnetic concentrate
-10 + 35	4.1	67.7
-35 + 100	1.3	19.8
-100	0.5	6.6

Analyses of the nonmagnetic concentrate are:

Major oxides	-10 + 35 mesh	-35 + 100 mesh	-100 mesh
	(Weight in per cent)		
SiO ₂	56.6	58.0	62.0
Al ₂ O ₃	16.8	17.3	18.5
Fe ₂ O ₃	0.07	0.03	0.10
CaO	0.75	0.76	0.95
Na ₂ O	6.11	5.79	5.63
K ₂ O	7.59	8.05	8.31

Processing results indicate that the nepheline syenite is low in magnetic impurities, has a high recovery rate of nonmagnetic materials and has, therefore, a very good potential to produce commercial grade nepheline syenite. Processing indicates a product brightness of 85 per cent can be obtained.

Samples tested are comparable to nepheline syenite currently imported into western Canada from Ontario. Geological mapping by Pell (Open File 1987-17) has documented large lenticular bodies of nepheline syenite over a distance of 7 kilometres at Trident Mountain. This large body has excellent potential to contain nepheline syenite similar to the samples tested. The samples tested were from float located approximately two kilometres north of Trident Mountain peak. Preliminary processing data indicates that a product of 85 per cent brightness can be obtained (McVey, H, 1988, Mineral Development Agreement, Report 4).

At the mouth of Trident Creek, which drains the area, placer uranium, thorium and niobium has been recorded (082M 077).

BIBLIOGRAPHY

EMPR FIELDWORK 1985, p. 255; *1988, p. 486
 EMPR OF *1987-17, pp. 48-50; 1991-10
 EMPR PF (*Russel, F.T. (1956): Report on #223 Prospecting 1956)
 GSC BULL *239, pp. 179-180
 GSC MAP 12-1964
 GSC OF 637
 GSC P 64-32, p. 14
 McVey, H. (1988): A Study of Markets for British Columbia's Nepheline Syenite and Feldspathic Minerals, MDA Report 4, B.C. Ministry of Energy, Mines and Petroleum Resources p.46
 Perkins, M.J. (1983): Structural Geology and Stratigraphy of the Northern Big Bend of the Columbia River, Selkirk Mountains, unpublished Ph.D. Thesis, Carleton University

DATE CODED: 1985/07/24
 DATE REVISED: 1989/12/11

CODED BY: GSB
 REVISED BY: LDJ

FIELD CHECK: N
 FIELD CHECK: N

MINFILE NUMBER: **082M 174**

NATIONAL MINERAL INVENTORY:

NAME(S): **COLUMBIA RIVER**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 16 00 N
LONGITUDE: 118 13 04 W
ELEVATION: 800 Metres

NORTHING: 5680184
EASTING: 415041

LOCATION ACCURACY: Within 5 KM
COMMENTS: Confirm location and references.

COMMODITIES: Andalusite

MINERALS

SIGNIFICANT: Mica Quartz Amphibole Andalusite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: P01 Andalusite hornfels

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Lardeau	Undefined Formation	

LITHOLOGY: Andalusite Schist
Mica Schist
Quartzite
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area is underlain by probable Lower Paleozoic Lardeau Group metasediments and metavolcanics.

The showing occurs as andalusite schists within argillaceous mica schists, quartzites and chlorite schists. The metasediments strike northwest and dip at low angles to the east.

BIBLIOGRAPHY

GSC MAP 12-1964
GSC OF 637
GSC P 64-32
GSC SUM RPT 1928A, p. 143

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/14

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 175**

NATIONAL MINERAL INVENTORY:

NAME(S): **KINBASKET LAKE, RUBY**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M16E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 57 20 N
LONGITUDE: 118 01 04 W
ELEVATION: 760 Metres

NORTHING: 5756584
EASTING: 430061

LOCATION ACCURACY: Within 1 KM
COMMENTS: Area 1, Figure 4 (Open File 1988-26).

COMMODITIES: Garnet Kyanite Mica

MINERALS

SIGNIFICANT: Garnet Kyanite Mica

ASSOCIATED: Quartz

MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Vein Layered Stratabound Disseminated
CLASSIFICATION: Metamorphic Pegmatite Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian
Lower Cambrian

GROUP

Horsethief Creek

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Garnet Schist
Quartz Kyanite Pegmatite
Quartz Kyanite Vein

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Big Bend (Mica Creek) - McNaughton Lake area, located approximately 100 kilometres to the north and northeast of Revelstoke, is underlain by Hadrynian Horsethief Creek Group and Lower Cambrian strata. In the Kinbasket Mountain - Sullivan River area schists of probable Lower Cambrian age contain up to 50 per cent garnet and locally, abundant kyanite associated with large quartz veins and pegmatites (Eichelberger, 1953). Mica is also present.

BIBLIOGRAPHY

EMPR AR 1921-G164
EMPR OF 1988-26, p. 11
EMPR PF (Eichelberger, F. (1953): *Report on Kyanite Deposits - Kinbasket Lake, British Columbia; unpublished Report for Yellow Creek Mica Ltd., 5 pages)
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1985/07/24
DATE REVISED: 1990/01/04

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 176**

NATIONAL MINERAL INVENTORY:

NAME(S): **SEYMOUR**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 34 30 N
LONGITUDE: 118 51 34 W
ELEVATION: 1500 Metres

NORTHING: 5715408
EASTING: 371148

LOCATION ACCURACY: Within 5 KM
COMMENTS: From description, GSC Paper 64-32, p. 5.

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Quartz Sillimanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Quartzite
Amphibolite
Sillimanite Gneiss
Biotite Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the northwest margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age, and is mantled by an unconformably overlying succession of metasedimentary rocks. The meta-sediments comprise calc-silicate gneiss, sillimanite/kyanite schist, biotite gneiss quartzite and amphibolite.

Kyanite is well developed around a big west trending fold between Seymour River and Kirbyville Creek where considerable areas of amphibolite and amphibolite gneiss are intimately associated with quartzite.

BIBLIOGRAPHY

EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 5

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/14

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 177**

NATIONAL MINERAL INVENTORY:

NAME(S): **DEATH RAPIDS**, PRIEST RAPIDS

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10E 082M07E 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 30 00 N
LONGITUDE: 118 30 34 W
ELEVATION: 750 Metres

NORTHING: 5706509
EASTING: 395228

LOCATION ACCURACY: Within 5 KM
COMMENTS: Downie Slide area.

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Quartz
MINERALIZATION AGE: Mesozoic

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Pelitic Schist
Kyanite Quartz Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The showing is located within the Downie Slide on the west slope of the Columbia River valley. The slide mass is composed of pelitic and semipelitic schists that lie on the northeastern flank of the Frenchman Cap gneiss dome in the Shuswap Metamorphic Complex.

Kyanite crystals occur in quartz veins and pegmatites and sections of the schists over a length of 300 metres along the river.

BIBLIOGRAPHY

EMPR AR *1931-148,149; 1933-211; *1947-215; 1952-A258
EMPR MAP 43
EMPR OF 1988-26, p. 12, Fig. 4
GSC MAP 12-1964
GSC OF 637
GSC P 64-32; 84-13, p. 9
CANMET IR *736, pp. 238-240
CJES v. 17, No. 6, pp. 698-709 (Brown, R.L., and Pstuka, J.F., 1980)

DATE CODED: 1985/07/24
DATE REVISED: 1989/12/11

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 178**

NATIONAL MINERAL INVENTORY:

NAME(S): **FRISBY**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 30 N
LONGITUDE: 118 19 04 W
ELEVATION: 750 Metres

NORTHING: 5684938
EASTING: 408148

LOCATION ACCURACY: Within 5 KM
COMMENTS:

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Quartz Feldspar Mica Garnet
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Mica Schist
Calc-silicate Gneiss
Quartzite
Marble
Hornblende Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the eastern margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age, and is mantled by an unconformably overlying succession of metasedimentary rocks. The metasediments are comprised of micaceous schist, hornblende gneiss, calc-silicate gneiss marble, quartzite, and impure marble.

The kyanite occurs within schists and gneisses containing mica, quartz, feldspar and garnet. The greyish-blue flat crystals, are up to 8 centimetres long, and compose up to 20 per cent of the rock.

BIBLIOGRAPHY

EMPR AR 1952-A258
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/14

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 179**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLAIS CREEK**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 30 40 N
LONGITUDE: 118 44 34 W
ELEVATION: 1700 Metres

NORTHING: 5708105
EASTING: 379063

LOCATION ACCURACY: Within 1 KM
COMMENTS:

COMMODITIES: Sillimanite

MINERALS

SIGNIFICANT: Sillimanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Quartzite
Hornblende Gneiss
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the northwest margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age, and is mantled by an unconformably overlying succession of metasedimentary rocks. The metasediments consist of calc-silicate gneiss, quartzite, hornblende gneiss and marble.

Sillimanite occurs within the metasediments at the head of Blais Creek.

BIBLIOGRAPHY

EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 5; 78-1A, pp. 81,82

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/17

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 847
REPORT: RGEN0100

MINFILE NUMBER: **082M 180**

NATIONAL MINERAL INVENTORY:

NAME(S): **BIG BEND**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M15E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 49 30 N
LONGITUDE: 118 30 34 W
ELEVATION: 800 Metres

NORTHING: 5742652
EASTING: 395975

LOCATION ACCURACY: Within 1 KM

COMMENTS: Description, Annual Report 1901, p. 1012.

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP
Paleozoic Lardeau

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartz Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by probable Lower Paleozoic Lardeau Group metasediments consisting of quartz-mica schist.

BIBLIOGRAPHY

EMPR AR 1901-1012; 1910-K94
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/14

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 181**

NATIONAL MINERAL INVENTORY:

NAME(S): **ADAMS LAKE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 07 00 N
LONGITUDE: 119 40 34 W
ELEVATION: 500 Metres

NORTHING: 5666205
EASTING: 312704

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location centred on limestone band (east shore of Adams Lake),
as shown on Map 56.

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
MINERALIZATION AGE: Lower Cambrian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Archaeocyathid

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary

Massive
Industrial Min.

TYPE: R09 Limestone

SHAPE: Tabular

DIMENSION: Metres

STRIKE/DIP: 090/73N

TREND/PLUNGE:

COMMENTS: Limestone belt trends northwest for 22 kilometres.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Lower Cambrian
GROUP: Undefined Group

FORMATION: Eagle Bay

IGNEOUS/METAMORPHIC/OTHER:

DATING METHOD: Fossil
MATERIAL DATED: Archaeocyathid

LITHOLOGY: Limestone
Greenschist

HOSTROCK COMMENTS: Tshinakin Member.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

On the east side of North Barriere River 6 kilometres north of the confluence of the Barrier River. The limestone on the north side of the Baldy Batholith, outcropping just north and south of Vavenby on either sides of the North Thompson River. The unit is commonly estimated to be up to several hundred metres thick.

The Tshinkan limestone is comprised prominently of light grey to white, massive, fine-grained limestone that is sometimes interbedded with quartzite and pyllite. The unit is rarely dolomitic.

BIBLIOGRAPHY

EMPR FIELDWORK 1978, pp. 31-37; *1979, pp. 28-36; 1985, p. 92
EMPR MAP 56
GSC MAP 48-1963
GSC OF 637
GSC P 74-1A, pp. 25-30; 75-1A, pp. 27-28
CJES Vol. 13, pp. 44-53

DATE CODED: 1985/07/24
DATE REVISED: 1989/09/20

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 182**

NATIONAL MINERAL INVENTORY:

NAME(S): **VAVENBY**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

Open Pit

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 35 40 N
LONGITUDE: 119 44 44 W
ELEVATION: 825 Metres

NORTHING: 5719504
EASTING: 309834

LOCATION ACCURACY: Within 500M

COMMENTS: Limestone band on hill top; an old quarry is located about 100 metres away (Open File 1986-5).

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Quartz
MINERALIZATION AGE: Lower Cambrian
ISOTOPIC AGE:

DATING METHOD: Fossil

MATERIAL DATED: Archaeocyathid

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary
TYPE: R09 Limestone
SHAPE: Tabular
DIMENSION: 4000 x 200

Massive
Industrial Min.

Metres

STRIKE/DIP: 130/74N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Undefined Group	Eagle Bay	

DATING METHOD: Fossil
MATERIAL DATED: Archaeocyathids

LITHOLOGY: Limestone
Calcareous Chlorite Schist
Dolomitic Chlorite Schist
Greenstone

HOSTROCK COMMENTS: Limestone of the Tshinakin member.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab
COMMODITY: Limestone

YEAR: 1944

GRADE	Per cent
54.9500	

COMMENTS: Grade given for CaO.

REFERENCE: CANMET Report 811, page 217, Sample 95.

CAPSULE GEOLOGY

The Vavenby occurrence is located 1 to 5 kilometres northwest of Vavenby, on the north side of the North Thompson River. Limestone was quarried at this location until 1933.

A band of Lower Cambrian limestone of the Tshinakin member of the Eagle Bay Formation extends northwest of Vavenby for 4 kilometres, forming a small steep sided mountain known locally as "Lime Bluff". The limestone is estimated to be up to several hundred metres thick. The unit lies enclosed in calcareous chlorite schist and greenstone derived from mafic volcanics. The unit continues southeastward crossing the North Thompson River.

The deposit is comprised mostly of sugary textured, pale blue to nearly white, massive, high calcium limestone that tends to break into small angular fragments. The eastern most knob of the mountain exposes pale blue, brown weathering dolomite with irregular masses and veins of quartz. A representative sample of limestone from a quarry contained 54.95 per cent CaO, 0.30 per cent MgO, 0.68 per cent SiO₂, 0.18 per cent Al₂O₃, 0.14 per cent Fe₂O₃ and 0.01 per cent

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 850
REPORT: RGEN0100

CAPSULE GEOLOGY

sulphur (CANMET Report 811, p. 217, Sample 95).
A small quarry and lime kiln were operated by W. Elliot during
the early 1930's, but no production figures are available.

BIBLIOGRAPHY

EMPR FIELDWORK 1985, p. 92
EMPR OF 1986-5
GSC MAP 48-1963
GSC OF 637
GSC P 75-1A, pp. 27-28
GSC SUM RPT 1930A, p. 153
CANMET RPT *811, p. 217

DATE CODED: 1985/07/24
DATE REVISED: 1989/09/20

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 183**

NATIONAL MINERAL INVENTORY:

NAME(S): **ONYX (MANSON) CREEK, MARJE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:
LATITUDE: 51 02 19 N
LONGITUDE: 119 17 11 W
ELEVATION: 1646 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: Location centred on limestone outcrop in headwaters of Onyx Creek,
as shown on GSC Map 48-1963.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5656606
EASTING: 339707

COMMODITIES: Limestone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Quartz Graphite Pyrite
MINERALIZATION AGE: Lower Cambrian
ISOTOPIC AGE: DATING METHOD: Fossil MATERIAL DATED: Archaeocyathid

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
SHAPE: Tabular
DIMENSION: 300 x 100 Metres STRIKE/DIP: 090/45N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Undefined Group	Eagle Bay	

DATING METHOD: Fossil
MATERIAL DATED: Archaeocyathid

LITHOLOGY: Limestone
Dolomite
Phyllite
Quartzite
Diorite
Lamprophyre

HOSTROCK COMMENTS: Host unit Tshinakin limestone member of Eagle Bay Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay

CAPSULE GEOLOGY

This occurrence is located on the southwest flank of Crowfoot Mountain, 16 kilometres north of Maona Bay on Shuswap Lake. Two limestone horizons of the Tshinikan Member of the Eagle Bay Formation outcrop in the headwaters of Onyx (Manson) Creek. The two horizons are separated by 137 metres of interbedded phyllite and quartzite. The entire sequence is intruded by a few lamprophyric to dioritic dykes and sills. The beds generally strike 090 degrees and dip 45 degrees north. Archeocyathids found in a correlative carbonate unit near Vavenby to the north indicate a Lower Cambrian age (Geological Fieldwork 1985, page 92). The upper horizon is comprised of approximately 46 metres of white to greyish white, white weathering, medium grained (1 to 2 millimetre) recrystallized dolomitic limestone that is cut by a network of opaque, white quartz veins near contacts with the enclosing host rocks. Some patches and seams of buff coloured, argillaceous and siliceous rock occur within this horizon. Minor graphite is also present. Near the base of the unit the limestone is intruded by some porphyritic, lamprophyric dykes at least 1.5 metres wide. This limestone horizon outcrops over a 300 by 90 metre area. The lower 18 metre thick horizon contains fine grained, white weathering limestone with some pyrite. A variable magnesium and silica content is displayed up section and along strike. The deposit was staked by Omar Paquette in 1973. Development work is limited to some trenching and diamond drilling.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 852
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK 1985, p. 92
EMPR PF (*White, G. (1974): Preliminary Report, Marje Claims
1-4)
GSC MAP 48-1963
GSC OF 637
GSC P 75-1A, pp. 27-28; 74-1A, pp. 25-30
CJES Vol. 13, pp. 44-57

DATE CODED: 1985/07/24
DATE REVISED: 1989/09/20

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 184**

NATIONAL MINERAL INVENTORY:

NAME(S): **HYDRO**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 51 30 N
LONGITUDE: 119 20 04 W
ELEVATION: 1340 Metres

NORTHING: 5747858
EASTING: 339244

LOCATION ACCURACY: Within 500M

COMMENTS: Molybdenite showings, Figure 176-3 (Assessment Report 7127).

COMMODITIES: Copper Molybdenum Silver Tungsten

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite Molybdenite Pyrrhotite Powellite

Scheelite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Replacement Epigenetic Skarn

TYPE: K01 Cu skarn

SHAPE: Irregular

DIMENSION: 0400 x 0125 Metres

COMMENTS: Molybdenite zone of intermittent showings.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Schist
Gneiss
Hornfels
Skarn
Amphibolite
Granitic Intrusive
Andesite Dike
Pegmatitic Dike
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1979

SAMPLE TYPE: Rock

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	2.0000	Grams per tonne
Copper	0.3400	Per cent
Molybdenum	0.0940	Per cent
Tungsten	0.0100	Per cent

COMMENTS: The sample was taken over 7 metres of width.

REFERENCE: Assessment Report 7127.

CAPSULE GEOLOGY

The property is underlain by the Shuswap Metamorphic Complex with granite intrusives. Foliation and schistosity is north-northwest with moderate to steep dips east and west. Pegmatites cut all rock types except a quartz monzonite. Andesite dykes cut all rocks.

The metamorphic rocks are divided into 3 units: quartz-feldspar-biotite gneiss; rusty weathering quartz sericite schist and minor amphibole; and a mixed sequence of quartzo feldspathic schists and gneisses, striped hornfels, and skarn and lesser amphibolite.

Several occurrences of chalcopyrite with pyrite and pyrrhotite occur within mixed bands of skarn, hornfels and amphibolite. A 12

CAPSULE GEOLOGY

metre wide zone, traced intermittently for about 30 metres on strike consists of disseminated chalcopyrite and disseminated to semi-massive pyrrhotite in skarn lenses. Molybdenite in quartz veins cuts these rocks. A 7 metre sample across the zone assayed 0.34 per cent copper, 0.094 per cent molybdenum, 0.01 per cent WO₃, and 2 grams per tonne silver.

Three hundred metres to the south, a 400 by 125 metre, north west trending zone of several molybdenite showings occur within mixed, banded skarn and hornfels, cut by narrow quartz stringers. The molybdenite occurs as coarse flakes within the quartz veins and disseminated throughout the skarn.

The chalcopyrite is likely related to basic tuffs and calcareous sediments from which the amphibolite and skarn were derived. The molybdenite was likely introduced with late stage silica vein fillings.

BIBLIOGRAPHY

EMPR ASS RPT *7127
EMPR EXPL 1978-E116,E117
EMPR OF 1991-17
GSC MAP 48-1963
GSC OF 637
GSC P 75-1A

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 185**

NATIONAL MINERAL INVENTORY:

NAME(S): **RIM**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 51 20 N
LONGITUDE: 119 44 49 W
ELEVATION: 1700 Metres

NORTHING: 5748540
EASTING: 310832

LOCATION ACCURACY: Within 500M

COMMENTS: Description and map (Assessment Report 8355).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite Pyrrhotite Pyrite

ASSOCIATED: Biotite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Proterozoic-Cambrian

Shuswap Metamorphic Complex

LITHOLOGY: Biotite Schist
Granodiorite
Quartz Feldspar Biotite Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by well foliated micaceous quartz-feldspar-biotite schist and gneiss of the Shuswap Metamorphic Complex. These rocks are intruded by or in fault contact with irregular bodies, dykes and sills of biotite-rich granodiorite.

Minor molybdenite mineralization occurs in well fractured micaceous schist in contact with the intrusive. Minor pyrrhotite and pyrite are disseminated in the schists.

BIBLIOGRAPHY

EMPR ASS RPT *8355, 9199
EMPR EXPL 1980-145
GSC MAP 48-1963
GSC OF 290; 637
GSC P 75-1A

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 186**

NATIONAL MINERAL INVENTORY:

NAME(S): **FINN**, HORSESHOE

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M14W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 55 10 N
LONGITUDE: 119 18 34 W
ELEVATION: 850 Metres

NORTHING: 5754599
EASTING: 341181

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Plate 2 (Assessment Report 7744).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Amphibolite
Granodiorite
Pegmatite
Biotite Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1979
SAMPLE TYPE: Rock	
<u>COMMODITY</u>	<u>GRADE</u>
Lead	1.5000 Per cent
Zinc	18.8000 Per cent

COMMENTS: The sample was 1 metre wide.
REFERENCE: Assessment Report 7744.

CAPSULE GEOLOGY

The area is underlain by rocks of the Shuswap Metamorphic Complex. To the northeast are granodiorite, pegmatite and minor biotite gneiss. To the west are calc-silicate gneiss, biotite gneiss and minor amphibolite, which are cut by various pegmatites.

Mineralization consisting of galena and sphalerite occurs within calc-silicate gneiss. A one metre sample assayed 18.8 per cent zinc and 1.5 per cent lead. A nearby drill hole intersected minor pyrrhotite within pegmatite at 86 metres and assayed 1.1 per cent zinc over 5 centimetres.

A second showing occurs 800 metres to the south. It is up to 3 metres wide and grades average 15 per cent zinc and 0.6 per cent lead.

BIBLIOGRAPHY

EMPR ASS RPT *7744, 9027, *9032
EMPR EXPL 1979-119; 1980-147
GSC MAP 48-1963
GSC OF 290; 637
GSC P 75-1A

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 857
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1986/05/08

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 187**

NATIONAL MINERAL INVENTORY: 082M1 W1

NAME(S): **THANKSGIVING**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 12 40 N
LONGITUDE: 118 11 59 W
ELEVATION: 670 Metres

NORTHING: 5673986
EASTING: 416200

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite Pyrite Pyrrhotite Marcasite
COMMENTS: Pyrrhotite occurs in one of 3 mineralized zones.

ASSOCIATED: Calcite Quartz Feldspar Diopside Vesuvianite
Garnet Sphene Clinozoisite

COMMENTS: Also includes hornblende and calcarenite.

ALTERATION: Diopside Vesuvianite Garnet Sphene Clinozoisite

ALTERATION TYPE: Skarn Silicific'n Pyrite Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Sedimentary Hydrothermal Skarn
TYPE: K05 W skarn
SHAPE: Irregular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Skarn
Calc-silicate
Limestone
Quartz Biotite Schist
Argillaceous Sediment/Sedimentary
Diorite
Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: Syn-mineralization GRADE:

CAPSULE GEOLOGY

The area is underlain by three lithologies in tectonic contact. They are a lower quartz biotite schist unit, an intermediate unit comprising calc-silicates, silicified limestone, semipelites, argillaceous sediments and graphitic sediments, and an upper unit of quartz-augen gneisses. A zoned diorite-quartz monzonite stock is present in the southern part of the property, below a major thrust zone. A broad asymmetric antiformal structure involves the above three units.

The intermediate unit hosts the skarn/scheelite-pyrrhotite zone near the crest of the antiform. The skarn unit, 3 to 10 metres wide, varies from silicified limestone to calc-silicates to the mineralized garnet-diopside skarn. The mineralization occurs as fine-grained, scattered coarse crystals and streaks of scheelite and pyrrhotite in irregular lenses parallel to bedding.

BIBLIOGRAPHY

EMPR ASS RPT *10041, *10091, 10099
EMPR FIELDWORK *1981, p. 58
EMPR OF 1991-17
EMR MP CORPFILE (Andaurex Resources Inc., Northair Mines Ltd.)
GSC Map 12-1964; 4404G
GSC OF 290; 637
GSC P 64-32
CIM Reporter, Sept. 28, 1981

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 859
REPORT: RGEN0100

BIBLIOGRAPHY

GCNL #89,#159,#222, 1981; #86, 1982
W MINER Sept. 1981; March 1983
Wares, R. (1981): *Preliminary Geology of the Thanksgiving
Tungsten Project; CIM District 6 Meeting, Victoria, British
Columbia, October 1981- Abstract in CIM Bull. Sept. 1981,
p. 65, v. 74, no. 833

DATE CODED: 1985/07/24
DATE REVISED: 1986/02/25

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 188**

NATIONAL MINERAL INVENTORY:

NAME(S): **TM 1**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 48 30 N
LONGITUDE: 119 47 29 W
ELEVATION: 1180 Metres

NORTHING: 5743406
EASTING: 307570

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of zone, (Assessment Report 10405).

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite
ASSOCIATED: Quartz Idocrase Garnet Wollastonite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Epigenetic Hydrothermal Skarn
TYPE: K05 W skarn
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 0120 x 0003 Metres STRIKE/DIP: 050/30N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian _____ _____ Shuswap Metamorphic Complex

LITHOLOGY: Biotite Schist
Marble
Skarn
Quartz Biotite Gneiss
Migmatite
Quartzite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Contact Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1982
SAMPLE TYPE: Channel
COMMODITY: _____ GRADE: _____
Tungsten 1.4400 Per cent
COMMENTS: A 1.0 metre sample width.
REFERENCE: Assessment Report 10405.

CAPSULE GEOLOGY

The area is underlain by rocks of the Shuswap Metamorphic Complex consisting of quartz-biotite schists and gneisses, migmatite, quartzite, marble and skarn. The metasediments are intruded by sills and irregular bodies of granodiorite.

The general trend of the metasediments is northerly, dipping moderately to the west. However, locally the rocks are structurally complex due to folding and faulting.

Within the quartz-biotite schist is a 1 to 3 metre wide scheelite bearing skarn which strikes in a north-easterly direction for 120 metres. The skarn consists of idocrase, garnet, wollastonite and quartz. Tungsten content in surface channel samples ranges up to 1.44 per cent WO₃ over 1 metre.

The mineralization is similar to Gotcha (082M 123).

BIBLIOGRAPHY

EMPR ASS RPT *10405
EMPR OF 1991-17
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 861
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 290; 637
GSC P 64-32

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 189**

NATIONAL MINERAL INVENTORY:

NAME(S): **TM 8**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 48 20 N
LONGITUDE: 119 50 44 W
ELEVATION: 2060 Metres

NORTHING: 5743242
EASTING: 303825

LOCATION ACCURACY: Within 500M

COMMENTS: Drilling area, (Assessment Report 9371).

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite
ASSOCIATED: Quartz Idocrase Garnet Wollastonite
ALTERATION: Idocrase Garnet Quartz Wollastonite
ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Epigenetic Hydrothermal Skarn
TYPE: K05 W skarn
DIMENSION: 0200 x 0004 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Biotite Schist
Marble
Skarn
Migmatite
Quartz Biotite Gneiss
Quartzite
Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Contact Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by rocks of the Shuswap Metamorphic Complex consisting of quartz-biotite schists and gneisses, migmatite, quartzite, marble and skarn. The metasediments are intruded by sills and irregular bodies of granodiorite.

The general trend of the metasediments is northerly, dipping moderately to the west. However, locally the rocks are structurally complex due to folding and faulting.

Within the quartz-biotite schist are carbonate beds with a 4 metre wide scheelite bearing skarn which strikes in a north direction for 200 metres. The skarn consists of idocrase, garnet and quartz with scheelite concentrated in the garnet rich bands.

To the south the biotite schists become more calcareous with development of several narrow skarn zones over a 10 metre thickness. Skarn development diminishes, showing a transition from quartz-garnet-idocrase through garnet-wollastonite to wollastonite marble and marble with local development of large garnet porphyroblasts. Scheelite content also diminishes with decreasing development of skarn.

BIBLIOGRAPHY

EMPR ASS RPT *9371
EMPR OF 1991-17
GSC MAP 48-1963
GSC OF 290; 637
GSC P 64-32

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 190**

NATIONAL MINERAL INVENTORY: 082M15 Zn2

NAME(S): **RIFT**

MINING DIVISION: Revelstoke

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M15E
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 52 30 N
 LONGITUDE: 118 34 29 W
 ELEVATION: 745 Metres

NORTHING: 5748308
 EASTING: 391597

LOCATION ACCURACY: Within 500M
 COMMENTS: Drawing No. 4 (Assessment Report 9638).

COMMODITIES: Zinc Lead Copper

MINERALS

SIGNIFICANT: Sphalerite Pyrite Pyrrhotite Galena Chalcopyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive Disseminated
 CLASSIFICATION: Sedimentary Syngenetic
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 MODIFIER: Folded
 DIMENSION: 27 x 2 Metres STRIKE/DIP: TREND/PLUNGE:
 COMMENTS: Massive sulphide layer.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Lardeau	Undefined Formation	

LITHOLOGY: Pelitic Schist
 Calc-silicate
 Quartzite
 Marble
 Serpentinite
 Grit
 Porphyritic Quartz Monzonite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1981
SAMPLE TYPE: Rock	
COMMODITY	<u>GRADE</u>
Copper	0.0300 Per cent
Lead	6.9300 Per cent
Zinc	29.4700 Per cent

COMMENTS: A 0.8 metre sample width.
 REFERENCE: Assessment Report 9638.

CAPSULE GEOLOGY

The Rift occurrence is in isoclinally deformed metasedimentary and metavolcanic rocks of the Selkirk allochthon in the immediate hanging wall of the east dipping Columbia River fault zone. Underlying rocks are probable Lower Cambrian and younger Lardeau Group consisting of a lower grit sequence, a middle "pelite" sequence and an upper carbonate sequence (Fieldwork, 1984). A zinc-lead-(copper) sulphide layer is contained in a 400 metre thick interval of the upper sequence of rocks consisting of pelitic schist, layered calc-silicate rocks, impure quartzite, marble and serpentinite that lie between marble units. Intrusive masses of potassium feldspar porphyritic quartz monzonite invade the metasedimentary rocks as sills and dykes. Mineralization consists of a number of thin layers of massive sphalerite, pyrite, pyrrhotite, and galena and minor chalcopyrite and arsenopyrite exposed for about 25 metres of strike length. The

CAPSULE GEOLOGY

massive sulphide layer varies in thickness from 0 to 1.4 metres and is structurally underlain by a zone 0.3 to 1.6 metres thick of disseminated sulfides in a fine-grained dark siliceous gangue. Hanging wall rocks are more calcareous and sulphide content is generally lower.

The massive sulphides assayed 29.47 per cent zinc, 6.93 per cent lead, 0.03 per cent copper over 0.8 metres and the footwall disseminated sulphides assayed 2.39 per cent zinc, 0.39 per cent lead and 0.02 per cent copper (Assessment Report 9638).

A second massive sulphide zone (upper showing) is exposed approximately 90 metres stratigraphically above the main showing. Intervening rocks include calcareous schists and thin marble bands, overlain by more pelitic schists.

One hundred metres above the main sulphide layer is a pod-like, sheared ultramafic body, 15 metres thick, containing large cleaved metacrysts in a matrix of antigorite, talc and magnetite. The ultramafic body assayed 2300 parts per million nickel, 106 parts per million cobalt and 175 parts per million copper (Hicks, 1982).

BIBLIOGRAPHY

- EMPR ASS RPT *9638, *10989, *11766, *13280, *14163, 17990
EMPR BULL 80, pp. 87-88
EMPR EXPL 1982-16,17,124; 1983-170; 1984-131; 1985-C111
EMPR FIELDWORK *1984, pp. 105-119
EMPR MAP 65 (1989)
EMPR OF 1992-1
EMPR PF (Field notes, 1981; Gibson, G. and Hoy, T. (undated): Rift, A Zinc-Lead Massive Sulphide Deposit in Southeastern British Columbia)
GSC MAP 12-1964
GSC OF 290; 637
GSC P 64-32
MIN May/June 1984, E & B Exploration Inc., p. 52
*Hicks, K.E. (1982): Geology and Mineralogy of the "Rift" zinc-lead Massive Sulfide Deposit, Southeastern British Columbia; unpublished B.Sc. Thesis, University of British Columbia, 55 pp.
WWW <http://www.orphanboy.com/rift.html>
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1987/07/30

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 191**

NATIONAL MINERAL INVENTORY: 082M4 Au1

NAME(S): **REA GOLD**, HILTON

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 082M04W
 BC MAP:

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5669980
 EASTING: 302727

LATITUDE: 51 08 50 N
 LONGITUDE: 119 49 14 W
 ELEVATION: 1475 Metres

LOCATION ACCURACY: Within 500M
 COMMENTS: Discovery zone (L100 lens) (Fieldwork 1985).

COMMODITIES: Silver Zinc Lead Gold Copper

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Arsenopyrite Chalcopyrite
 Tetrahedrite
 ASSOCIATED: Barite
 ALTERATION: Silica Pyrite Sericite
 ALTERATION TYPE: Silicific'n Pyrite Sericitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive Stockwork
 CLASSIFICATION: Volcanogenic
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Tabular
 DIMENSION: 120 x 50 x 4 Metres STRIKE/DIP: 140/60E TREND/PLUNGE:
 COMMENTS: Discovery lens (L100 lens).

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
 Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Chloritic Phyllite
 Quartz Sericite Schist
 Chert
 Siliceous Tuff
 Mafic Tuff
 Argillite
 Siltstone
 Grit

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: TOTAL REPORT ON: Y
 CATEGORY: Indicated YEAR: 1987
 QUANTITY: 376000 Tonnes
 COMMODITY GRADE
 Silver 69.4000 Grams per tonne
 Gold 6.1000 Grams per tonne
 Copper 0.3300 Per cent
 Lead 2.2000 Per cent
 Zinc 2.3000 Per cent

COMMENTS: Reserves for northern and southern lenses.
 REFERENCE: George Cross News Letter No.8, 1987; Northern Miner November 30, 1987.

CAPSULE GEOLOGY

The Rea Gold deposit is hosted by chloritic phyllites, quartz-sericite schists and chert derived from predominantly mafic with minor intermediate to felsic volcanic and volcanoclastic rocks (Unit EBF) of the Lower Cambrian and older(?) to Mississippian Eagle Bay Formation (Map 56). The rocks are overlain by sericitic phyllites, derived from felsic to intermediate volcanics (Unit EBA) which host the Homestake deposit (082M 025), 4 kilometres south. These units are overlain by metasedimentary rocks consisting of argillites, siltstones and grits, which are structurally overlain to the east by mafic metavolcanics (Unit EBG). The deposit lies on the inverted

CAPSULE GEOLOGY

northern limb of a northwest trending, northeast dipping, tight, overturned syncline.

Two massive sulphide lenses, 250 metres apart and at about the same stratigraphic level, occur at the stratigraphic top of a silicified tuff and exhalative chert sequence that lies above a thicker sequence of mafic ash, crystal and lapilli tuffs. Both lenses are stratigraphically overlain by a thin sequence of mafic tuff which grades up into argillites, wackes and grits. The southern lens is "capped" by a layer of massive barite.

The massive sulphides are underlain by a footwall feeder and alteration zone, characterized by intense silicification, pervasive pyrite and sericite development. As the stratigraphic succession is inverted, the "footwall alteration zone" or "stockwork feeder zone" forms the structural hanging wall of the sulphide lenses.

Mineralization within the sulphide lenses include pyrite, sphalerite, galena, arsenopyrite, chalcopyrite and tetrahedrite-tennantite. The sulphides range from fine-grained, massive with a faint breccia texture, to medium-grained and banded (Fieldwork 1984). Gold and silver is associated with the massive sulphides and barite.

The southern lens (L98 lens) has a surface strike length of 75 metres and a downdip extension of at least 80 metres. Massive sulphide widths to 8 metres have been intersected by drilling.

The northern lens (L100 lens) or Discovery lens, has a surface strike length of about 50 metres, a width of about 4 metres, and a down dip projection of at least 120 metres. The lens strikes 140 degrees and dips 50-60 degrees north eastward. Measured geological reserves are estimated at 242,849 tonnes grading 6.51 grams per tonne gold, 73.37 grams per tonne silver, 2.14 per cent lead, 2.24 per cent zinc and 0.52 per cent copper (George Cross News Letter #8, 1987).

The southern lens or L98 lens, contains measured geological reserves of 133,536 tonnes grading 61.71 grams per tonne silver, 5.41 grams per tonne gold, 0.69 per cent copper, 2.4 per cent lead and 2.4 per cent zinc (Northern Miner - November 30, 1987).

See Samatosum (082M 244) for related information.

Indicated reserves for the northern and southern lenses are 376,000 tonnes grading 0.33 per cent copper, 2.2 per cent lead, 2.3 per cent zinc, 6.1 grams per tonne gold and 69.4 grams per tonne silver (George Cross News Letter No.8, 1987; Northern Miner November 30, 1987).

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 287-306
EMPR ASS RPT *12737, *14185, 15718
EMPR EXPL 1983-xxxii,157; 1986-B7-B19,C113
EMPR FIELDWORK 1984, pp. 67-76; *1984, pp. 77-83; *1985, pp. 59-68
EMPR GEM 1970-316
EMPR MAP *56; 65 (1989)
EMPR OF 1992-1; 1998-8-L, pp. 1-49; 1998-9; 1998-10; 1999-2; 1999-14; 2000-31
EMPR P 1991-4, pp. 112,114
EMR MIN BULL MR 223 B.C. 72
GSC MAP 48-1963; 5320G
GSC OF 290; 637
GSC P 64-32
CMH 1984-85, p. 323; 1987-88, pp. 272,330
GCNL #209,#213,#218,#222,#227,#228,#235, 1983; #7,#9,#60,#61, #82,#89,#113,#217, 1984; #11,#41,#49,#60,#71,#99,#214, #243,#247,#250, 1985; #4,#57,#131,#135,#153,#172,#177,#201, 1986; #8,#76,#96,#108,#111,#112,#116,#117,#118,#133,#224, 1987; #26,#44,#85, 1988
IPDM Nov/Dec 1983; *Jan/Feb 1984; May/June 1985; Feb. 1986
N MINER Dec.1,8, 1983; March *8,22, May 3, June 21, July 5, Aug.16, 23, Oct.4, 1984; Jan.3,31, March 7, Aug.29, Dec.30, 1985; Jan.13, March 31, June 12, July 14,21, Aug.4, 1986; Jan.26, May 11, Nov. 30, 1987
NAGMIN Jan.15, March 30, July 6, Nov.9, 1984
NW PROSP Aug. 1984; Winter 1985; Jan. 1987
V STOCKWATCH Nov. 28, 1986; Dec. 23, 1987
W MINER Feb., Apr., June, 1984; Vol.57, No.6, 1984
*Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986): Mineral Deposits of the Adams Plateau - Clearwater area Placer Dome File
*Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau - Clearwater Region; GSA Cordilleran Section Meeting, May 1985, pp. 16-1 to 16-11

MINFILE NUMBER: **082M 192**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEARTREE**, SLIDE

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 29 10 N
LONGITUDE: 118 17 04 W
ELEVATION: 1300 Metres

NORTHING: 5704667
EASTING: 410818

LOCATION ACCURACY: Within 500M

COMMENTS: Slide zone - (Assessment Report 10776).

COMMODITIES: Tungsten Molybdenum Copper

MINERALS

SIGNIFICANT: Scheelite Powellite Molybdenite Pyrite Chalcopyrite

COMMENTS: Scheelite rimmed by powellite.

ASSOCIATED: Quartz Diopside Garnet

ALTERATION: Malachite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Skarn
TYPE: K05 W skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Lardeau	Undefined Formation	Unnamed/Unknown Informal
Mesozoic			

LITHOLOGY: Siltstone
Sandstone
Limestone
Hornfels
Schist
Quartz Monzonite
Volcanic
Skarn

HOSTROCK COMMENTS: Downie Creek Pluton.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Selkirk Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The property is underlain by siltstones, sandstones, limestones and minor basic volcanics of probable Lower Paleozoic Lardeau Group. The rocks are affected by low grade regional metamorphism and are part of the lower (inverted) limb of a major F1 regional nappe structure which has been subsequently deformed by F2 recumbent isoclinal folds and later open folds. The latter are related to the Downie Creek pluton which consists of biotite-quartz monzonite.

The sedimentary rocks in contact with the pluton are converted to schists, hornfels and scheelite-bearing skarns. Two distinct mineralized zones are the cave zone consisting of coarse-grained garnet diopside skarn, with abundant disseminated scheelite, and traces of molybdenite, devoid of sulphides, and the slide zone consisting of a quartz sulphide-scheelite breccia zone.

Trace disseminations of chalcopyrite and malachite with pyrite were reported in the southern property area.

BIBLIOGRAPHY

EMPR ASS RPT *10776
EMPR EXPL 1982-117
EMPR OF 1991-17
GSC MAP 12-1964
GSC OF 290; 637
GSC P 64-32

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 868
REPORT: RGEN0100

BIBLIOGRAPHY

Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1986/03/06

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 193**

NATIONAL MINERAL INVENTORY:

NAME(S): **WAD**

MINING DIVISION: Kamloops

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M04E
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 50 N
 LONGITUDE: 119 35 04 W
 ELEVATION: 1700 Metres

NORTHING: 5658254
 EASTING: 318848

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Fig. 4B (Assessment Report 13192).

COMMODITIES: Copper Lead Zinc Silver Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite Galena

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
 CLASSIFICATION: Replacement

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Basic Extrusive
 Volcanic Breccia
 Granodiorite
 Diorite
 Chert
 Quartz Porphyry
 Pyroclastic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE:	SAMPLE	REPORT ON:	N
CATEGORY:	Assay/analysis	YEAR:	1984
SAMPLE TYPE:	Grab		
COMMODITY		GRADE	
Silver		43.9000	Grams per tonne
Gold		0.6900	Grams per tonne
Copper		2.5000	Per cent
Lead		0.1000	Per cent
Zinc		0.5000	Per cent
REFERENCE:	Assessment Report 13192.		

CAPSULE GEOLOGY

The property is underlain by northeast trending, folded and metamorphosed mafic and intermediate volcanics, volcanoclastics and sediments of the Late Devonian to Early Mississippian age Eagle Bay Formation. These rocks are intruded by dykes and stocks of diorite, diabase, granodiorite and quartz porphyry.

The metavolcanics comprise a lower unit of mafic flows and breccias of basaltic composition intercalated with detrital sediment, chert lenses and intermediate volcanic rocks. These rocks are overlain by intermediate volcanic flows, breccias and volcanoclastics of andesitic to rhyodacite composition.

Structure in the area is dominated by a northeasterly trending overturned synform cut by several north trending right lateral faults.

Disseminated, veinlet and replacement pyrite, pyrrhotite and to a lesser extent chalcopyrite, sphalerite and galena mineralization are hosted by metasomatized mafic volcanic flows and breccias, and dioritic phases of the granodiorite stock. This showing appears restricted to the margins of a roof pendant of the mafic volcanic sequence within the intrusion.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 870
REPORT: RGEN0100

CAPSULE GEOLOGY

A grab sample assayed 2.5 per cent copper, 0.5 per cent zinc, 0.1 per cent lead, 43.9 grams per tonne silver and 0.69 grams per tonne gold.

BIBLIOGRAPHY

EMPR ASS RPT *13192
EMPR EXPL 1984-116
EMPR INF CIRC 1985-1, pp. 24,36
EMPR MAP 56
GSC MAP 48-1963
GSC OF 290; 637
GSC P 75-1A
GCNL #208, 1984; #119, 1985

DATE CODED: 1986/04/14
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 194**

NATIONAL MINERAL INVENTORY:

NAME(S): **JOSEPH**

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 32 05 N
LONGITUDE: 119 59 34 W
ELEVATION: 1835 Metres

NORTHING: 5713537
EASTING: 292442

LOCATION ACCURACY: Within 500M

COMMENTS: Drill holes, Drill Plan (Assessment Report 8530).

COMMODITIES: Silver Lead Zinc Copper Barite
Gold

MINERALS

SIGNIFICANT: Galena Pyrite Sphalerite Chalcopyrite Pyrrhotite

ASSOCIATED: Quartz

ALTERATION: Calcite

ALTERATION TYPE: Carbonate

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Massive

CLASSIFICATION: Industrial Min.

TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

SHAPE: Tabular

MODIFIER: Fractured

DIMENSION: 0210 x 0008 Metres STRIKE/DIP: 160/85W TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Permian Slide Mountain Fennell

ISOTOPIC AGE: 265 Ma
MATERIAL DATED: Conodont

LITHOLOGY: Argillite
Chert
Conglomerate
Basalt
Quartz Feldspar Porphyry
Sandstone
Phyllite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Silver	93.9400	Grams per tonne
Gold	0.1700	Grams per tonne
Barite	2.4500	Per cent
Copper	0.0200	Per cent
Lead	9.2000	Per cent
Zinc	1.5600	Per cent

COMMENTS: The sample width is 2.7 metres.

REFERENCE: Assessment Report 13045.

CAPSULE GEOLOGY

The area is underlain by the Devonian to Permian Fennell Formation. The Lower (eastern) division is a heterogenous assemblage of bedded chert, basalt, quartz-feldspar porphyry, conglomerate, sandstone, argillite, phyllite and limestone. These units occupy a westerly overturned syncline, which plunges shallowly to the north-northwest. To the east, separated by an east-dipping thrust fault, are metavolcanics of the Eagle Bay

CAPSULE GEOLOGY

Formation. The Middle Cretaceous Baldy Batholith lies to the south.

The mineralized zone lies within a 75 metre wide sedimentary panel of argillite, chert, minor chert-pebble conglomerate. The sediments trend north-northwest, dip steeply west, and are contained within a extensive basalt sequence. Deformation is intense, shown by gouge and brecciation within broader zones of cleavage and fracturing.

Stratabound mineralization occurs as irregular veins of galena, pyrite and minor sphalerite. The sulphides are associated with quartz and some carbonate or occur as nearly massive aggregates. The mineralization is fairly widespread but the most significant concentrations occur in an 8 metre wide zone. A drill hole intersected 9.2 metres of 2.39 per cent lead, 1.05 per cent zinc, 1.27 per cent barium, 0.014 per cent copper, 30.9 grams per tonne silver and 0.07 grams per tonne gold, within which occurred 2.7 metres of 9.2 per cent lead, 1.56 per cent zinc, 2.45 per cent barium, 0.02 per cent copper, 93.94 grams per tonne silver and 0.17 grams per tonne gold (Assessment Report 13045). A drill hole 210 metres to the northwest intersected 1.8 metres of 2.9 per cent lead, 0.45 per cent zinc and 26.06 grams per tonne silver (Assessment Report 13054).

BIBLIOGRAPHY

EMPR ASS RPT 8530, 9716, *11381, *13054
EMPR EXPL 1979-200; 1980-144; 1983-168; 1984-130
EMPR MAP 53; 56
EMPR OF 1986-5; 1999-2
GSC MAP 48-1963
GSC OF 290; 637
GSC P 75-1A
GCNL #168, 1984

DATE CODED: 1987/01/10
DATE REVISED: 1987/01/10

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 195**

NATIONAL MINERAL INVENTORY: 082M1 Zn5

NAME(S): **MASTODON NORTH**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E 082M08E
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 15 00 N
LONGITUDE: 118 07 14 W
ELEVATION: 1400 Metres

NORTHING: 5678223
EASTING: 421795

LOCATION ACCURACY: Within 500M

COMMENTS: See NMI 082M1 Zn1 Mastodon. Annual Report 1950-165; 1959-111,116-117.

COMMODITIES: Zinc Lead Silver Barite Fluorite
 Gold Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Barite Fluorite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Industrial Min.
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Irregular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian Undefined Group Badshot

LITHOLOGY: Limestone
 Dolomite
 Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The showings occur in a contorted zone containing lenses of dolomite and limestone in grey phyllite between two extensive masses of limestone. A fault striking between 340 to 360 degrees and dipping 40 to 65 degrees bounds the east side of the contorted zone.

Two groups of showings occur between 1325 and 1585 metres. The first group has a strike length of 40 metres of sparse mineralization. Mineralized widths up to 2 metres of disseminated sphalerite and galena occur along a dolomite-phyllite contact. Irregular mineralized veinlets also occur with white and mauve crystals of fluorite, white crystalline barite and quartz.

Two hundred and fifty metres north is a second group of showings scattered over a strike length of 100 metres. Sphalerite lenses occur in limestone and occasionally in phyllite; the largest is 1.5 metres wide and 1.2 metres thick.

BIBLIOGRAPHY

EMPR AR 1918-189; *1950-165, Fig. 5; *1959-111, 116, 117
EMPR OF 1992-16
GSC MAP 12-1964
GSC OF 290; 637
GSC P 75-1A
GSC SUM RPT 1928, part A, p. 190

DATE CODED: 1986/02/27
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 196**

NATIONAL MINERAL INVENTORY: 082M1 Zn3

NAME(S): **LITTLE SLIDE NO. 3, MCCALLUM**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01E
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 12 40 N
LONGITUDE: 118 03 34 W
ELEVATION: 1710 Metres

NORTHING: 5673835
EASTING: 425998

LOCATION ACCURACY: Within 1 KM

COMMENTS: Symbol 7, Map 12-1964 and description p. 118 (GSC Paper 84-32).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 0015 x 0006 Metres STRIKE/DIP: TREND/PLUNGE: 360/35

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Undefined Group Badshot

LITHOLOGY: Phyllite
Limestone
Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

Galena and sphalerite occur as discontinuous layers in limestone and as irregular disseminated lenses in dolomite, within grey and green phyllites. The highest-grade mineralization occurs in a 2 metre band of limestone which lenses out into dolomite, forming an isoclinal antiform plunging 35 degrees to the north. In the crest of the antiform is a rusty phyllite lens between the limestone and dolomite and pinching out along the limbs.

BIBLIOGRAPHY

EMPR AR 1900-809; 1917-151,152, *1959-118,119
EMPR ASS RPT *5724
EMPR EXPL 1975-E56; 1977-E86
GSC MAP 12-1964
GSC OF 290; 637
GSC P 75-1A, 84-32, p. 30
GSC SUM RPT 1929, part A, p. 190
EMPR OF 2000-22

DATE CODED: 1986/02/28
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 197**

NATIONAL MINERAL INVENTORY:

NAME(S): **KIRKUP**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 00 N
LONGITUDE: 118 24 14 W
ELEVATION: 1980 Metres

NORTHING: 5650763
EASTING: 401492

LOCATION ACCURACY: Within 500M

COMMENTS: Fig. 4 (Assessment Report 1794). Includes 82LNE001 (deleted from file), "JS, JR, JT, and GC".

COMMODITIES: Talc

MINERALS

SIGNIFICANT: Talc
ASSOCIATED: Quartz Feldspar Sillimanite Chlorite Mica
ALTERATION TYPE: Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Hydrothermal Industrial Min.
TYPE: E08 Carbonate-hosted talc
SHAPE: Regular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Gneiss
Quartzite
Calc-silicate
Argillite
Marble
Pegmatite
Lamprophyre
Talc Schist

HOSTROCK COMMENTS: Intruded by swarms of pegmatite and lamprophyre dykes.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence is on the south flank of the Frenchman's Cap gneiss dome in the Shuswap Metamorphic Complex. Gneiss, quartzite, schist, calc-silicate rocks, minor marble and argillite are iso-clinally folded with easterly trending structures. Folding and jointing are common with planes intruded by swarms of pegmatite and lamprophyre dykes.

A talc schist was sampled and analysed by x-ray diffraction in 1968, and found to contain talc and mica intergrown with chlorite. Accessory minerals are quartz, feldspar and sillimanite (Assessment Report 1794).

A small bed of "nearly pure" talc is reported to occur within mixed gneisses, about one kilometre to the south.

BIBLIOGRAPHY

EMPR ASS RPT *1792, *1793, *1794
EMPR OF 1988-19
GSC MAP 12-1964
GSC P 64-32

DATE CODED: 1986/02/21
DATE REVISED: 1988/01/21

CODED BY: LDJ
REVISED BY: MM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 198**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHILLY LAKE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 40 N
LONGITUDE: 118 43 04 W
ELEVATION: 2000 Metres

NORTHING: 5685824
EASTING: 380276

LOCATION ACCURACY: Within 5 KM
COMMENTS: From descriptions.

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite Andalusite Sillimanite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Mica Schist
Pelite
Sillimanite Kyanite Gneiss
Quartzite
Calc-silicate Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the western margin of the Frenchman Cap Dome. The core of the dome is composed of mixed paragneiss and orthogneiss rocks of probable Apebian age, and is mantled by an unconformably overlying succession of metasedimentary rocks. The metasediments in the immediate area comprise pelites, calc-silicate gneiss, sillimanite-kyanite schists and quartzites.

The kyanite forms porphyroblasts several centimetres long in quartz-mica schists.

BIBLIOGRAPHY

EMPR FIELDWORK 1981, pp. 187-201
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 5; *71-29, p. 40, Fig. 3

DATE CODED: 1986/03/14
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 199**

NATIONAL MINERAL INVENTORY:

NAME(S): **REN**, MT. GRACE, RATCHFORD CREEK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M07E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5691116
EASTING: 378658

LATITUDE: 51 21 30 N
LONGITUDE: 118 44 34 W
ELEVATION: 1140 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Zone of anomalous elements, Map C (Assessment Report 11639).

COMMODITIES: Cerium Lanthanum Niobium Molybdenum Copper
 Zinc Neodymium

MINERALS

SIGNIFICANT: Apatite Columbite Monazite Pyrrhotite Pyrite
 Sphalerite Chalcopyrite Molybdenite Pyrochlore
ASSOCIATED: Calcite Apatite Sphene
ALTERATION: Sphene Amphibole Biotite Monazite Pyrochlore
ALTERATION TYPE: Fenitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Magmatic
TYPE: N01 Carbonatite-hosted deposits
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 3000 x 0200 Metres STRIKE/DIP: 315/25S TREND/PLUNGE:
COMMENTS: Maximum extent of carbonatite; general strike and dip.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Monashee Complex

LITHOLOGY: Carbonatite
Pyroxene Amphibole Fenite
Calc-silicate
Quartzite
Alkali Gneiss
Marble
Tuff
Pelitic Schist
Pelitic Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The area lies within the Monashee Complex along the western margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Apebian age, and is mantled by an unconformably overlying succession of metasedimentary rocks, locally intruded by a suite of alkalic gneiss. The metasediments consist of a basal quartzite unit overlain by a succession of interbanded pelitic schists, pelitic gneiss, calc-silicate and marble.

Two types of carbonatites occur within the calc-silicate unit. Type I is concordant within quartz-biotite-gneiss, quartz-amphibole gneiss and quartzite. It trends northwest for 3 kilometres, and dips to the southwest, and varies from 20 to 200 metres in width. The carbonatite averages 60 to 80 per cent calcite, 10 to 30 per cent apatite with accessory biotite, amphibole, sphene and minor pyrrhotite, pyrite, sphalerite, chalcopyrite, molybdenite, pyrochlore and monazite. The carbonatite is associated with pyroxene-amphibole fenites.

Type II, occurring 2 kilometres to the west, is concordant with a white marble unit and other metasedimentary layers and has been interpreted to be a carbonatite tuff.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 878
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *11639
EMPR BULL 80
EMPR EXPL 1983-161
EMPR FIELDWORK 1981, pp. 194,199; 1985, pp. 69-88
ECON GEOL *Vol. 81, 1986, pp. 1374-1386
EMPR OF *1987-17, p. 54
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
CJES v. II, pp. 304-318 (McMillan, W.J., and Moore Jr., J.M. (1974)
Placer Dome File
WWW <http://www.infomine.com/>

DATE CODED: 1986/03/13
DATE REVISED: 1987/01/05

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 200**

NATIONAL MINERAL INVENTORY:

NAME(S): **D & R**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 32 10 N
LONGITUDE: 118 49 44 W
ELEVATION: 2150 Metres

NORTHING: 5711031
EASTING: 373157

LOCATION ACCURACY: Within 500M
COMMENTS: Fig. 2 (Assessment Report 8609).

COMMODITIES: Molybdenum

MINERALS

SIGNIFICANT: Molybdenite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated
CLASSIFICATION: Unknown
TYPE: * Unknown
COMMENTS: The molybdenum is concentrated in a 3 square metre area.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Hornblende Gneiss
Sillimanite Gneiss
Quartz Syenite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the northwest margin of the Frenchman Cap Dome. The core of the Dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age.

The molybdenum occurs at the closure of a small fold or limb in a quartz-syenite orthogneiss layer that is part of a paragneiss sequence within the northwest limb of the Mount Grace Syncline. The syenite measures about 1300 by 200 metres.

The original molybdenum occurrence lies 1 kilometre to the west, down section from the larger occurrence in a hornblend-rich gneiss. The mineralized zone measures about 4 square metres and an assay returned 0.65 per cent molybdenite (Johnson, 1980).

BIBLIOGRAPHY

EMPR ASS RPT *8609
EMPR BULL *80, p. 84
EMPR EXPL 1980-143
EMPR MAP 43
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
Johnson, D.D. (1980): A Petrographic Study of the Cottonbelt Mine, Revelstoke Mining District, British Columbia, unpublished B.Sc. Thesis, University of Calgary, Calgary, Alberta

DATE CODED: 1986/03/17
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 201**

NATIONAL MINERAL INVENTORY:

NAME(S): **MEL 1200**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 32 30 N
LONGITUDE: 118 28 04 W
ELEVATION: 1900 Metres

NORTHING: 5711084
EASTING: 398213

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of Mel 1200, claim, Fig. 1 (Assessment Report 6347).

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Syngenetic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Index	

LITHOLOGY: Graphitic Schist
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area is underlain by metasediments of probable Lower Paleozoic Lardeau Group. Mineralized graphitic schist or chloritic phyllite, similar to enclosing rocks of the Goldstream deposit, outcrop on the claim.

BIBLIOGRAPHY

EMPR ASS RPT *6347, 15484
EMPR BULL 71
EMPR EXPL 1976-E67
EMPR MAP 25
EMPR OF 1999-2
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1986/03/26
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 202**

NATIONAL MINERAL INVENTORY:

NAME(S): **MEL 600**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 34 00 N
LONGITUDE: 118 23 34 W
ELEVATION: 1500 Metres

NORTHING: 5713763
EASTING: 403467

LOCATION ACCURACY: Within 5 KM

COMMENTS: Centre of Mel 600 Claim, Fig. 1 (Assessment Report 6347).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement Hydrothermal Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Cambrian
Triassic

GROUP

Lardeau

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Meta Sediment/Sedimentary
Quartz Monzonite
Hornfels
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

The area is underlain by metasedimentary rocks of probable Lower Paleozoic Lardeau Group. A large Triassic (?) aged intrusive body cuts the metasediments, altering the rocks to hornfels and skarn.

Minor chalcopyrite and pyrrhotite occur in the contact metamorphic zone.

BIBLIOGRAPHY

EMPR ASS RPT *6347, 15484
EMPR BULL 71
EMPR EXPL 1976-E67
EMPR OF 1999-2
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1986/03/26
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 203**

NATIONAL MINERAL INVENTORY:

NAME(S): **MEL 200**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 34 00 N
LONGITUDE: 118 26 34 W
ELEVATION: 2000 Metres

NORTHING: 5713830
EASTING: 400001

LOCATION ACCURACY: Within 5 KM

COMMENTS: Centre of Mel 200 Claim, Fig. 1 (Assessment Report 6347).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrrhotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Replacement Hydrothermal Skarn
TYPE: K01 Cu skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Lardeau		
Cambrian		Index	Unnamed/Unknown Informal

LITHOLOGY: Meta Sediment/Sedimentary
Quartz Monzonite
Hornfels
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Contact

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE: Hornfels

CAPSULE GEOLOGY

The area is underlain by metasediments of probable Lower Paleozoic Lardeau Group. A large Triassic (?) aged intrusive body cuts the metasedimentary rocks, developing hornfels and skarn.

Minor chalcopyrite and pyrrhotite occur in the contact metamorphic zone.

BIBLIOGRAPHY

EMPR ASS RPT *6347, 15484
EMPR BULL 71
EMPR EXPL 1976-E67
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1986/03/26
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 204**

NATIONAL MINERAL INVENTORY:

NAME(S): **NEXT 1**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 37 30 N
LONGITUDE: 118 31 34 W
ELEVATION: 1000 Metres

NORTHING: 5720434
EASTING: 394361

LOCATION ACCURACY: Within 5 KM
COMMENTS: Trench. Fig. 2 (Assessment Report 6347).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Index	

LITHOLOGY: Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area is underlain by probable Lower Paleozoic Lardeau Group metasediments and metavolcanics. A bulldozed trench revealed chalcopyrite in chloritic phyllite rubble.

BIBLIOGRAPHY

EMPR ASS RPT *6347, 15484
EMPR EXPL 1976-E67
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
GCNL Apr.14, June 14, Aug.11, Oct.22, 1976
WWW <http://www.orphanboy.com/gstream.html>

DATE CODED: 1986/03/26
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 205**

NATIONAL MINERAL INVENTORY:

NAME(S): **STAN**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 40 00 N
LONGITUDE: 118 30 04 W
ELEVATION: 800 Metres

NORTHING: 5725032
EASTING: 396187

LOCATION ACCURACY: Within 5 KM

COMMENTS: Boundaries of Stan 500 and 600 claims, Fig. 1 (Assessment Report 6347).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Lardeau	Undefined Formation	

LITHOLOGY: Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area is underlain by probable Lower Paleozoic Lardeau Group metasediments.
Galena occurs in narrow quartz stringers.

BIBLIOGRAPHY

EMPR ASS RPT *6347
EMPR EXPL 1976-E67
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
WWW <http://www.orphanboy.com/gstream.html>

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

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 206**

NATIONAL MINERAL INVENTORY:

NAME(S): **MB**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 20 N
LONGITUDE: 119 09 04 W
ELEVATION: 1580 Metres

NORTHING: 5652645
EASTING: 349083

LOCATION ACCURACY: Within 500M

COMMENTS: Description (Assessment Report 11808); north side of Hudson Creek.

COMMODITIES: Silver Lead

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
ALTERATION: Quartz Ankerite Mariposite
ALTERATION TYPE: Silicific'n Carbonate Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Schist
Limestone
Quartzite
Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The property is underlain by Paleozoic graphitic schists in contact with limestone, dolomite and limy quartzites of the Eagle Bay Formation.

A 1.5 to 2.0 metre wide, flatly dipping quartz vein striking west-northwest contains argentiferous galena. Disseminated galena is also noted in dolomitic limestone bands near the contact with the schists.

Soil geochemistry identified highly anomalous lead values. A quartz ankerite mariposite alteration zone with economic values of silver (unverified) corresponds to a magnetic low (Assessment Report 11808).

BIBLIOGRAPHY

EMPR ASS RPT 10272, 11808
EMPR EXPL 1982-107; 1983-152
GSC MAP 48-1963
GSC OF 290; 637
GSC P 75-1A

DATE CODED: 1986/04/07
DATE REVISED: 1986/04/07

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 207**

NATIONAL MINERAL INVENTORY:

NAME(S): **SPARKLE 4**, METAL CREST

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5655142
EASTING: 328489

LATITUDE: 51 01 20 N
LONGITUDE: 119 26 44 W
ELEVATION: 550 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Fig. 4 (Assessment Report 13381). This report (p. 29) suggests this showing is the Metal Crest (082LNW014) occurrence.

COMMODITIES: Lead Silver Copper Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite Magnetite
ASSOCIATED: Quartz Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant Disseminated
CLASSIFICATION: Replacement
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Chert
Argillite
Quartzite
Limestone
Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
RELATIONSHIP:
GRADE:

CAPSULE GEOLOGY

The property is underlain by rocks of the Cambrian to Ordovician Eagle Bay Formation consisting of metamorphosed felsic to basic volcanics, black argillite and minor quartzite and limestone.

The showing is a mineralized quartz-carbonate vein hosted by a cherty horizon within mafic metavolcanics. Mineralization consists of galena, pyrite, chalcopyrite and sphalerite in the quartz-calcite vein and pyrite, galena and magnetite in a 1.5 by 35 metre chert horizon.

BIBLIOGRAPHY

EMPR AR 1929-218
EMPR ASS RPT 13381
GSC MAP 48-1963
GSC MEM 296, p. 146
GSC OF 290; 637

DATE CODED: 1986/04/07
DATE REVISED: 1986/04/07

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 208**

NATIONAL MINERAL INVENTORY:

NAME(S): **JIM**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 20 N
LONGITUDE: 119 22 04 W
ELEVATION: 1450 Metres

NORTHING: 5662376
EASTING: 334182

LOCATION ACCURACY: Within 500M

COMMENTS: Geology map (Assessment Report 11253). Discovery showing (082M 154) is located 1.3 kilometres to the west.

COMMODITIES: Lead Zinc Manganese Silver

MINERALS

SIGNIFICANT: Galena Sphalerite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Replacement Industrial Min.
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Greenstone
Limestone
Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The property is underlain by sediments and volcanics of the Eagle Bay Formation. The rocks consist of limestones and greenstones. These are overlain by argillaceous phyllites. The rocks strike northeast and dip 30 to 45 degrees northwest. Galena, sphalerite and manganese occur at the base of the greenstones adjacent to the limestones.

BIBLIOGRAPHY

EMPR ASS RPT 6388, 7371, *8348, *11253, 12848, 13760, 14126
EMPR EXPL 1977-87; 1978-102; 1979-108; 1982-108; 1984-111,112
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/04/07
DATE REVISED: 1986/04/07

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 209**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLDEN EAGLE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 10 N
LONGITUDE: 119 28 04 W
ELEVATION: 1050 Metres

NORTHING: 5656739
EASTING: 326983

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of claim.

COMMODITIES: Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite Galena Sphalerite Arsenopyrite

Magnetite

ASSOCIATED: Quartz

ALTERATION: Limonite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE

Paleozoic
Cretaceous

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY:

Schist
Quartzite
Granite
Granodiorite
Greenstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The property is underlain in the west by Lower Paleozoic Eagle Bay metavolcanics and metasediments consisting of chlorite schist, mica schist, greenstone and quartzite. The eastern part of the claim is underlain by granitic rocks of Cretaceous age.

Several mineralized veins, striking north to northeast and dipping to the west, occur within the metamorphic and granitic rocks. Mineralization consists of pyrite, chalcopyrite, magnetite, and limonite with minor sphalerite, galena and arsenopyrite.

BIBLIOGRAPHY

EMPR ASS RPT *11898, 13204, 13513
EMPR MAP 56
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/04/08
DATE REVISED: 1986/04/08

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 210**

NATIONAL MINERAL INVENTORY:

NAME(S): **FIR, DON**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 40 N
LONGITUDE: 119 24 34 W
ELEVATION: 1600 Metres

NORTHING: 5661236
EASTING: 331224

LOCATION ACCURACY: Within 500M

COMMENTS: Geology map (Assessment Report 7371).

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena Tetrahedrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Limestone
Tuff
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1976

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver

2976.0000

Grams per tonne

Lead

44.2500

Per cent

COMMENTS: The sample width is 5 centimetres.

REFERENCE: Assessment Report 6388.

CAPSULE GEOLOGY

The property is underlain by sediments and volcanics of the Cambrian to Ordovician Eagle Bay Formation, consisting of limestones, schists and tuffs.

Mineralized quartz veins, trending southeast, occur within the volcanics and limestones. The veins carry galena and tetrahedrite. A 5.0 centimetre wide vein gave 44.25 per cent lead and 2976 grams per tonne silver and a 46 centimetre wide vein ran 4.92 per cent lead and 429 grams per tonne silver.

BIBLIOGRAPHY

EMPR ASS RPT *6388, *7371, *8348, *11253, 12848, 13760, 14126
EMPR EXPL 1976-59; 1977-87; 1978-102; 1979-108; 1982-108;
1984-111,112
GSC MAP 48-1963
GSC OF 637
GCNL Apr. 15, Nov. 4, 1980; Oct. 21, 1982; June 14, 1983
IPDM v. 7, No. 2, March/April 1984, p. 9 (Bachelor, D., 1984)
N MINER July 5, 1984

DATE CODED: 1986/04/08
DATE REVISED: 1986/04/08

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 211**

NATIONAL MINERAL INVENTORY:

NAME(S): **WAD-SECOND**

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 50 N
LONGITUDE: 119 36 04 W
ELEVATION: 1800 Metres

NORTHING: 5658296
EASTING: 317679

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Fig 4A (Assessment Report 13192).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Chalcopyrite Sphalerite Galena
ALTERATION: Quartz Calcite Chlorite Mariposite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant Massive Disseminated
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Chert
Basic Extrusive
Tuff
Phyllite
Rhyodacite
Diorite
Granodiorite
Quartz Porphyry
Basalt
Andesite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1986
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 3.7700 Grams per tonne
Copper 0.0800 Per cent
Lead 0.0500 Per cent
Zinc 4.1800 Per cent

COMMENTS: The sample width is 0.55 metres.
REFERENCE: Assessment Report 14716.

CAPSULE GEOLOGY

The property is underlain by northeast trending, folded and metamorphosed mafic and intermediate volcanics, volcanoclastics and sediments of the Late Devonian to Early Mississippian age Eagle Bay Formation. These rocks are intruded by dykes and stocks of diorite, diabase, granodiorite and quartz porphyry.

The metavolcanics comprise a lower unit of mafic flows and breccias of basaltic composition, intercalated with detrital sediment, chert lenses and intermediate volcanic rocks. These rocks are overlain by intermediate volcanic flows, breccias and volcanoclastics of andesitic to rhyodacite composition.

Structure in the area is dominated by a northeasterly trending overturned synform cut by several north trending right lateral faults.

The Wad-second showing is disseminated, veinlet and semi-massive pyrite, pyrrhotite with lesser chalcopyrite, sphalerite and galena hosted by an altered chert horizon. The chert host is altered with

CAPSULE GEOLOGY

secondary quartz, calcite, chlorite and mariposite. This mineralization, although possibly remobilized by later synmetamorphic folding, appears to be syngenetic and conformable with the enclosing country rocks.

The mineralization is exposed for 4 metres and a grab sample assayed 0.38 per cent lead, 0.36 per cent zinc, 0.20 per cent copper and 12 grams per tonne silver (Assessment Report 13192). Subsequent drilling in the area intersected mineralized horizons in tuffs and phyllites overlying a rhyodacite flow and in greenstones and chloritized rhyodacites. Drill hole AX26 intersected 0.275 per cent zinc, 0.047 per cent lead, 0.108 per cent copper, and 1.6 grams per tonne silver over 5.58 metres and 400 metres to the northeast, drill hole A1 intersected 4.18 per cent zinc, 0.05 per cent lead, 0.08 per cent copper and 3.77 grams per tonne silver over 0.55 metres (Assessment Report 14716).

A 1986 drill hole intersected 0.36 per cent zinc, 0.07 per cent lead, 0.27 per cent copper, 7.2 grams per tonne silver, and 0.17 grams per tonne gold over 2.9 metres (Assessment Report 15609).

BIBLIOGRAPHY

EMPR ASS RPT *13192, *14716, 15609
EMPR EXPL 1984-116; 1986-C111
EMPR INF CIRC 1985-1, pp. 24,36
EMPR MAP 56
EMPR OF 1999-2
GSC MAP 48-1963
GSC OF 637
GCNL #208, 1984; Oct. 16, 1985

DATE CODED: 1986/04/14
DATE REVISED: 1987/07/20

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 212**

NATIONAL MINERAL INVENTORY:

NAME(S): **AXL 3**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5658070
EASTING: 315332

LATITUDE: 51 02 40 N
LONGITUDE: 119 38 04 W
ELEVATION: 1900 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Drill holes, Drawing No. 1 (Assessment Report 13542).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Pyrite Galena Sphalerite Pyrrhotite Chalcopyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Phyllite
 Tuff
 Rhyodacite
 Limestone
 Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 12.3400 Grams per tonne
Copper 0.0100 Per cent
Lead 0.0200 Per cent
Zinc 0.2880 Per cent
COMMENTS: The sample width is 6.1 metres.
REFERENCE: Assessment Report 13542.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestones and greenschist. The metavolcanics and metasediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

The AXL 3 showing lies 3.5 kilometres southwest of the Lucky Coon (082M 012). Mineralization is exposed adjacent to bedded cherty tuffs within phyllites. Drilling, 1300 metres to the south east, intersected a mineralized horizon in rhyodacite tuff with assays of 0.288 per cent zinc, 0.02 per cent lead, 0.01 per cent copper and 12.34 g/tonne silver over 6.1 metres in Hole No. AX1 and 0.15 per cent zinc, 0.07 per cent lead, 0.04 per cent copper and 3.43 grams per tonne silver over 4.9 metres in Hole No. AX2.

BIBLIOGRAPHY

EMPR ASS RPT 6546, 6549, 7019, 11521, 11933, 12724, 13142,
*13542, 14716
EMPR EXPL 1984-113; 1986-C111

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 893
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR MAP *56
EMPR OF 1999-2
GSC MAP 48-1963; 5320G
GSC OF 637
GCNL Aug. 27, 1985
IPDM Nov./Dec. 1985
NAGMIN July 19, Nov. 19, 1985

DATE CODED: 1986/04/17
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 213**

NATIONAL MINERAL INVENTORY: 082M14 Pb1

NAME(S): **ELSIE (L.5227)**, BILLIE (L.5228)

STATUS: Developed Prospect

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082M04E

BC MAP:

LATITUDE: 51 04 10 N

LONGITUDE: 119 37 34 W

ELEVATION: 1820 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5660828

EASTING: 316016

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of showings, Fig 2A (Assessment Report 11521).

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive

CLASSIFICATION: Replacement Syngenetic

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

SHAPE: Cylindrical

MODIFIER: Folded

DIMENSION: 0800 x 0003 Metres

STRIKE/DIP: 055/40N

TREND/PLUNGE:

COMMENTS: General strike of strata; approximate size of deposit.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Undefined Group	Eagle Bay	

LITHOLOGY: Greenschist
Phyllite
Limestone
Greenstone
Chlorite Schist
Quartzite
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Adams Plateau

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1930

SAMPLE TYPE: Rock

COMMODITY

Silver

GRADE

357.0000

Grams per tonne

Lead

26.0000

Per cent

Zinc

10.2000

Per cent

COMMENTS: The sample was 0.75 metres in width.

REFERENCE: Annual Report 1930, page 185.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestones and greenschist. The metavolcanics and metasediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

Mineralization comprises sulphides of silver, lead and zinc within metasedimentary rocks on the north limb of the Nitwikaia synform. The showings occur within a dominantly metasedimentary succession (EBGs) of siliceous and/or graphitic phyllite, calcareous phyllite, streaky banded calc-silicate rock, limestone, and quartzite. The metasediments are stratigraphically underlain by chloritic schists and greenstone (EBG Preto et al in preparation).

The mineralization occurs as layers, lenses and pods of

CAPSULE GEOLOGY

semi-massive to massive sulphides, generally within a siliceous gangue. The sulphide horizons are generally well banded and conformable to the schistosity and, where observed, to the bedding. Intense deformation of the rocks has caused discontinuity and marked variability in the widths of the sulphide horizons which tend to thicken in the hinge zones of folds.

The Elsie deposit, 1200 metres southwest of the Lucky Coon (082M 012), consists of several showings and drill intersections along an 800 metre strike length. Mineralization, averaging 30 centimetres wide, is semi-massive galena, sphalerite, pyrite and minor chalcopyrite within greenschist underlain by black phyllites. A 0.75 metre sample from an adit assayed 357 grams per tonne silver, 26 per cent lead and 10.2 per cent zinc.

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 223-246
EMPR AR 1927-199,200; 1928-210; 1929-218; 1930-184,185; 1936-D40-43
EMPR ASS RPT 1936, 2616, 6513, 7019, 9915, 10665 (same as 11022),
*11521, 11601, *11933, *13142, *13381, *13542, *16024
EMPR EXPL 1977-E91; 1982-108,109; 1983-156; 1984-113; 1985-C100
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; 1984, pp. 67-76
EMPR MAP 56
EMR MP CORPFILE (Norlex Mines Limited, East Lemhi Mining Company,
Consolidated Giant Metallics Ltd., Adams Silver Resources Inc.)
GSC MAP 48-1963; 5320G
GSC OF *637
GCNL Oct. 29, Dec. 12, 1984; June 13, 1985; #228, 1987
N MINER Nov. 1, 1984
NAGMIN Nov. 9, 1984 (p. 1); June 7 (p. 14), Nov. 19, 1985
Dickie, G.J., Preto, V.A. and Schiarizza, P., (in preparation
1986): *Mineral Deposits of the Adams Plateau - Clearwater area
Hainsworth, W.G. (1973): Report on the Lucky Coon Claims, Aug.
1973 in Consolidated Giant Metallics Ltd. Statement of
Material Facts, October 17, 1973
EMPR OF 2000-22

DATE CODED: 1986/04/17
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 214**

NATIONAL MINERAL INVENTORY:

NAME(S): **VIC 5, ELMOORE 5, BECA**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 50 N
LONGITUDE: 119 42 04 W
ELEVATION: 800 Metres

NORTHING: 5658548
EASTING: 310671

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Lead Copper Silver Zinc

MINERALS

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

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
DIMENSION: 0200 Metres STRIKE/DIP: 150/72E TREND/PLUNGE:
COMMENTS: Quartz vein, 0.5 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Greenstone
Greenschist
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1966
SAMPLE TYPE: Channel
COMMODITY GRADE
Silver 3.4000 Grams per tonne
Copper 0.2300 Per cent
Lead 0.1900 Per cent
Zinc 0.0800 Per cent

COMMENTS: The sample width is 0.5 metres.
REFERENCE: Assessment Report 904.

CAPSULE GEOLOGY

The property is underlain by Devonian to Mississippian age Eagle Bay Formation. The rocks consist of greenstones, greenschists and chlorite schists trending northeast and dipping 35 to 45 degrees northwest.
The Vic 5 showing lies 600 metres northeast of the Elmoore showing. A 0.5 metre wide quartz vein occurs within greenschist along a 200 metre length trending 150 degrees and dipping 72 degrees northeast. Intermittent mineralization consisting of galena, pyrite and chalcopyrite occur within the quartz vein. A 0.5 metre sample assayed 3.4 grams per tonne silver, 0.23 per cent copper, 0.19 per cent lead and 0.08 per cent zinc.

BIBLIOGRAPHY

EMPR AR 1966-145,146
EMPR ASS RPT *904, 1114, *2650, 4504
EMPR GEM 1970-317
EMPR MAP *56
GSC MAP 48-1963; 5320G

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 897
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1986/04/26
DATE REVISED: 1986/04/26

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 215**

NATIONAL MINERAL INVENTORY:

NAME(S): **AD 1**

MINING DIVISION: Kamloops

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M04E
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 20 N
 LONGITUDE: 119 31 34 W
 ELEVATION: 1650 Metres

NORTHING: 5657186
 EASTING: 322904

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Dwg. No. 4 (Assessment Report 13514).

COMMODITIES: Silver Gold Zinc Lead Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite Pyrrhotite
 Magnetite
 ASSOCIATED: Quartz Epidote Chlorite Garnet Calcite
 ALTERATION: Quartz Chlorite Epidote
 ALTERATION TYPE: Silicific'n Chloritic Epidote
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive
 CLASSIFICATION: Unknown
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
 Greenschist
 Tuff
 Rhyodacite
 Argillite
 Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Rock

YEAR: 1984

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	2.9000	Grams per tonne
Gold	3.3500	Grams per tonne
Copper	0.0400	Per cent
Lead	0.0500	Per cent
Zinc	0.0080	Per cent

REFERENCE: Assessment Report 13514.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestones and greenschist. The metavolcanics and metasediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends.

Several thin and discontinuous zones of massive sulphides containing pyrrhotite, pyrite, magnetite, chalcopyrite, sphalerite, and galena are concordant with the metavolcanics and metasediments. Minor galena, chalcopyrite, and sphalerite mineralization occurs in a 17 metre wide zone within intercalated argillite and rhyolite. The mineralization is associated with silicification and chloritization.

A sample of the main zone gave 3.35 grams per tonne gold, 2.9 grams per tonne silver, 0.05 per cent lead, 0.04 per cent copper,

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 899
REPORT: RGEN0100

CAPSULE GEOLOGY

and 0.008 per cent zinc (Assessment Report 13514).

BIBLIOGRAPHY

EMPR ASS RPT *13514, *15772
EMPR MAP 56
EMPR OF 1999-2
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/05/01
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 216**

NATIONAL MINERAL INVENTORY:

NAME(S): **AD 18**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 00 N
LONGITUDE: 119 29 04 W
ELEVATION: 1380 Metres

NORTHING: 5656469
EASTING: 325804

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrences, Dwg. No. 4 (Assessment Report 13514).

COMMODITIES: Silver Gold Zinc Lead Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite Pyrrhotite
ASSOCIATED: Quartz Epidote Chlorite Garnet Calcite
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Disseminated
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Undefined Group Eagle Bay

LITHOLOGY: Phyllite
Greenschist
Tuff
Porphyritic Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1984
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 1.0100 Grams per tonne
Gold 0.0530 Grams per tonne
Copper 0.1300 Per cent
Lead 0.5000 Per cent
Zinc 6.3700 Per cent
REFERENCE: Assessment Report 13514.

CAPSULE GEOLOGY

The area is underlain by the Lower Cambrian part of the Eagle Bay Formation consisting of siliceous and graphitic phyllites, phyllitic limestones and greenschist. The metavolcanics and metasediments generally strike northeast and dip 10 to 40 degrees northwest. The rocks are cut by Late Cretaceous or Early Tertiary quartz-feldspar porphyry and mafic dykes with northerly trends. Several thin and discontinuous zones of massive sulphides are concordant with the metavolcanics and metasediments. A sample of one zone assayed 6.37 per cent zinc, 0.5 per cent lead, 0.13 per cent copper and high values for gold and silver (Assessment Report 13514).

BIBLIOGRAPHY

EMPR ASS RPT *13514
EMPR MAP 56
EMPR OF 1999-2
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 901
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1986/05/01
DATE REVISED: 1986/05/01

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 902
REPORT: RGEN0100

MINFILE NUMBER: **082M 217**

NATIONAL MINERAL INVENTORY:

NAME(S): **PAT 700**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 37 50 N
LONGITUDE: 118 23 34 W
ELEVATION: 900 Metres

NORTHING: 5720868
EASTING: 403602

LOCATION ACCURACY: Within 500M

COMMENTS: Description and Map 85-2 (Assessment Report 14033).

COMMODITIES: Lead Copper Silver

MINERALS

SIGNIFICANT: Galena Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

DIMENSION:
COMMENTS: Direction of vein.

STRIKE/DIP: 360/80W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Lardeau	Index	

LITHOLOGY: Chlorite Schist
Sericite Quartz Schist
Greenstone
Limestone
Chlorite Sericite Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by probable Lower to Middle Paleozoic metasediments and metovolcanics of the Lardeau Group. The rocks consist of intercalated micaceous quartzite, sericite-quartz schist, chlorite-sericite schist, chlorite schist, greenstone, and limestone. A strong regional foliation strikes southeast and dips variably to the northeast.

Narrow discordant quartz veins carrying minor galena and chalcopyrite occur within chlorite schist. Two of the better mineralized veins carried silver values as well. The vein set rarely exceeds 0.5 metres in width and strikes north with steep westerly dips.

BIBLIOGRAPHY

EMPR ASS RPT *14033
EMPR BULL 71, p. 45
EMPR EXPL 1985-C108
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1986/05/09
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 217**

MINFILE NUMBER: **082M 218**

NATIONAL MINERAL INVENTORY:

NAME(S): **CHIP - DIXIE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 14 50 N
LONGITUDE: 119 59 24 W
ELEVATION: 730 Metres

NORTHING: 5681565
EASTING: 291330

LOCATION ACCURACY: Within 500M

COMMENTS: Gossan zone, Map C84-19-3 (Assessment Report 13036).

COMMODITIES: Copper Zinc Gold

MINERALS

SIGNIFICANT: Pyrite
ALTERATION: Silica Limonite
ALTERATION TYPE: Silicific'n Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
CLASSIFICATION: Unknown
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular
MODIFIER: Sheared
DIMENSION: 0950 x 0200 Metres STRIKE/DIP: 100/45N TREND/PLUNGE:
COMMENTS: Attitude of schistosity; dimension of gossan zone.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian Undefined Group Eagle Bay

LITHOLOGY: Tuff
Phyllite
Gossan
Quartz Feldspar Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.0100 Per cent
Zinc 0.6600 Per cent
REFERENCE: Assessment Report 13036.

CAPSULE GEOLOGY

The property is underlain by alternating units of intermediate volcanics and poorly sorted sediments of the Devonian or Mississippian age Eagle Bay Formation (unit EBF, Map 56). A sulphide bearing gossan zone, measuring 950 by 200 metres, is composed of rusty weathering and slightly friable crystal and "quartz eye" tuff, sometimes silicified and sheared. A grab sample assayed 0.02 per cent copper and 20 parts per billion gold. Also exposed in the gossan zone is a heavily mineralized outcrop of quartz-feldspar porphyry. A grab sample returned 0.66 per cent zinc and 0.01 per cent copper (Assessment Report 13036).

BIBLIOGRAPHY

EMPR ASS RPT *13036
EMPR EXPL 1984-119
EMPR MAP 56
EMPR OF 1999-2
GSC MAP 48-1963

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 904
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 637

DATE CODED: 1986/05/13
DATE REVISED: 1986/05/13

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 219**

NATIONAL MINERAL INVENTORY:

NAME(S): **PERCY**, GIN, BIRK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5692141
EASTING: 297573

LATITUDE: 51 20 40 N
LONGITUDE: 119 54 24 W
ELEVATION: 1205 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Drill hole P82-1 (Assessment Report 11033).

COMMODITIES: Copper Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Sphalerite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Disseminated Massive
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE: Devonian GROUP: Undefined Group FORMATION: Eagle Bay IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Quartz Sericite Schist
Argillite
Felsic Volcanic

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: TRENCH REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Rock
COMMODITY: GRADE
Silver 5.8000 Grams per tonne
Gold 0.1700 Grams per tonne
Zinc 0.0500 Per cent

COMMENTS: The sample width is 1 metre.
REFERENCE: Assessment Report 8489.

CAPSULE GEOLOGY

Mineralization on the Percy 1 claim occurs as pods and lenses of massive pyrrhotite and pyrite with minor chalcopyrite in felsic volcanic rocks (now quartz sericite schist) and as small stringers of sphalerite and galena in argillites.

A 1 metre trench sample assayed 0.41 per cent copper, 0.05 per cent zinc, 5.8 grams per tonne silver and 0.17 grams per tonne gold. A nearby drill hole intersected 0.73 per cent copper across 2.7 metres (Assessment Report 8489).

Sphalerite and galena stringers within argillite occur 900 metres south of the drill hole.

BIBLIOGRAPHY

EMPR ASS RPT 3150, 5150, *8489, *10582, *11033, 14388
EMPR EXPL 1971-440; 1976-E62, 1982-114; 1986-C115
EMPR FIELDWORK 1984, pp. 67-76
EMPR MAP 53; *56
EMPR OF 1999-2; 2000-7
GSC MAP 48-1963
GSC OF 637
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986): Mineral Deposits of the Adams Plateau - Clearwater area.
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau - Clearwater Region; GSA

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 906
REPORT: RGEN0100

BIBLIOGRAPHY

Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1986/05/13
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 220**

NATIONAL MINERAL INVENTORY:

NAME(S): **COPPER CLIFF**

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M05W
 BC MAP:
 LATITUDE: 51 19 30 N
 LONGITUDE: 119 55 14 W
 ELEVATION: 840 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Showing, Plate 2 (Assessment Report 6879); Map No. 3 (Assessment Report 70).

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5690017
 EASTING: 296520

COMMODITIES: Copper Lead Zinc Silver

MINERALS

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

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive
 CLASSIFICATION: Volcanogenic Syngenetic
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
 Limestone
 Argillite
 Phyllite
 Felsic Tuff
 Felsic Flow
 Porphyritic Granodiorite
 Quartz Diorite
 Quartz Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: LENS REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1924
 SAMPLE TYPE: Grab
 COMMODITY GRADE
 Silver 20.6000 Grams per tonne
 Copper 1.5000 Per cent
 REFERENCE: Annual Report, 1924.

CAPSULE GEOLOGY

The area is underlain by metavolcanic and lesser meta-sedimentary rocks of the Eagle Bay Formation of Devonian to Mississippian age. The volcanics include felsic tuffs and flows, metamorphosed to quartz-sericite schists and quartz-chlorite schists. The metavolcanics are intercalated with and overlain by limestone and graphitic argillite and phyllite. The rocks trend east-west, with a prominent foliation dipping 5 to 20 degrees to the north. Small stocks of fine-grained, porphyritic granodiorite to quartz diorite intrude the metavolcanics. The Cretaceous Baldy Batholith of quartz monzonite to granodiorite composition lies north of the area. Mineralization on the Copper Cliff showing consists of a lens of massive pyrite with minor galena, sphalerite and chalcopyrite in quartz-sericite schist. A grab sample assayed 1.5 per cent copper and 20.6 grams per tonne silver (Annual Report 1924).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 908
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1924-153
EMPR ASS RPT 69, 70, 3333, 6202, 6879, 14388
EMPR EXPL 1976-E61; 1978-E107; 1986-C115
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; *1984, pp. 67-76
EMPR MAP 53; *56
EMPR OF 1999-2; 2000-7
GSC MAP 48-1963
GSC OF 637
GCNL #75, 1986
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation
1986): *Mineral Deposits of the Adams Plateau - Clearwater area
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral
Deposits of the Adams Plateau - Clearwater Region; GSA
Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1986/05/13
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 221**

NATIONAL MINERAL INVENTORY: 082M5 Cu2

NAME(S): **RAINBOW**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 19 20 N
LONGITUDE: 119 54 59 W
ELEVATION: 800 Metres

NORTHING: 5689697
EASTING: 296798

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Map 3 (Assessment Report 6202).

COMMODITIES: Copper Lead Zinc Silver

MINERALS

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

DEPOSIT

CHARACTER: Stratabound Stratiform Disseminated Massive
CLASSIFICATION: Volcanogenic Syngenetic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
DIMENSION: 0075 x 0003 Metres STRIKE/DIP: 100/20S TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Sericite Schist
Limestone
Argillite
Felsic Tuff
Phyllite
Felsic Flow
Porphyritic Granodiorite
Quartz Chlorite Schist
Quartz Diorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: LENS REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1976
SAMPLE TYPE:	Grab		
COMMODITY	GRADE		
Silver	13.4000	Grams per tonne	
Copper	3.0800	Per cent	
Lead	0.4000	Per cent	
Zinc	0.2200	Per cent	

REFERENCE: Assessment Report 6202.

CAPSULE GEOLOGY

The area is underlain by metavolcanic and lesser meta-sedimentary rocks of the Eagle Bay Formation of Devonian to Mississippian age. The volcanics include felsic tuffs and flows, metamorphosed to quartz-sericite schists and quartz-chlorite schists. The metavolcanics are intercalated with and overlain by limestone, graphitic argillite and phyllite. The rocks trend northwest, with a prominent foliation dipping moderately to the southwest, and locally striking east-west with a moderate southwest dip. Small stocks of fine-grained, porphyritic granodiorite to quartz diorite intrude the metavolcanics. The Cretaceous Baldy Batholith of quartz monzonite to granodiorite composition lies north of the area.

CAPSULE GEOLOGY

The Rainbow showing is exposed in cliffs and several adits on the south side of Birk Creek. A 3.5 metre sulphide-rich section within generally contorted quartz-eye sericitic schist and carbonaceous quartz schist overlain by sulphide-poor sericite schist. The schists are in fault contact with limestone to the east.

The sulphides occur as massive pods, up to 3 metres thick, of pyrite with minor chalcopyrite and as disseminated pyrite, galena, sphalerite and chalcopyrite. A grab sample of a massive pyrite lens assayed 3.08 per cent copper, 0.40 per cent lead, 0.22 per cent zinc and 13.4 grams per tonne silver (Assessment Report 6202).

BIBLIOGRAPHY

- EMPR AR 1927-190; 1928-211
EMPR ASS RPT 69, 70, 3333, *6202, *6879, 11033, 14388
EMPR EXPL 1976-E61; 1978-E107; 1986-C115
EMPR FIELDWORK 1978, pp. 31-37; 1979, pp. 28-36; *1984, pp. 67-76
EMPR MAP 53; 56
EMPR OF 1999-2; 2000-7
GSC MAP 48-1963
GSC OF 637
GCNL #75, 1986
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986): Mineral Deposits of the Adams Plateau - Clearwater area.
Preto, V.A. and Schiarizza, P. (1985): *Geology and Mineral Deposits of the Adams Plateau - Clearwater Region; GSA Cordilleran Section Meeting May 1985, pp. 16-1 to 16-11

DATE CODED: 1986/05/13
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 222**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAD, RUSSEL CREEK**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 15 N
LONGITUDE: 119 51 54 W
ELEVATION: 1150 Metres

NORTHING: 5687549
EASTING: 300299

LOCATION ACCURACY: Within 500M

COMMENTS: DDH Cad 84-1 (Assessment Report 13168).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena
ASSOCIATED: Quartz Calcite
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Phyllite
Andesite
Argillite
Chlorite Talc Schist
Limonite Quartz
Limestone
Mudstone
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1984

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	15.6000	Grams per tonne
Lead	0.0400	Per cent
Zinc	1.2000	Per cent

COMMENTS: Taken from a 10 centimetre wide vein.
REFERENCE: Assessment Report 13168.

CAPSULE GEOLOGY

Two diamond drill holes intersected intermediate volcanic and graphitic sedimentary rocks, dipping steeply east. The volcanics consist of andesites and the sediments are largely graphitic mudstones and argillites.

One drill hole (DDH CAD 84-1) intersected zinc mineralization near the top of an andesite flow, overlain by the sediments. A 1.7 metre sample assayed 0.65 per cent zinc and 2.0 grams per tonne silver.

A second hole (DDH CAD 84-2) intersected narrow quartz-carbonate veins with specks of sphalerite and galena within graphitic argillite and siltstone. A 10 centimetre wide vein assayed 1.2 per cent zinc, 15.6 grams per tonne silver and 0.04 per cent lead, and a 60 centimetre wide vein assayed 0.05 per cent zinc, 0.10 per cent lead and 3.6 grams per tonne silver. The drill hole is located 1000 metres west of the first.

The area is underlain by shallow dipping Devonian or older

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 912
REPORT: RGEN0100

CAPSULE GEOLOGY

age Eagle Bay Formation consisting of phyllite and calcareous phyllite.

BIBLIOGRAPHY

EMPR ASS RPT *13168, 14397, *16331
EMPR MAP 56
EMPR OF 2000-7
EMPR PF (Prospectus Report by N. Jorgensen, 1987)
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/05/16
DATE REVISED: 1987/12/29

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 223**

NATIONAL MINERAL INVENTORY:

NAME(S): **ADON V**, NSM

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 10 N
LONGITUDE: 119 46 34 W
ELEVATION: 900 Metres

NORTHING: 5687156
EASTING: 306488

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Fig No. 350-3 (Assessment Report 13334).

COMMODITIES: Lead Zinc Silver Copper Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Quartz Biotite Garnet Schist
Argillite
Shale
Greenschist
Phyllite
Agglomerate
Quartzite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1984
SAMPLE TYPE: Grab	
COMMODITY	<u>GRADE</u>
Silver	720.0000 Grams per tonne
Gold	0.8850 Grams per tonne
Copper	0.0210 Per cent
Lead	0.3950 Per cent
Zinc	0.4000 Per cent

REFERENCE: Assessment Report 13334.

CAPSULE GEOLOGY

The property is underlain by Devonian or older Eagle Bay Formation metavolcanics consisting of greenschists, phyllites, agglomerate, quartzites, limestone, quartz biotite garnet schist, argillite, and shale.

A broad northwest trending syncline cuts northwest through the property.

A showing at the faulted contact of argillite and limestone units consists of quartz veins and lenses containing variable amounts of galena, sphalerite, chalcopyrite, and pyrite. A grab sample from this showing assayed 0.021 per cent copper, 0.395 per cent lead, 0.40 per cent zinc, 0.885 grams per tonne gold, and 720 grams per tonne silver.

A second showing apparently consists of scattered chalcopyrite, galena, and sphalerite in quartz veins (Assessment Report 13334).

BIBLIOGRAPHY

EMPR ASS RPT 4685, *13334, 14392, *15483

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 914
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR EXPL 1986-C118
EMPR MAP 56
EMPR OF 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/05/20
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 224**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK**

STATUS: Developed Prospect
 REGIONS: British Columbia
 NTS MAP: 082M13E
 BC MAP:

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5754274
 EASTING: 323195

LATITUDE: 51 54 40 N
 LONGITUDE: 119 34 14 W
 ELEVATION: 1150 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of zone outlined by drilling (Assessment Report 8317).
 See also 082M137, 225-228, 245-251.

COMMODITIES: Zinc Lead Silver Copper Gallium

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena Chalcopyrite
 ASSOCIATED: Quartz Diopside Calcite Amphibole Plagioclase
 Fluorite Vesuvianite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated Massive
 CLASSIFICATION: Sedimentary
 TYPE: S01 Broken Hill-type Pb-Zn-Ag±Cu E13 Irish-type carbonate-hosted Zn-Pb
 SHAPE: Tabular
 MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
 Quartz Feldspar Hornblende Gneiss
 Quartzite
 Marble
 Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Barkerville
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: CK REPORT ON: Y

CATEGORY: Indicated	YEAR: 1980
QUANTITY: 1490365 Tonnes	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	8.5000 Grams per tonne
Lead	1.4000 Per cent
Zinc	8.6000 Per cent

REFERENCE: George Cross News Letter November 26, 1986.

CAPSULE GEOLOGY

The CK area is underlain by metasedimentary rocks of the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex consisting of quartz-feldspar-hornblende gneiss, amphibolite, calc-silicate gneiss and minor quartzite and marble. The metasediments are cut by pegmatites and granitic intrusives.

The general structure of the area is composed of an east-facing succession folded into a broad open, east plunging synform. Locally the structures are complex resulting in dip reversals and repetition and omission of lithologies.

A sulphide layer, up to 2.1 kilometres long and 7.8 metres wide, is confined to a calcareous horizon that trends southeast on the southern limb of the synform. The calcareous horizon consists of calc-silicate gneiss and carbonates which is structurally underlain by hornblende gneiss and amphibolite and overlain by quartz-feldspar gneiss and pelitic schist.

The sulphide layer consists of massive sphalerite and pyrrhotite, minor galena and trace chalcopyrite. Gangue quartz, diopside, calcite, amphibole and plagioclase are common and fluorite

CAPSULE GEOLOGY

and vesuvianite occur locally. A 0.6 metre chip sample assayed 21.85 per cent zinc, 4.41 per cent lead and 0.057 per cent copper (Fieldwork 1979). Drilling results gave an average grade of 11.2 per cent zinc and 1.6 per cent lead over 2.5 metres along a 600 metre strike length (Assessment Report 7213).

The CK property overlies 12 mineralized lead-zinc occurrences where indicated reserves are 1,490,365 tonnes grading 8.6 per cent zinc, 1.4 per cent lead and 8.5 grams per tonne silver (George Cross News Letter November 26, 1986). See 082M 137, 225-228, 245-251.

In 1998, V.G. Wiens prospected the claims. BWI Resources Ltd. purchased the CK claims in 1999.

BIBLIOGRAPHY

EMPR ASS RPT *5189, *5192, *6909, *7213, *7299, *7644, *8317,
*16030, *17539, 18359, 19467, 25641
EMPR BULL 80, p. 87
EMPR EXPL 1978-E116; 1979-E118; 1980-146,147
EMPR FIELDWORK *1979, pp. 23-27
EMPR GEM 1974-99
EMPR MAP 65 (1989)
EMPR OF 1992-1
EMR MIN BULL MR 223 B.C. 79
GSC MAP 48-1963
GSC OF 637
GCNL #1(Jan.3), 1989; #131(Jul.10), 2000
EMPR OF 1998-10
EMPR OF 2000-22

DATE CODED: 1986/05/22
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 225**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - MIST**

MINING DIVISION: Kamloops

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M13E
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 56 10 N
 LONGITUDE: 119 33 34 W
 ELEVATION: 1500 Metres

NORTHING: 5757027
 EASTING: 324057

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Dwg. G-8355 (Assessment Report 5631).

COMMODITIES: Zinc Lead Copper Silver Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrrhotite Chalcopyrite
 ASSOCIATED: Quartz Calcite
 ALTERATION TYPE: Silicific'n
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated Massive
 CLASSIFICATION: Sedimentary Syngenetic
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
 SHAPE: Tabular
 DIMENSION: 0030 x 0001 Metres STRIKE/DIP: 350/40E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
 Pegmatite
 Amphibolite
 Quartz Feldspar Hornblende Gneiss
 Granitic Intrusive
 Quartzite
 Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Barkerville
 METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1979
SAMPLE TYPE: Drill Core	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	6.2000 Grams per tonne
Gold	0.2400 Grams per tonne
Copper	0.0100 Per cent
Lead	0.7100 Per cent
Zinc	3.9800 Per cent

COMMENTS: The sample width is 1.1 metre.
 REFERENCE: Fieldwork 1979, pages 23-27.

CAPSULE GEOLOGY

The area is underlain by metasedimentary rocks of the Shuswap Metamorphic Complex consisting of quartz-feldspar-hornblende gneiss, amphibolite, calc-silicate gneiss and minor quartzite and marble of unknown but probable Paleozoic age. The metasediments are cut by pegmatites and granitic intrusives.

The general structure of the area is composed of an east-facing succession folded into a broad open, east-plunging synformal structure. Locally the structures are complex resulting in dip reversals and repetition and omission of lithologies.

A sulphide layer, less than one metre wide and up to 30 metres long is confined to a calcareous horizon which trends northerly and dips 40 degrees east.

CAPSULE GEOLOGY

The sulphide layer consists of massive and disseminated sphalerite and pyrrhotite and minor galena and chalcopyrite. A 0.6 metre chip sample assayed 20.70 per cent zinc, 2.66 per cent lead and 0.05 per cent copper. A drill hole intersection returned 3.98 per cent zinc, 0.71 per cent lead, 0.01 per cent copper, 6.2 grams per tonne silver and 0.24 grams per tonne gold across 1.1 metres (Fieldwork 1979).

BIBLIOGRAPHY

EMPR ASS RPT *5471, *5613, *7644, *8317, 16030, 25641
EMPR BULL 80, p. 87
EMPR EXPL 1975-E59; 1978-E116; 1979-E118; 1980-146,147
EMPR FIELDWORK *1979, pp. 23-27
GSC MAP 48-1963
GSC OF 637
WWW <http://www.infomine.com/>
EMPR OF 2000-22

DATE CODED: 1986/05/22
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 226**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - NORTH**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 56 50 N
LONGITUDE: 119 33 14 W
ELEVATION: 1700 Metres

NORTHING: 5758249
EASTING: 324482

LOCATION ACCURACY: Within 500M

COMMENTS: Showing, Dwg. G-8355 (Assessment Report 5631).

COMMODITIES: Zinc Lead Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite
ASSOCIATED: Quartz Calcite
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
DIMENSION:

STRIKE/DIP: 030/45E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Quartzite
Marble
Pegmatite
Granitic Intrusive
Amphibolite
Quartz Feldspar Hornblende Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Chip
COMMODITY GRADE
Copper 0.0500 Per cent
Lead 0.8100 Per cent
Zinc 8.9500 Per cent

COMMENTS: The sample width is 0.6 metre.
REFERENCE: Fieldwork 1979, pages 23-27.

CAPSULE GEOLOGY

The area is underlain by metasedimentary rocks of the Shuswap Metamorphic Complex consisting of quartz-feldspar-hornblende gneiss, amphibolite, calc-silicate gneiss and minor quartzite and marble of unknown but probable Paleozoic age. The metasediments are cut by pegmatites and granitic intrusives.

The general structure of the area is composed of an east-facing succession folded into a broad open, east-plunging synformal structure. Locally the structures are complex resulting in dip reversals and repetition and omission of lithologies.

A 20 to 30 centimetre thick sulphide layer is on strike with a similar layer at the Mist showing (082M 225), 1300 metres to the southwest. The layer which consists of disseminated sphalerite and minor galena and chalcopyrite is confined to a calcareous horizon which strikes 30 degrees and dips 40 degrees

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 920
REPORT: RGEN0100

CAPSULE GEOLOGY

southeast. A 0.6 metre chip sample assayed 8.95 per cent zinc, 0.81 per cent lead and 0.05 per cent copper (Fieldwork 1979).

BIBLIOGRAPHY

EMPR ASS RPT *5471, *5613, *7644, *8317, 16030, 25641
EMPR BULL 80, p. 87
EMPR EXPL 1975-E59; 1978-E116; 1979-E118; 1980-146,147
EMPR FIELDWORK *1979, pp. 23-27
GSC MAP 48-1963
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1986/05/22
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 227**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - RAFT SYNFORM**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 57 40 N
LONGITUDE: 119 32 34 W
ELEVATION: 1620 Metres

NORTHING: 5759767
EASTING: 325299

LOCATION ACCURACY: Within 500M

COMMENTS: Drill hole location map (Assessment Report 8317).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena
ASSOCIATED: Quartz Calcite
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Amphibolite
Quartzite
Marble
Pegmatite
Granitic Intrusive
Quartz Feldspar Hornblende Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Barkerville
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis	YEAR: 1980
SAMPLE TYPE: Drill Core	
<u>COMMODITY</u>	<u>GRADE</u>
Lead	0.6800 Per cent
Zinc	2.1300 Per cent

COMMENTS: The sample width is 0.15 metres.
REFERENCE: Assessment Report 8317.

CAPSULE GEOLOGY

The area is underlain by metasedimentary rocks of the Shuswap Metamorphic Complex consisting of quartz-feldspar-hornblende gneiss, amphibolite, calc-silicate gneiss and minor quartzite and marble of unknown but probable Paleozoic age. The metasediments are cut by pegmatites and granitic intrusives.

The general structure of the area is composed of an east-facing succession folded into a broad open, east-plunging synformal structure. Locally the structures are complex resulting in dip reversals and repetition and omission of lithologies.

Thin bands and disseminated sphalerite and minor galena occur in silicified calc-silicate gneiss near the closing of the Raft synform. A drill hole (DDH 80-12) intersected 2 per cent combined zinc and lead over 0.45 metres (Assessment Report 8317).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 922
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *7644, *8317, 16030, 25641
EMPR BULL 80, p. 87
EMPR EXPL 1979-E118; 1980-146,147
EMPR FIELDWORK *1979, pp. 23-27
GSC MAP 48-1963
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1986/05/22
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 228**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - NORTH STRAT**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 52 40 N
LONGITUDE: 119 32 49 W
ELEVATION: 1600 Metres

NORTHING: 5750511
EASTING: 324689

LOCATION ACCURACY: Within 500M

COMMENTS: Drill hole, location map (Assessment Report 9011).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrrhotite
ASSOCIATED: Quartz Calcite
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated Massive
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
DIMENSION: 0400 x 0001 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Intermittent mineralization.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N

CATEGORY:	Assay/analysis	YEAR:	1981
SAMPLE TYPE:	Drill Core		
COMMODITY		GRADE	
Lead		1.9200	Per cent
Zinc		23.9000	Per cent

COMMENTS: The sample width is 1.0 metre. The samples were not assayed for other metals.

REFERENCE: Assessment Report 9011.

CAPSULE GEOLOGY

The area is underlain by metasedimentary rocks of the Shuswap Metamorphic Complex consisting of quartz-feldspar-hornblende gneiss, amphibolite, calc-silicate gneiss and minor quartzite and marble of unknown but probable Paleozoic age. The metasediments are cut by pegmatites and granitic intrusives.

The general structure of the area is composed of an east-facing succession folded into a broad open, east-plunging synformal structure. Locally the structures are complex resulting in dip reversals and repetition and omission of lithologies.

Massive sphalerite and minor galena and pyrrhotite occur as thin bands within flat lying siliceous calc-silicate. A number of drill holes intersected mineralization, up to 1.0 metre wide, of 25.8 per cent combined lead and zinc over a 400 metre north-south trend. Faulting locally displaces the mineralization. No surface showings have been located thus far.

BIBLIOGRAPHY

EMPR ASS RPT *7423, *8317, *9011, 25641
EMPR EXPL 1979-E118; 1980-146,147

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 924
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK *1979, pp. 23-27
GSC MAP 48-1963
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1986/05/22
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 229**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAX, MOOSE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 54 10 N
LONGITUDE: 119 44 44 W
ELEVATION: 1760 Metres

NORTHING: 5753787
EASTING: 311125

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of sulphide zone, Map No. 1 (Assessment Report 7812). Claim map 86.05.01 incorrectly locates the claims.

COMMODITIES: Copper Lead Zinc Silver

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Galena Sphalerite Pyrite

ASSOCIATED: Biotite Garnet Actinolite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated Massive
CLASSIFICATION: Sedimentary Syngenetic

SHAPE: Tabular

MODIFIER: Folded

DIMENSION:

STRIKE/DIP: 150/35E

TREND/PLUNGE:

COMMENTS: Area of mineralized outcrop 120 by 900 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Pelitic Schist
Gneiss
Biotite Schist
Muscovite Alaskite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by pelitic and psammo-pelitic schists and gneisses of the Shuswap Metamorphic Complex, intruded by biotite orthogneiss and almandine muscovite alaskite. Foliations in the metasediments range from east to northeast (100 to 148 degrees) with dips between 35 and 60 degrees north and northwest. The rocks are folded by an early set with axes plunging north to northwest at 20 to 45 degrees.

Stratiform copper-lead-zinc-silver mineralization occurs in a well defined zone up to several metres thick and traceable over 1.0 kilometre with a possible strike length exceeding 1.9 kilometres. The zone includes mineralized pyrrhotite biotite schists, massive pyrrhotite sulphide, and pyrrhotite garnet actinolite gneiss with associated chalcopyrite, galena and sphalerite. Modal economic sulphide minerals may be present up to 2 per cent.

BIBLIOGRAPHY

EMPR ASS RPT *3935, *7812, *8918
EMPR EXPL 1979-117,118; 1980-146
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/05/26
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 230**

NATIONAL MINERAL INVENTORY:

NAME(S): **SI**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 46 30 N
LONGITUDE: 119 43 34 W
ELEVATION: 1300 Metres

NORTHING: 5739530
EASTING: 311931

LOCATION ACCURACY: Within 500M

COMMENTS: Trace of PB-ZN Mineralization (Assessment Report 9543).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite

ASSOCIATED: Calcite Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate
Marble
Monzonite
Granodiorite
Pelite
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Barkerville

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The dominant rocks are intrusive unfoliated granodiorite to monzonite of probable Jurassic age. These contain discrete lenses and discontinuous bands, trending north-south with dips to the west, of metasediments consisting of pelites, calc-silicates, marble and quartzite. The metasediments are probably of the Shuswap Metamorphic Complex.

Mineralization, comprising narrow lenticular bands of sphalerite and galena, is discontinuously exposed along a 1500 metre north-south trend. The mineralization appears associated with a calc-silicate unit adjacent to a massive white marble unit.

The metasediments terminate abruptly to the south, probably due to tight folds within the granodiorite body.

BIBLIOGRAPHY

EMPR ASS RPT *7422, *9543
GSC MAP 48-1963
GSC OF 637
EMPR OF 2000-22

DATE CODED: 1986/05/28
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 231**

NATIONAL MINERAL INVENTORY:

NAME(S): **HARBOUR**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 36 00 N
LONGITUDE: 119 09 44 W
ELEVATION: 1300 Metres

NORTHING: 5718765
EASTING: 350251

LOCATION ACCURACY: Within 500M

COMMENTS: Discovery showing, Fig. 3 (Assessment Report 7688).

COMMODITIES: Uranium

MINERALS

SIGNIFICANT: Unknown
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Pegmatite
TYPE: O02 Rare element pegmatite - NYF family
COMMENTS: Radioactive pegmatite area.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Granitic Gneiss
Schist
Pegmatite
Syenite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Bulk Sample

YEAR: 1979

COMMODITY
Uranium

GRADE
0.0140 Per cent

COMMENTS: A 4.5 kilogram sample.
REFERENCE: Assessment Report 7688.

CAPSULE GEOLOGY

The area is underlain by granite gneisses and schists of the Shuswap Metamorphic Complex, cut by pegmatite pods and syenite dykes. The pegmatite lenses are commonly 10 to 15 metres in length and 1 to 2 metres thick. They parallel the schistosity of the granite and infill crosscutting fractures.

The pegmatites are commonly 6 times background in radiometric response and over 100 times background (greater than 10,000 counts per second, BGSI-SL, Scintrex) on the discovery showing.

A 4.5 kilogram sample of the radiometric surface material assayed 0.014 per cent uranium (Assessment Report 7688).

BIBLIOGRAPHY

EMPR ASS RPT *7688
EMPR EXPL 1979-112
GSC MAP 48-1963
GSC OF 637
Bates, D.V.; Murray, J.W.; Raudsepp, V. (1980): Royal Commission of Inquiry Health and Environmental Protection Uranium Mining Vol., p. 128

DATE CODED: 1986/05/29
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 232**

NATIONAL MINERAL INVENTORY:

NAME(S): **MAR**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 43 30 N
LONGITUDE: 119 33 34 W
ELEVATION: 850 Metres

NORTHING: 5733553
EASTING: 323232

LOCATION ACCURACY: Within 500M

COMMENTS: Skarn showing, Plans 1 and 2 (Assessment Report 9544).

COMMODITIES: Tungsten Molybdenum Copper

MINERALS

SIGNIFICANT:	Scheelite	Molybdenite	Pyrite	Chalcopyrite	Malachite
ASSOCIATED:	Garnet	Pyroxene	Amphibole	Quartz	Pyrite
	Idocrase	Diopside			
ALTERATION:	Quartz	Garnet	Pyroxene	Amphibole	Malachite
ALTERATION TYPE:	Silicific'n		Skarn	Oxidation	
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement Skarn
 TYPE: K05 W skarn
 SHAPE: Regular
DIMENSION:
COMMENTS: Skarn. STRIKE/DIP: 350/ TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Skarn
Marble
Amphibolite
Quartz Monzonite
Quartzite
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1981
SAMPLE TYPE: Chip
COMMODITY GRADE
Tungsten 0.3500 Per cent
COMMENTS: The sample width is 0.14 metre.
REFERENCE: Assessment Report 9544.

CAPSULE GEOLOGY

The property lies within the Shuswap Metamorphic Complex consisting of a strongly foliated assemblage of quartz mica schist, skarn, quartzite, marble and amphibolite. These rocks are intruded by pegmatites and quartz-monzonites. Foliation and compositional layering reflect a north and north-east structural trend with steep to moderate dips to the east. A north trending skarn, consisting of garnet-pyroxene-amphibole-quartz containing pyrite, scheelite and molybdo-scheelite, has developed in a diopside marble along the upper and lower contacts of an intruding thin (0.6 metre) coarse-grained, quartz monzonite sill. Maximum thickness of the skarn is 0.6 metres. Amphibolite overlying the marble unit is also altered with weak development of pyroxene, garnet, quartz and pyrite, with very small amounts of scheelite and molybdo-scheelite. A chip sample assayed 0.35 per cent W₃O over 0.14 metres (Assessment Report 9544).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 929
REPORT: RGEN0100

CAPSULE GEOLOGY

Weak chalcopyrite and malachite mineralization occurs in heavily fractured and faulted fine-grained quartz monzonite, 200 metres east of the skarn showing.

BIBLIOGRAPHY

EMPR ASS RPT *9544
EMPR OF 1991-17
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/05/30
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 233**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAMP CR**, OLD CAMP CR

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

Open Pit

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 41 00 N
LONGITUDE: 118 35 04 W
ELEVATION: 750 Metres

NORTHING: 5727007
EASTING: 390464

LOCATION ACCURACY: Within 5 KM

COMMENTS: From descriptions and Fig. P. 151 (Annual Report 1917).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP
Hadrynian Horsethief Creek

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Schist
Marble
Amphibolite
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Underlying rocks in the area belong to the Upper Proterozoic Horsethief Creek Group. They consist of calcareous pelitic schists, amphibolites, marbles and quartzites.

Gold occurs in quartz veins around the heads of McCulloch and Graham Creeks. These veins are thought to have been the source of the placer gold. The placer gold occurs as coarse grains and nuggets close to the bedrock and as fine colours in the gravels and surface soil. The gold is also angular and slightly porous.

BIBLIOGRAPHY

EMPR AR 1895-690; 1904-115; 1917-151; 1938-E45
EMPR BULL 21, p. 23; 28, p. 53, Fig. 3
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, p. 34
GSC SUM RPT *1928, part A, p. 192

DATE CODED: 1986/03/11
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 234**

NATIONAL MINERAL INVENTORY:

NAME(S): **SMITH CR**, GAFFNEY CR, KIRBYVILLE CR

STATUS: Past Producer Open Pit

MINING DIVISION: Revelstoke

REGIONS: British Columbia

NTS MAP: 082M10E

BC MAP:

LATITUDE: 51 39 00 N

LONGITUDE: 118 37 34 W

ELEVATION: 600 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: From descriptions and Fig. P. 151 (Annual Report 1917).

UTM ZONE: 11 (NAD 83)

NORTHING: 5723363

EASTING: 387502

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold

COMMENTS: Placer.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown

CLASSIFICATION: Placer

TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Monashee

PHYSIOGRAPHIC AREA: Monashee Mountains

CAPSULE GEOLOGY

The area is underlain by metasediments of the Shuswap Metamorphic Complex.

BIBLIOGRAPHY

EMPR AR 1887-267; 1890-356,363; 1893-1043; 1894-743; 1895-691,
1908-91; *1917-151; 1934-E34
EMPR BULL 28, p. 53, Fig. 3
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1986/03/11
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 235**

NATIONAL MINERAL INVENTORY:

NAME(S): **FERNIE CR**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:
LATITUDE: 51 44 00 N
LONGITUDE: 118 40 04 W
ELEVATION: 600 Metres
LOCATION ACCURACY: Within 1 KM
COMMENTS: From descriptions.

Open Pit

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

NORTHING: 5732696

EASTING: 384831

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee

PHYSIOGRAPHIC AREA: Monashee Mountains

CAPSULE GEOLOGY

The area is underlain by metasediments of the Shuswap Metamorphic Complex.

BIBLIOGRAPHY

EMPR AR 1887-267,268
EMPR BULL 28, p. 53, Fig. 3
GSC MAP 12-1964
GSC OF 637
GSC P 64-32

DATE CODED: 1986/03/11
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 933
REPORT: RGEN0100

MINFILE NUMBER: **082M 236**

NATIONAL MINERAL INVENTORY:

NAME(S): **CARNES CR**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:
LATITUDE: 51 18 00 N
LONGITUDE: 118 14 34 W
ELEVATION: 600 Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS: From descriptions.

Open Pit

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

NORTHING: 5683920
EASTING: 413360

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP
Devonian Lardeau

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Meta Sediment/Sedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Underlying rocks are probable Lower Paleozoic Lardeau Group.

BIBLIOGRAPHY

EMPR AR 1886-203; 1887-269; 1889-267; 1895-691; 1934-E34
EMPR BULL 21, p. 23; 28, p. 53, Fig. 3
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
GSC SUM RPT *1928, part A, p. 192

DATE CODED: 1986/03/11
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 236**

MINFILE NUMBER: **082M 237**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLDSTREAM CR**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:
LATITUDE: 51 38 00 N
LONGITUDE: 118 24 04 W
ELEVATION: 700 Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS: From descriptions.

Open Pit

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

NORTHING: 5721187
EASTING: 403031

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Gold
COMMENTS: Placer.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Placer
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Schist
Amphibolite
Marble
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

Underlying rocks in the area belong to the Upper Proterozoic Horsethief Creek Group. They consist of calcareous pelitic schists, amphibolites, marbles and quartzites.

Gold occurs in quartz veins around the heads of McCulloch and Graham Creeks. These veins are thought to have been the source of the placer gold. The placer gold occurs as coarse grains and nuggets close to the bedrock and as fine colours in the gravels and surface soil. The gold is also angular and slightly porous.

BIBLIOGRAPHY

EMPR AR 1893-1043; 1894-743; 1895-690
EMPR BULL 21, p. 23; 28, p. 53, Fig. 3
GSC MAP 12-1964
GSC OF 637
GSC P 64-32
GSC SUM RPT *1928, part A, p. 192

DATE CODED: 1986/03/11
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 238**

NATIONAL MINERAL INVENTORY:

NAME(S): **KITTY**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 25 05 N
LONGITUDE: 119 56 34 W
ELEVATION: 1830 Metres

NORTHING: 5700425
EASTING: 295388

LOCATION ACCURACY: Within 500M

COMMENTS: Sample location (Assessment Report 14262).

COMMODITIES: Silver Molybdenum Lead Tungsten

MINERALS

SIGNIFICANT: Molybdenite Galena Scheelite

COMMENTS: Probable minerals present.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cretaceous			Baldy Batholith

LITHOLOGY: Biotite Granite
Aplite
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

The area is underlain by biotite granite and pegmatite of the Cretaceous Baldy Batholith. Later phase aplite dykes are common and occasional zones of hydrothermal alteration are present.

Fracture controlled, very fine-grained sulphide mineralization occurs in the granite. A rock sample assayed 48.3 grams per tonne silver, 0.14 per cent molybdenum, 0.19 per cent lead and 0.05 per cent tungsten (Assessment Report 14262).

BIBLIOGRAPHY

EMPR ASS RPT 14262
EMPR OF 1991-17; 2000-7
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1986/09/19
DATE REVISED: 1987/01/12

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 239**

NATIONAL MINERAL INVENTORY:

NAME(S): **TIA**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 33 35 N
LONGITUDE: 119 51 04 W
ELEVATION: 960 Metres

NORTHING: 5715924
EASTING: 302374

LOCATION ACCURACY: Within 500M

COMMENTS: Diamond drill hole 2, figure 1041-3 (Assessment Report 14206).

COMMODITIES: Lead Zinc Copper Silver Barite

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Galena Barite
ASSOCIATED: Quartz Barite
ALTERATION: Sericite Quartz
ALTERATION TYPE: Sericitic Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratabound Disseminated
CLASSIFICATION: Volcanogenic Industrial Min.
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
DIMENSION: 0100 x 0030 Metres STRIKE/DIP: 090/45N TREND/PLUNGE:
COMMENTS: Width and probable length of mineralized horizon.

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Devonian-Mississipp. Undefined Group Eagle Bay

LITHOLOGY: Tuff
Quartz Sericite Schist
Chert
Agglomerate
Quartzite
Phyllite
Siltstone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Silver 1.5400 Grams per tonne
Barite 8.1000 Per cent
Copper 0.0060 Per cent
Lead 1.6000 Per cent
Zinc 3.0000 Per cent
COMMENTS: The sample width is 2.0 metres.
REFERENCE: Assessment Report 14206.

CAPSULE GEOLOGY

The area is underlain by metavolcanics and metasediments of the Devonian to Mississippian Eagle Bay Formation. Rocks consist of chlorite-sericite schist derived from quartz-hornblende-feldspar crystal lithic tuffs, agglomerates and porphyritic flows, with minor cherty quartzite, dark grey phyllite, and siltstone. The units trend east and dip 50 degrees north.

Drill holes intersected a 30 metre wide low-grade sulphide horizon associated with a well-foliated, pyritic tuff unit. The unit contains bleached, highly sericitized and silicified schist with pyrite, pyrrhotite and minor sphalerite and galena as fine disseminations and thin, discontinuous laminations.

CAPSULE GEOLOGY

Barite beds also occur, containing disseminated mineralization. The mineralized horizon strikes east and dips 45 degrees north.

A 12 metre intersection in drill hole #2 assayed 0.06 per cent lead, 0.31 per cent zinc, 0.009 per cent copper and 0.65 grams per tonne silver, which contained a 1.22 metre intersection of 0.25 per cent lead, 1.47 per cent zinc, 0.01 per cent copper and 2.74 grams per tonne silver (Assessment Report 14206). Drill hole #1 intersected 2 metres of 1.6 per cent lead, 3.0 per cent zinc, 0.006 per cent copper, 1.54 grams per tonne silver and 8.1 per cent barite (Assessment Report 14206).

BIBLIOGRAPHY

EMPR ASS RPT 13862, *14206
EMPR EXPL 1985-110-111
EMPR OF 1986-5; 1999-2
GSC MAP 48-1963
GSC OF 637

DATE CODED: 1987/02/05
DATE REVISED: 1987/02/05

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 240**

NATIONAL MINERAL INVENTORY:

NAME(S): **OCCURRENCE CB 14-9**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 30 43 N
LONGITUDE: 118 48 50 W
ELEVATION: 1814 Metres

NORTHING: 5708317
EASTING: 374131

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Iron

MINERALS

SIGNIFICANT: Chalcopyrite Magnetite
ALTERATION: Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Replacement Epigenetic Hydrothermal Industrial Min.
SHAPE: Regular
DIMENSION: STRIKE/DIP: 062/42N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Monashee Complex

LITHOLOGY: Marble
Calc-silicate Gneiss

HOSTROCK COMMENTS: Occurrence is at contact of a marble and calc-silicate gneiss.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence is within the Monashee Complex on the eastern margin of the Shuswap Metamorphic Complex. It lies on the south-eastern limb of the Mount Grace syncline, on the northwestern edge of Frenchman Cap Dome. Host rock is a regionally metamorphosed marble within a calc-silicate gneiss, marble, gneiss succession that overlies dominantly orthogneiss in the core of the dome. The age of the host succession is not known but is probably late Proterozoic or early Paleozoic.

The occurrence consists of magnetite and minor chalcopyrite, marked by conspicuous malachite staining, in a very rusted zone 20 centimetres thick. A small pit indicates previous exploration of the zone.

BIBLIOGRAPHY

EMPR BULL *80, p. 84
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1987/08/20
DATE REVISED: / /

CODED BY: TH
REVISED BY:

FIELD CHECK: Y
FIELD CHECK:

MINFILE NUMBER: **082M 242**

NATIONAL MINERAL INVENTORY:

NAME(S): **OCCURRENCE CB 14-12**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 30 47 N
LONGITUDE: 118 48 30 W
ELEVATION: 1859 Metres

NORTHING: 5708431
EASTING: 374519

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Iron

MINERALS

SIGNIFICANT: Chalcopyrite Malachite
ASSOCIATED: Calcite
ALTERATION: Malachite Hornblende
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Disseminated
CLASSIFICATION: Industrial Min.
SHAPE: Regular
DIMENSION:

STRIKE/DIP: 060/40W

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Monashee Complex

LITHOLOGY: Marble
Gneiss

HOSTROCK COMMENTS: Occurrence is within a coarse grained calcite marble.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Post-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The occurrence is within the Monashee Complex on the eastern margin of the Shuswap Metamorphic Complex. It lies on the south-eastern limb of the Mount Grace syncline, on the northwestern edge of Frenchman Cap Dome. Host rock is a coarsely crystalline marble within a calc-silicate gneiss, marble, gneiss succession that overlies dominantly orthogneiss in the core of the dome. The age of the host succession is not known but is probably late Proterozoic or early Paleozoic.

The occurrence is comprised of a 15 to 20 centimetre thick interval of minor chalcopyrite and magnetite, associated with hornblende

BIBLIOGRAPHY

EMPR BULL *80, p. 84
GSC MAP 12-1964
GSC OF 637
GSC P 71-29

DATE CODED: 1987/08/20
DATE REVISED: / /

CODED BY: TH
REVISED BY:

FIELD CHECK: Y
FIELD CHECK:

MINFILE NUMBER: **082M 243**

NATIONAL MINERAL INVENTORY:

NAME(S): **AXL**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 00 N
LONGITUDE: 119 37 44 W
ELEVATION: 1875 Metres

NORTHING: 5656821
EASTING: 315678

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Lead Zinc Silver Copper

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Sphalerite Chalcopyrite
ALTERATION: Chlorite
ALTERATION TYPE: Chloritic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound
CLASSIFICATION: Volcanogenic
TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
SHAPE: Tabular
DIMENSION: 0500 x 0002 Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metavolcanic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Rhyodacite Tuff
Rhyodacite Flow
Chert
Diorite
Granodiorite
Quartz Porphyry

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Adams Plateau

RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

The property is underlain by northeast trending, folded and metamorphosed mafic and intermediate volcanics, volcanoclastics and sediments of the Late Devonian to Early Mississippian age Eagle Bay Formation. These rocks are intruded by dykes and stocks of diorite, diabase, granodiorite and quartz porphyry.

The metavolcanics comprise a lower unit of mafic flows and breccias of basaltic composition, intercalated with detrital sediment, chert lenses and intermediate volcanic rocks. These rocks are overlain by intermediate volcanic flows, breccias, and volcanoclastics of andesitic to rhyodacite composition.

Structure in the area is dominated by a northeasterly trending overturned synform cut by several north trending right lateral faults.

A 500 metre strike length of stratabound low grade massive sulphide mineralization occurs in banded, grey-green rhyodacite tuff. Mineralization consists of pyrite, pyrrhotite, sphalerite and trace chalcopyrite. A 1986 drill hole (#29) intersected 1.34 metres assaying 1.43 per cent zinc, 0.39 per cent lead, 0.06 per cent copper, 6.17 grams per tonne silver and 0.10 grams per tonne gold (Assessment Report 15609).

The mineralized zone varies from 0.3 to 1.2 metres wide and up to 300 metres long on surface. Surface samples assay up to 107.6 grams per tonne silver, 17.75 per cent lead, and 6.78 per cent zinc.

Several units contain pyrite, pyrrhotite, chalcopyrite, sphalerite, and galena mineralization.

BIBLIOGRAPHY

EMPR ASS RPT *14716, *15609
EMPR EXPL *1986-C111
EMPR MAP 86

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 942
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR OF 1999-2
GSC MAP 48-1963
GSC OF 637
GCNL #228, 1987

DATE CODED: 1986/04/14
DATE REVISED: 1987/07/30

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

predominantly altered argillites/wackes. Original terms such as "sericitic tuffs" for the mixed sediments, and "muddy tuffs" for the altered argillite/wackes are now largely out of favour as it is really alteration products that one sees rather than original lithologies (Friesen, 1990).

The mixed sedimentary unit (SERT) is characterized by a strong yellow to white sericitic content, interbedded with up to 30 per cent cherty/quartz lenses. The altered argillites (MUT) are characterized by light silvery grey muscovite and sericite. They may also often locally contain up to 60 per cent very fine-grained pyrite and host low grade values of base and precious metals. Both units represent altered lithologies; their protoliths were probably variations of an original argillite/wacke/tuff sequence.

Both the SERT and MUT lie structurally below a thick unit of chloritic mafic volcanics, which in the deposit area are most commonly tuffaceous to lapilli in texture; but with an occasional pillowed component.

Both the Samatosum and original Discovery zone or Rea Gold zone (082M 191) 500 metres to the southwest are contained in a very similar stratigraphy: within a package of mixed sediments, argillites and their sericitic equivalents of SERT and MUT, and both are structurally overlain by mafic pyroclastics. There is much speculation regarding their structural and genetic associations. There is a strong suggestion of repetition by folding and/or faulting (which supports a long favoured theory of a thrust fault zone located between the deposits). Alternatively, but currently discounted, the two deposits may exist within similar stratigraphic cycles overprinted by a crosscutting alteration package (Friesen, 1990).

The Samatosum deposit is an early, highly deformed quartz vein system containing massive to disseminated components of tetrahedrite, sphalerite, galena and chalcopyrite hosted in structurally complex wallrocks. The upper portion of the orebody is tabular, averages about 5 metres in thickness, has a northwesterly strike length of about 500 metres and dips at an average of 30 degrees northeasterly for 100-150 metres. In the northern half of the deposit the tabular nature of the orebody gives way down dip to an apparent synformal structure, which is currently interpreted to be caused by slicing and imbrication by local overturning and thrust faulting. The northern half of the orebody has a northwesterly plunge of about 20 degrees, whereas the southern half displays a very slight plunge to the southeast (phase 2 folding?).

Tetrahedrite is the most valuable mineral in the ore zone, followed by sphalerite, chalcopyrite and galena. The tetrahedrite contains 36 per cent copper, 25 per cent sulphur, 23 per cent antimony, 5 per cent zinc, 4 per cent silver, 3 per cent arsenic and 2 per cent iron. Tetrahedrite appears to be the most uniformly distributed, while the sphalerite, galena and chalcopyrite often appear more erratically distributed in the northern end of the orebody as semimassive to massive lenses within the quartz vein host; perhaps indicating more than one mineralizing episode. It is important to note that whereas chalcopyrite, sphalerite and galena can be present in minor amounts in virtually any quartz vein occurrence throughout the property; tetrahedrite has so far been rarely found outside the immediate ore zone (Friesen, 1990).

The principal ore-related gangue minerals are quartz (30 per cent), dolomite (19 per cent) and pyrite (11 per cent).

Sericite and muscovite are by far the dominant alteration minerals in the Mine Series rocks and are thought to be a deformational product of the original ore-related alteration. All units from the lower portion of the mafics through the entire Mine Series stratigraphy are sericitic. Muscovite/sericite alteration fronts producing MUT commonly crosscut bedding and foliation, often leaving behind unaltered argillite/wacke remnants.

Other significant alteration in the deposit area includes: silicification or silica flooding of portions of wallrock surrounding the orebody (eg. many original "quartzites" and black cherts are now believed to be silicified MUT and argillites); dolomite, much more intense than previously believed, the bulk of which is probably a late-stage fault-related overprint; pyritization, as a replacement feature of lapilli in the mafic pyroclastics; and the green mica fuchsite, so far almost entirely restricted to a several metre thick occurrence associated with the argillites/MUT along the immediate sheared footwall portion of the ore zone.

Underground mineable reserves at Samatosum are 80,278 tonnes grading 1.2 per cent copper, 2.9 per cent zinc, 1.7 per cent lead, 1021.5 grams per tonne silver and 1.7 grams per tonne gold (Northern Miner - August 5, 1991). Both open pit and underground reserves are expected to be exhausted by October 1992. The underground reserve is the strike extension of the open pit deposit and extends

CAPSULE GEOLOGY

approximately 198 metres beyond the pit wall before it is structurally terminated.

The Samatosum deposit was discovered in 1986. During 1988 a feasibility study determined the deposit could be mined economically by open pit methods, despite an unusually high 25:1 waste-to-ore stripping ratio. Mine stripping began in March 1989; ore production and milling began in May 1989; shipments began in June 1989.

Mining ceased in July 1992 and milling ceased in September 1992.

BIBLIOGRAPHY

- EM FIELDWORK 1998, pp. 287-306
EMPR ASS RPT 12737, 14185, 18571, 19199, 19200, 21689
EMPR ENG INSP Annual Report 1989, 1990
EMPR EXPL 1983-xxxii, 157; 1986-B7-B19,C113
EMPR FIELDWORK 1984, pp. 67-83; 1985, pp. 59-68
EMPR MAP 56; 65 (1989)
EMPR MINING 1988
EMPR OF 1992-1; 1998-9; 1998-10; 1999-14; 2000-31
EMPR PF (Friesen, R.G. (1990): Geology of the Samatosum Deposit - Field Trip B2, GAC-MAC Joint Annual Meeting, Vancouver 1990, Mineral Deposits of the Canadian Cordillera; Preliminary Engineering Geology, Hydrogeology and Rock Mechanics Assessments for the Proposed Underground Mine, Samatosum Project - May 1991; Memorandum to Geological Survey Branch, P. Schiarizza - June 14, 1990; Press Release, Rea Gold Corporation, Feb.21, 1991; M.E.G Luncheon Talk notes, Jan.13, 1988)
GSC MAP 48-1963; 5320G
GSC OF 637
CMH 1987-88, pp. 272,330
GCNL #4,#57,#131,#135,#153,#172,#177,#210, 1986; #8,#76,#96,#108, #111,#112,#116,#117,#118,*#133, 1987; #33,#70,#78,#207, 1988; #1(Jan.3),#56(Mar.21),#123(June 27),#205(Oct.25), 1989; #19(Jan.26),#52(Mar.14),#90(May 9),#179(Sept.17),#186(Sept.26), 1990; #38(Feb.22),#52(Mar.14),#68(Apr.9),#127(Jul.3),#147(Jul.31), #200(Oct.17), 1991
IPDM Feb. 1986
N MINER Dec.30, 1985; Jan.13, March 31, July 14,21, Aug.4, 1986; Jan. 26, May 11, 1987; March 7, May 2,23, Oct.24, 1988; June 5,12, Nov.6,13, 1989; Feb.6, Mar.19, Sept.10, 1990; Apr.1,15, May 6, Jul.15, Aug.5, Oct.21, 1991
N MINER MAG *June 1989, pp. 15-18
NAGMIN Jan.15, March 30, July 6, Nov.9, 1984
NW PROSP Jan. 1987
V STOCKWATCH Nov.28, 1986; May 22,28, July 13, Dec.17, 1987
WWW http://www.infomine.com/index/properties/SAMATOSUM_MINE.html
Dickie, G.J., Preto, V.A. and Schiarizza, P. (1986): Mineral Deposits of the Adams Plateau - Clearwater area
Pirie, I. (1988): Geology and Mineralization of the Samatosum (Rea Gold) Deposit, Adams Plateau, B.C., MEG Talk, January 1988 - Notes taken by T. Schroeter and C. Lund
Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau - Clearwater Region - GSA Cordilleran Section Meeting, May 1985, pp. 16-1 to 16-11

DATE CODED: 1987/10/01
DATE REVISED: 1991/11/12

CODED BY: TH
REVISED BY: GO

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **082M 245**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - EAST**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 55 05 N
LONGITUDE: 119 35 04 W
ELEVATION: 1110 Metres

NORTHING: 5755080
EASTING: 322267

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, figure 4 (Assessment Report 16030).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena
ASSOCIATED: Quartz Plagioclase
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Biotite Gneiss
Marble
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by strongly foliated and lineated meta-sedimentary gneiss, schist, calc-silicate, amphibolite and marble of the Shuswap Metamorphic Complex. Foliation and bedding attitudes commonly trend 140 to 180 degrees and dip steeply east. These rocks are intruded by dykes and sills of pegmatite.

Stratiform lead-zinc mineralization is conformable and continuous over a 20 kilometre strike length. Rocks often associated with the mineralization include biotite gneiss, calc-silicate and marble. Sulphide mineralization includes sphalerite, pyrrhotite and minor galena. Gangue minerals include quartz and plagioclase and minor fluorite, augite, diopside, calcite and sphene.

BIBLIOGRAPHY

EMPR ASS RPT *16030, 25641
GSC MAP 48-1963
EMPR OF 2000-22

DATE CODED: 1987/07/23
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 246**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - SPRING**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 53 46 N
LONGITUDE: 119 33 09 W
ELEVATION: 1370 Metres

NORTHING: 5752563
EASTING: 324378

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, figure 4 (Assessment Report 16030)

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena
ASSOCIATED: Quartz Plagioclase
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Cambrian

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Biotite Gneiss
Marble
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by strongly foliated and lineated meta-sedimentary gneiss, schist, calc-silicate, amphibolite and marble of the Shuswap Metamorphic Complex. Foliation and bedding attitudes commonly trend 140 to 180 degrees and dip steeply east. These rocks are intruded by dykes and sills of pegmatite.

Stratiform lead-zinc mineralization is conformable and continuous over a 20 kilometre strike length. Rocks often associated with the mineralization include biotite gneiss, calc-silicate and marble. Sulphide mineralization includes sphalerite, pyrrhotite and minor galena. Gangue minerals include quartz and plagioclase and minor fluorite, augite, diopside, calcite and sphene.

BIBLIOGRAPHY

EMPR ASS RPT *16030, 25641
GSC MAP 48-1963
EMPR OF 2000-22

DATE CODED: 1987/07/23
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 248**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - AUTUMN**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 52 34 N
LONGITUDE: 119 34 47 W
ELEVATION: 1130 Metres

NORTHING: 5750405
EASTING: 322426

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, figure 4 (Assessment Report 16030)

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena
ASSOCIATED: Quartz Plagioclase
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Cambrian

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Biotite Gneiss
Marble
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by strongly foliated and lineated meta-sedimentary gneiss, schist, calc-silicate, amphibolite and marble of the Shuswap Metamorphic Complex. Foliation and bedding attitudes commonly trend 140 to 180 degrees and dip steeply east. These rocks are intruded by dykes and sills of pegmatite.

Stratiform lead-zinc mineralization is conformable and continuous over a 20 kilometre strike length. Rocks often associated with the mineralization include biotite gneiss, calc-silicate and marble. Sulphide mineralization includes sphalerite, pyrrhotite and minor galena. Gangue minerals include quartz and plagioclase and minor fluorite, augite, diopside, calcite and sphene.

BIBLIOGRAPHY

EMPR ASS RPT *16030, 25641
GSC MAP 48-1963
EMPR OF 2000-22

DATE CODED: 1987/07/23
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 249**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - COM**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 51 55 N
LONGITUDE: 119 34 46 W
ELEVATION: 1065 Metres

NORTHING: 5749200
EASTING: 322403

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, Figure 4 (Assessment Report 16030).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena
ASSOCIATED: Quartz Plagioclase
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Cambrian			Shuswap Metamorphic Complex

LITHOLOGY: Biotite Gneiss
Marble
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by strongly foliated and lineated meta-sedimentary gneiss, schist, calc-silicate, amphibolite and marble of the Shuswap Metamorphic Complex. Foliation and bedding attitudes commonly trend 140 to 180 degrees and dip steeply east. These rocks are intruded by dykes and sills of pegmatite.

Stratiform lead-zinc mineralization is conformable and continuous over a 20 kilometre strike length. Rocks often associated with the mineralization include biotite gneiss, calc-silicate and marble. Sulphide mineralization includes sphalerite, pyrrhotite and minor galena. Gangue minerals include quartz and plagioclase and minor fluorite, augite, diopside, calcite and sphene.

BIBLIOGRAPHY

EMPR ASS RPT *16030, 25641
GSC MAP 48-1963
EMPR OF 2000-22

DATE CODED: 1987/07/23
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 250**

NATIONAL MINERAL INVENTORY:

NAME(S): **CK - HORNE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 51 20 N
LONGITUDE: 119 33 54 W
ELEVATION: 1160 Metres

NORTHING: 5748083
EASTING: 323359

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence, figure 4 (Assessment Report 16030)

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Sphalerite Pyrrhotite Galena
ASSOCIATED: Quartz Plagioclase
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Sedimentary Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Proterozoic-Cambrian

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Biotite Gneiss
Marble
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The area is underlain by strongly foliated and lineated meta-sedimentary gneiss, schist, calc-silicate, amphibolite and marble of the Shuswap Metamorphic Complex. Foliation and bedding attitudes commonly trend 140 to 180 degrees and dip steeply east. These rocks are intruded by dykes and sills of pegmatite.

Stratiform lead-zinc mineralization is conformable and continuous over a 20 kilometre strike length. Rocks often associated with the mineralization include biotite gneiss, calc-silicate and marble. Sulphide mineralization includes sphalerite, pyrrhotite and minor galena. Gangue minerals include quartz and plagioclase and minor fluorite, augite, diopside, calcite and sphene.

BIBLIOGRAPHY

EM EXPL 2001-33-43
EMPR ASS RPT *16030, 25641
GSC MAP 48-1963
EMPR OF 2000-22

DATE CODED: 1987/07/23
DATE REVISED: 1987/07/23

CODED BY: LDJ
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 252**

NATIONAL MINERAL INVENTORY:

NAME(S): **MT. GRACE CARBONATITE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M07W
BC MAP:
LATITUDE: 51 26 10 N
LONGITUDE: 118 49 08 W
ELEVATION: 1850 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: One location of carbonatite which forms approximately a 60 kilometre long zone.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5699893
EASTING: 373574

COMMODITIES: Niobium Cerium Lanthanum Neodymium

MINERALS

SIGNIFICANT: Pyrochlore Apatite Zircon
ASSOCIATED: Calcite Amphibole
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Igneous-contact
TYPE: N01 Carbonatite-hosted deposits
SHAPE: Tabular
MODIFIER: Folded
COMMENTS: Dimension is approximately 60 kilometres by 1-20 metres.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Monashee Complex

LITHOLOGY: Carbonatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Ancestral North America Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Extrusive carbonatite in Frenchman Cap mantling gneisses.

CAPSULE GEOLOGY

The area lies within the Monashee Complex along the western margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age, and is mantled by an unconformably overlying succession of metasedimentary rocks, locally intruded by a suite of alkalic gneiss. The metasediments consist of a basal quartzite unit overlain by a succession of interbanded pelitic schists, pelitic gneiss, calc-silicate and marble.

Two types of carbonatites occur within the calc-silicate unit. Type I is concordant within quartz-biotite-gneiss, quartz-amphibole gneiss and quartzite. It trends northwest for 3 kilometres, and dips to the southwest, and varies from 20 to 200 metres in width. The carbonatite averages 60 to 80 per cent calcite, 10 to 30 per cent apatite with accessory biotite, amphibole, sphene and minor pyrrhotite, pyrite, sphalerite, chalcopyrite, molybdenite, pyrochlore and monazite.

Type II, occurring 2 kilometres to the west, is concordant with a white marble unit and other metasedimentary layers and has been interpreted to be a carbonatite tuff.

This is another location for an example of Type II carbonatite.

BIBLIOGRAPHY

EMPR ASS RPT *11639
EMPR BULL 80
EMPR EXPL 1983-161
EMPR FIELDWORK 1981, pp. 194,199; *1985, pp. 69-87
EMPR OF *1987-17, pp. 55-59; 1994-8
CJES V. II, pp. 304-318 (McMillan, W.J., and Moore Jr., J.M. (1974))
ECON GEOL *Vol. 81, 1986, pp. 1374-1386

DATE CODED: 1987/10/14
DATE REVISED: 1999/07/28

CODED BY: JP
REVISED BY: LDJ

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082M 252**

MINFILE NUMBER: **082M 253**

NATIONAL MINERAL INVENTORY:

NAME(S): **PERRY RIVER CARBONATITE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M07E
BC MAP:
LATITUDE: 51 19 00 N
LONGITUDE: 118 36 04 W
ELEVATION: 2200 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: One of a number of small carbonatite occurrences.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5686258
EASTING: 388420

COMMODITIES: Niobium Lanthanum Cerium Neodymium

MINERALS

SIGNIFICANT: Pyrochlore Apatite Zircon
ASSOCIATED: Calcite Amphibole
COMMENTS: Alteration type is associated with fenite.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Magmatic Igneous-contact
TYPE: N01 Carbonatite-hosted deposits
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 0500 x 0010 Metres STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Monashee Complex

LITHOLOGY: Carbonatite
Sovite
Mafic Fenite
Syenitic Fenite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Intrusive carbonatite.

CAPSULE GEOLOGY

The area lies within the Monashee Complex along the western margin of the Frenchman Cap Dome. The core of the dome is composed of a mixed paragneiss and orthogneiss succession of probable Aphebian age, and is mantled by an unconformably overlying succession of metasedimentary rocks, locally intruded by a suite of alkalic gneiss. The metasediments consists of a basal quartzite unit overlain by a succession of interbanded pelitic schists, pelitic gneiss, calc-silicate and marble.

Two types of carbonatites occur within the calc-silicate unit. Type I is concordant within quartz-biotite-gneiss, quartz-amphibole gneiss and quartzite. It trends northwest for 3 kilometres, and dips to the southwest, and varies from 20 to 200 metres in width. The carbonatite averages 60 to 80 per cent calcite, 10 to 30 per cent apatite with accessory biotite, amphibole, sphene and minor pyrrhotite, pyrite, sphalerite, chalcopryrite, molybdenite, pyrochlore and monazite. The carbonatites are sovites and are associated with mafic and syenitic fenites.

Type II, occurring 2 kilometres to the west, is concordant with a white marble unit and other metasedimentary layers and has been interpreted to be a carbonatite tuff.

This is another example of Type I carbonatite.

BIBLIOGRAPHY

EMPR ASS RPT *11639
EMPR BULL 80
EMPR EXPL 1983-161
EMPR FIELDWORK 1981, pp. 194,199; 1985, pp. 69-88
EMPR OF *1987-17, pp. 53-54
CJES VOL. II, pp. 304-318 (McMillan, W.J., and Moore Jr., J.M.)

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 955
REPORT: RGEN0100

BIBLIOGRAPHY

(1974))
ECON GEOL *Vol. 81, 1986, pp. 1374-1386

DATE CODED: 1987/10/14
DATE REVISED: / /

CODED BY: JP
REVISED BY:

FIELD CHECK: Y
FIELD CHECK:

MINFILE NUMBER: **082M 254**

NATIONAL MINERAL INVENTORY:

NAME(S): **ORO VIEJO DOLOMITE**

MINING DIVISION: Revelstoke

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 082M10E

BC MAP:

LATITUDE: 51 39 27 N

LONGITUDE: 118 35 57 W

ELEVATION: 914 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Sample 2, 1.2 kilometres south of Goldstream River (Assessment Report 16604).

UTM ZONE: 11 (NAD 83)

NORTHING: 5724156

EASTING: 389384

COMMODITIES: Dolomite

MINERALS

SIGNIFICANT: Dolomite

ASSOCIATED: Calcite

MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Stratiform Massive Breccia
CLASSIFICATION: Sedimentary Metamorphic Industrial Min.

TYPE: R10 Dolomite

DIMENSION: 4000 x 1500 x 548 Metres

COMMENTS: Deposit strikes north-northwest, dips gently west.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Undefined Group

FORMATION

Badshot

IGNEOUS/METAMORPHIC/OTHER

DATING METHOD: Fossil

LITHOLOGY:

Dolomite
Limestone
Phyllite
Carbonaceous Slate
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: ORO VIEJO DOLOMITE

REPORT ON: Y

CATEGORY: Inferred

YEAR: 1988

QUANTITY: 25000000 Tonnes

COMMODITY

GRADE

Dolomite

98.0000 Per cent

COMMENTS: Zone of high purity, estimated to contain 300 million tonnes, with more than 25 million tonnes grading at least 98 per cent dolomite.

REFERENCE: Assessment Report 18028, page 11.

CAPSULE GEOLOGY

The Oro Viejo dolomite occurrence outcrops on both sides of the Goldstream River near its confluence with the Columbia River, approximately 78 kilometres north-northwest of Revelstoke.

The region is underlain by a northwest trending succession of metamorphic rocks of the Lower Proterozoic Horsethief Creek Group, the Lower Cambrian Badshot Formation and the Lower Paleozoic Hamill and Lardeau groups. This sequence is intruded by post-Cambrian granitic masses.

A body of dolomite comprising the Badshot Formation trends north-northwest for 7 kilometres, crossing the Goldstream River a kilometre east of the Columbia River. The unit is underlain by banded light grey to dark grey limestone of the Horsethief Creek Group and overlain by silver grey phyllites and carbonaceous slate of the Lardeau Group. The entire succession dips gently to the west. An average foliation strikes 090 degrees and dips 36 degrees north. Local thickening of the Badshot Formation may be caused by a decollement.

The deposit consists of snow white, microcrystalline, earthy to

CAPSULE GEOLOGY

chalky, massive dolomite displaying zones of tectonic brecciation along strike. A zone of high purity dolomite (95 to 99 per cent dolomite) occurs over a 4-kilometre strike length with a width of 500 metres in the north and over 1500 metres in the south. Outcrops at various elevations, suggest that the high purity zone extends down dip for a vertical depth of at least 548 metres. This zone is estimated to contain 300 million tonnes of dolomite over an average width of 1000 metres to a depth of 30 metres, with over 25 million tonnes grading at least 98 per cent dolomite (Assessment Report 18028, p. 11). Twenty-seven grab samples, collected in 1987 over a 7.3-kilometre strike length, displayed the following average and range in compositions (in per cent) (Assessment Report 16604, p. 10a):

	Average	Range	
		From	To
CaO	33.98	29.94	49.66
MgO	18.15	4.59	21.72
SiO2	0.41	0.04	4.06
Al2O3	0.15	0.02	1.28
Fe2O3	0.21	0.09	0.60
MnO	0.024	0.006	0.090
TiO2	0.023	0.02	0.07
Na2O	0.013	0.003	0.100
K2O	0.018	0.001	0.308
Ig. Loss	46.21	42.25	47.15

Nineteen of the samples contained greater than 21 per cent MgO and seventeen contained less than 0.10 per cent SiO2. Of an additional thirteen samples collected in 1988, nine contained greater than 20 per cent MgO (Assessment Report 18028).

This property was mapped and sampled by R.G. Komarechka in 1987 and by G.C. Hurlburt in 1988.

BIBLIOGRAPHY

EMPR ASS RPT *16604, *18028
 EMPR BULL 71
 GSC MAP 12-1964
 GSC OF 481
 GSC P 64-32

DATE CODED: 1988/02/18
 DATE REVISED: 1989/09/21

CODED BY: PMB
 REVISED BY: PSF

FIELD CHECK: N
 FIELD CHECK: N

MINFILE NUMBER: **082M 255**

NATIONAL MINERAL INVENTORY:

NAME(S): **HIREN LAKE**, MOUNT COPELAND

MINING DIVISION: Revelstoke

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M01W
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 07 00 N
 LONGITUDE: 118 26 04 W
 ELEVATION: 1370 Metres

NORTHING: 5663777
 EASTING: 399600

LOCATION ACCURACY: Within 500M
 COMMENTS: Southern flank of Mount Copeland.

COMMODITIES: Nepheline Syenite

MINERALS

SIGNIFICANT: Nepheline Orthoclase Albite
 ASSOCIATED: Amphibole Pyroxene Magnetite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant
 CLASSIFICATION: Industrial Min.
 TYPE: R13 Nepheline syenite

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex
ISOTOPIC AGE: 770 Ma			
DATING METHOD: Zircon			
MATERIAL DATED: Zircon			

LITHOLOGY: Nepheline Syenite Gneiss

HOSTROCK COMMENTS: Dating by Okulitch, et al, 1981.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Monashee
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains
 RELATIONSHIP:
 GRADE: Amphibolite

CAPSULE GEOLOGY

Nepheline syenite and syenite gneisses crop out in a 6 kilometre band on the southern flank of Mount Copeland, 15 kilometres northwest of Revelstoke. The rock consists of orthoclase with subordinate nepheline and albite and small amounts of amphibole, pyroxene and magnetite. It has a banded texture and contains both fine and coarse-grained zones. The Mount Copeland syenites are exposed in a large antiformal structure and have been subjected to more than one phase of folding. The contacts appear gradational. Three main alkaline rock units have been defined; a basal nepheline syenite gneiss, overlain by alkaline amphibolite, which in turn overlain by calcareous and saturated syenites. The alkaline rocks intrude micaceous quartzites and calcsilicate gneisses of the Frenchman Cap autochthonous cover sequence. The metasedimentary succession has been correlated with a similar succession in the Perry River and Mount Grace areas. Based on these correlations, it appears that the gneisses at Mount Copeland lie stratigraphically beneath the Mount Grace extrusive carbonatite.

Thirty-four samples collected from the deposit were analysed with the following results:

Major oxides	Weight (per cent)
SiO2	51.30 - 61.26
Al2O3	17.27 - 24.38
Fe2O3	0.84 - 8.21
CaO	0.04 - 9.61
Na2O	2.74 - 8.76
K2O	7.49 - 10.14

These analyses indicate the rocks are a potential source of feldspathic material although most samples are high in iron. To better evaluate the material, two 20 kilogram samples, low in iron, were sent to CANMET for processing. At CANMET they were crushed, run through a dry magnetic separator (-10 + 100 mesh) and a mica-iron float produced with the following results:

Magnetic Separation

CAPSULE GEOLOGY

(Weight, per cent)	Magnetic	Nonmagnetic	-100 Mesh
Sample 1	40.0	51.0	9.0
Sample 2	23.4	66.3	10.3

Flotation (Weight, per cent)	Slimes		Concentrate/float tails	
	Mica-Iron	Magnetic	Nonmagnetic	
Sample 1	15.6	27.9	19.1	36.5
Sample 2	20.0	3.8	28.6	46.6

The nonmagnetic concentrates were then analysed with the following results:

Major oxides (Weight, per cent)	Separation		Floatation	
	1	2	1	2
SiO ₂	56.20	47.1	54.80	50.70
Al ₂ O ₃	19.20	20.50	18.30	21.10
Fe ₂ O ₃	0.50	1.23	0.19	0.41
CaO	1.27	1.60	0.98	0.80
Na ₂ O	6.58	6.02	6.44	5.48
K ₂ O	8.40	9.45	8.76	10.57

Full liberation is achieved at less than 100 mesh. Samples processed by CANMET contain high levels of iron and titanium which could not be reduced below 0.19 per cent and 0.40 per cent respectively. This makes it difficult to produce nepheline syenite meeting market specifications.

BIBLIOGRAPHY

EMPR FIELDWORK 1978, pp. 25-30; *1988, pp. 485-486
 EMPR OF *1987, pp. 59-62
 GSC BULL 239
 GSC P 80-1A, pp. 47-51; 81-1A, pp. 33-36
 EG Vol. 81, pp. 1374-1386

DATE CODED: 1989/03/31
 DATE REVISED: 1989/12/11

CODED BY: GVV
 REVISED BY: LDJ

FIELD CHECK: Y
 FIELD CHECK: N

MINFILE NUMBER: **082M 256**

NATIONAL MINERAL INVENTORY:

NAME(S): **RATCHFORD CREEK KYANITE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 21 02 N
LONGITUDE: 118 43 27 W
ELEVATION: 1460 Metres

NORTHING: 5690220
EASTING: 379934

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of Area 4, Figure 4, Open File 1988-26.

COMMODITIES: Kyanite Sillimanite

MINERALS

SIGNIFICANT: Kyanite Sillimanite

ASSOCIATED: Garnet Biotite

MINERALIZATION AGE: Mesozoic

DEPOSIT

CHARACTER: Layered Stratabound Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Monashee Complex

LITHOLOGY: Kyanite Sillimanite Biotite Schist
Sillimanite Biotite Garnet Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Monashee

METAMORPHIC TYPE: Regional

RELATIONSHIP: Syn-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

Kyanite has been noted (Wheeler, 1965) in schists and gneisses south of Ratchford Creek and west of the headwaters of Perry River. In that area, kyanite occurs as crystals from 1 to 2 centimetres in length. Sillimanite is also present in some strata; fibrolite intergrown with biotite can comprise in excess of 10 per cent of the rock.

The schists and gneisses which outcrop in this area are part of the autochthonous cover succession, mantling the Frenchman Cup Dome.

BIBLIOGRAPHY

EMPR OF 1988-26, p. 11
GSC P *64-32, p. 37
Placer Dome File
*Wheeler, J.O. (1965): Big Bend Map Area, British Columbia (82M, E1/2); Geological Survey of Canada Paper 64-32, 37 pages

DATE CODED: 1988/03/29
DATE REVISED: 1992/08/21

CODED BY: JP
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 257**

NATIONAL MINERAL INVENTORY:

NAME(S): **ORO VIEJO TALC, BROKEN PICK**

MINING DIVISION: Revelstoke

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 39 03 N
LONGITUDE: 118 36 21 W
ELEVATION: 991 Metres

NORTHING: 5723425
EASTING: 388906

LOCATION ACCURACY: Within 500M

COMMENTS: Talc outcrop along Highway 23, 380 metres southeast of the Goldstream River (Assessment Report 16604).

COMMODITIES: Talc

MINERALS

SIGNIFICANT: Talc
ASSOCIATED: Magnesite Chlorite Serpentine Chalcopyrite Pyrite
COMMENTS: Minor pyrite and chalcopyrite just to the north and south.
ALTERATION: Chlorite Serpentine
ALTERATION TYPE: Chloritic Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Metamorphic Epigenetic Industrial Min.
TYPE: E08 Carbonate-hosted talc
DIMENSION: 1600 x 35 Metres STRIKE/DIP: 135/70N TREND/PLUNGE:
COMMENTS: Talc unit.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Undefined Formation	

LITHOLOGY: Phyllite
Carbonaceous Slate
Limestone
Talc Magnesite Schist
Marble
Graphitic Schist
Talc Schist

HOSTROCK COMMENTS: Lardeau Group ranges from Cambrian to Mississippian in age.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

CAPSULE GEOLOGY

A pervasive talc-magnesite trend is developed in a sequence of silver grey phyllites with interbeds of carbonaceous slate and minor limestone of the Cambrian to Mississippian Lardeau Group, near the contact with limestone of the Lower Cambrian Badshot Formation to the east. These rocks have been metamorphosed up to greenschist facies. An average foliation strikes 090 degrees and dips 36 degrees north.

The deposit outcrops on the shore of the Columbia River and continues southeast to Highway 6, crossing the Goldstream River 500 metres east of the Columbia River for a total length of 1600 metres. Talc float to the southeast, suggests that the trend continues for another 1600 metres. The unit generally strikes 135 degrees and dips 70 degrees north.

The deposit consists of talc-magnesite schist with variable amounts of chlorite and serpentine occurring as a single 2 to 7 metre wide "vein" on Goldstream River and as 3 separate talc "veins" interlayered with marble and graphitic to talcose schist along the highway to the southeast. The talc zones display a composite width of 39 metres on the highway. The talc is greenish white and steatitic to occasionally crystalline. This talc mineralization appears to be currently subeconomic in terms of tonnage and grade (Assessment Report 18028). Minor chalcopyrite and pyrite occur just north and south of this unit on both sides of the Goldstream River.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 962
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *16604, 18028
EMPR BULL 71
GSC MAP 12-1964
GSC OF 481
GSC P 64-32

DATE CODED: 1989/10/18
DATE REVISED: 1989/10/18

CODED BY: PSF
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 258**

NATIONAL MINERAL INVENTORY:

NAME(S): **KIRBYVILLE CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M10W 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 36 49 N
LONGITUDE: 118 45 04 W
ELEVATION: 1830 Metres

NORTHING: 5719517
EASTING: 378757

LOCATION ACCURACY: Within 1 KM
COMMENTS: Area 3, Figure 4, Open File 1988-26.

COMMODITIES: Garnet Kyanite

MINERALS

SIGNIFICANT: Garnet Kyanite
ASSOCIATED: Biotite Sillimanite
MINERALIZATION AGE: Mesozoic

DEPOSIT

CHARACTER: Layered Stratabound Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Unknown			Monashee Complex

LITHOLOGY: Kyanite Sillimanite Garnet Schist
Garnet Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Monashee Complex contains orthogneisses and paragneisses which are exposed in the Frenchman Cap dome. Frenchman Cap is one of a series of domal structures, and, together with the Thor Odin, Valhalla and Pinnacles domes comprises the core zone of the Omineca crystalline belt. Archean orthogneisses (Brown, 1980) predominate in the lowest part of the Monashee Complex, and are exposed in the core of the Frenchman Cap dome. These are overlain by an autochthonous cover or mantling succession of clastic and carbonate rocks.

Locally, kyanite may constitute 20 per cent of micaceous schists within the mantling succession, and individual crystals may be over three centimetres in length (Hoy, personal communication, 1987). North of Kirbyville Creek, on the north flank of Frenchman Cap dome pelitic horizons contain abundant, coarse kyanite, some sillimanite and locally, up to 30 per cent garnet. A distinctive amphibolite layer in the same area is reported to contain garnets ranging from 2 to 20 centimetres in size and randomly oriented clusters of kyanite (Scammell, 1985).

BIBLIOGRAPHY

EMPR OF 1988-26, p. 11
GSC P *85-1A, pp. 311-316
*Scammell, R.J. (1985): Stratigraphy and Structure of the Northwest Flank of Frenchman Cap Dome, Monashee Complex, British Columbia

DATE CODED: 1988/03/29
DATE REVISED: 1990/01/04

CODED BY: JP
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 259**

NATIONAL MINERAL INVENTORY:

NAME(S): **EAGLE PASS MOUNTAIN**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 23 N
LONGITUDE: 118 32 32 W
ELEVATION: 2150 Metres

NORTHING: 5657227
EASTING: 391917

LOCATION ACCURACY: Within 5 KM
COMMENTS: Area 6, Figure 4, Open File 1988-26.

COMMODITIES: Andalusite

MINERALS

SIGNIFICANT: Andalusite Kyanite
ASSOCIATED: Sericite
MINERALIZATION AGE: Mesozoic

DEPOSIT

CHARACTER: Layered Stratabound Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P01 Andalusite hornfels
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Unknown			Monashee Complex

LITHOLOGY: Andalusite Kyanite Sericite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

Along the southern flank of Frenchman Cap dome, near Eagle Pass Mountain andalusite-sericite schists have recently been found. These schists contain 30 per cent andalusite and some kyanite (up to 8 per cent) in a matrix of predominantly sericite and quartz (C.D.S. Bates, personal communication 1987 to Z.D. Hora).

These schists are presumed to be part of the mantling gneiss succession of Frenchman Cap dome.

BIBLIOGRAPHY

EMPR OF *1988-26, p. 12

DATE CODED: 1988/03/29
DATE REVISED: 1989/01/04

CODED BY: JP
REVISED BY: LJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 260**

NATIONAL MINERAL INVENTORY:

NAME(S): **STITT CREEK**, STITT CREEK GARNET

STATUS: Developed Prospect

REGIONS: British Columbia

NTS MAP: 082M09E

BC MAP:

LATITUDE: 51 37 42 N

LONGITUDE: 118 10 24 W

ELEVATION: 762 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Located at the confluence of Stitt Creek and Goldstream River, about 70 kilometres north of Revelstoke.

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

NORTHING: 5720354

EASTING: 418786

COMMODITIES: Garnet

MINERALS

SIGNIFICANT: Garnet

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unconsolidated

CLASSIFICATION: Placer Industrial Min.

TYPE: C01 Surficial placers

SHAPE: Irregular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

Unknown

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Alluvium

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

INVENTORY

ORE ZONE: TOTAL

REPORT ON: Y

CATEGORY: Measured
QUANTITY: 300000 Tonnes

YEAR: 1994

COMMODITY

Garnet

GRADE

1.0000 Per cent

COMMENTS: Calculated tonnage; grade unknown.

REFERENCE: D. Hora, personal communication, 1994.

CAPSULE GEOLOGY

The Stitt Creek placer garnet deposit is located at the confluence of Stitt Creek and Goldstream River, about 70 kilometres north of the community of Revelstoke. The deposit is an alluvial fan into a braided stream, with a depth of 5.1 metres. The deposit is very irregular with economic grades of almandine garnet. Calculated reserves are 300,000 tonnes with potential to double (D. Hora, personal communication, 1994).

Cassiar Coal Company Ltd. conducted a 25-hole drilling program totalling approximately 373 metres in 1995 on the south resource block of Placer Lease 315346. Drill spacing was tightened to 50 metres from 100 metres and done on a diamond pattern. Drilling in 1993 on the north resource block was on 200 metre spacings. Drilling in 1995 was followed by pitting and bulk sampling. The 1995 program indicates a blanket-like deposit improving to the west; overburden is 1-2 metres. The company estimates the 1995 work increased mineable reserves by 25 per cent, pending final results of bulk sampling.

Development work was reported to be ongoing in 1996.

BIBLIOGRAPHY

EM EXPL 1996-A24

EM INF CIRC 1996-1, p. 20; 1997-1, p. 23

DATE CODED: 1994/12/05
DATE REVISED: 1996/01/01

CODED BY: GO
REVISED BY: VAP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 261**

NATIONAL MINERAL INVENTORY:

NAME(S): **UPPER MONTGOMERY**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 33 20 N
LONGITUDE: 118 19 18 W
ELEVATION: 2300 Metres

NORTHING: 5712435
EASTING: 408373

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Zinc

MINERALS

SIGNIFICANT: Pyrrhotite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated Stratiform
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Lardeau	Index	

LITHOLOGY: Actinolite Schist
Siliceous Schist
Meta Chert
Meta Diorite Sill
Graphitic Pelite
Marble
Micaceous Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

CAPSULE GEOLOGY

A disseminated sulphide bearing horizon crops out high above Montgomery Lake on the east-trending divide between Goldstream River and Downie Creek.

The sulphide horizon is hosted by rusty weathering thinly foliated actinolite schist and siliceous schist/metachert which form the hangingwall of a metadiorite sill 1 to 3 metres thick. The horizon can be traced for approximately 500 metres in a sequence of interlayered graphitic pelite, marble and micaceous quartzite which is coarsening upward. The sequence above the sulphide horizon consists of clean quartzite, mica schist and marble. The latter hosts the lead-zinc mineralization of the KJ showing.

The Upper Montgomery sulphide horizon has a prominent electromagnetic signature. It was sampled near its eastern and western ends and analyses returned low base and precious metal values, but elevated manganese.

Diamond drilling in 1994 tested the eastern end of this zone. Drillhole 94-2 intersected two semimassive pyrrhotite zones separated by 26 metres of interlayered greenstone, dark graphitic pelite and carbonate units. The upper (3.8 metres) and the lower (3.2 metres) zones returned trace to insignificant copper values. Drillhole 94-3, collared 100 metres north-northwest of 94-2, intersected only the upper sulphide zone. Analysed samples returned trace amounts of copper (Fieldwork 1994, page 235).

BIBLIOGRAPHY

EMPR FIELDWORK *1994, pp. 215-241
EMPR OF 1995-2;1999-2

DATE CODED: 1996/02/02
DATE REVISED: / /

CODED BY: MC
REVISED BY:

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082M 262**

NATIONAL MINERAL INVENTORY:

NAME(S): **ICE**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M09E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 33 34 N
LONGITUDE: 118 20 57 W
ELEVATION: 2440 Metres

NORTHING: 5712903
EASTING: 406474

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Gold

MINERALS

SIGNIFICANT: Pyrrhotite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratiform
CLASSIFICATION: Volcanogenic
TYPE: * Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Lardeau

FORMATION

Index

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Pelitic Calcareous Rock
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

CAPSULE GEOLOGY

The Ice showing was discovered in 1989 during a regional exploration program conducted by Bethlehem Resources Corporation and Goldnev Resources Inc. Numerous, subangular massive pyrrhotite boulders up to 0.5 metre square are dispersed along the north wall of a cirque at 2500 metres elevation. The southern margin of the Goldstream pluton crops out in the cliffs immediately to the north. A single grab sample consisting of chips from five of these boulders returned 6.23 grams per tonne gold, 3.23 grams per tonne silver, 540 parts per million copper and 96 parts per million zinc (Fieldwork 1994, page 235). These values compare well with those reported by Gibson (1989).

Polished thin section studies by J. Payne of Vancouver Petrographics Ltd. describe the sulphide sample as a fine-grained skarn dominated by pyrrhotite with interstitial grains of diopside and lesser plagioclase. Chalcopyrite, minor bismuth minerals and traces of arsenopyrite and electrum occur mainly in patches and fractures in diopside (Gibson, 1989).

Massive pyrrhotite, with similar gold grades to those reported here, has been discovered in place during the summer of 1994, in the cliffs above the boulder train. The massive pyrrhotite layer is 1 to 2 metres thick and exposed along strike for over 5 metres in a north-northeasterly direction. Analysed samples returned up to 7.5 grams per tonne gold and elevated copper, bismuth and tungsten (Fieldwork 1994, page 235). The layer is hosted by a pelitic calcareous pendant in the Goldstream pluton.

Boulders from the Ice showing have low base metal values, but their source is an interesting target due to the elevated gold values which are unknown in the other copper-zinc volcanogenic massive sulphide deposits of the area, except perhaps at the J&L, about 25 kilometres to the south.

BIBLIOGRAPHY

EMPR ASS RPT 19580
EMPR FIELDWORK *1994, pp. 215-241
EMPR OF 1995-2

DATE CODED: 1996/02/02
DATE REVISED: 1996/02/07

CODED BY: MC
REVISED BY: MC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 262**

MINFILE NUMBER: **082M 263**

NATIONAL MINERAL INVENTORY:

NAME(S): **C-1, GSWEST**

MINING DIVISION: Revelstoke

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M10E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 38 09 N
LONGITUDE: 118 34 18 W
ELEVATION: 1140 Metres

NORTHING: 5721706
EASTING: 391234

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Zinc Lead Silver

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Chalcopyrite Galena
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Layered Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Lardeau

FORMATION

Index

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Chlorite Phyllite
Carbonate
Graphitic Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Drill Core

YEAR: 1991

COMMODITY

GRADE

Silver	31.1900	Grams per tonne
Copper	0.0400	Per cent
Lead	1.5400	Per cent
Zinc	3.9400	Per cent

COMMENTS: Best intersection over 2 metres.
REFERENCE: Fieldwork 1994, page 234.

CAPSULE GEOLOGY

The C-1 zone was discovered in 1991 by diamond drilling coincident geochemical and geophysical anomalies on the south-facing slope of the 'hump' approximately 9 kilometres west of the Goldstream mine.

The zone is comprised of one or more layers of disseminated and banded to locally semimassive pyrrhotite and sphalerite with trace amounts of chalcopyrite and galena. Ten drillholes tested the zone over a strike length of 400 metres and downdip for up to 75 metres. The best intersection yielded 3.94 per cent zinc, 1.54 per cent lead, 0.04 per cent copper and 31.19 grams per tonne silver over 2 metres. The sulphides are hosted by strongly fractured and faulted dark chlorite phyllite, carbonate and black graphitic phyllite and minor quartz stockwork zones within these units. The thinly foliated calcareous green chlorite schists and carbonates are probably equivalent to the middle Index Formation, or the uppermost lower Index Formation and are correlated with footwall rocks at the Goldstream mine (082M 141).

Talc-altered ultramafic rocks and dark graphitic phyllite crop out in a soapstone quarry 2 kilometres east of the C-1 zone. Drillhole stratigraphy eastward towards the mine shows an interlayered sequence of graphitic phyllites, chloritic phyllites, talc-altered ultramafic rocks and lesser carbonate as far east as the tailings pond (approximately 4 kilometres east of the C-1 zone). Northwest of the C-1 showing, asbestos-bearing serpentinite occurs in

CAPSULE GEOLOGY

graphitic schists of the lower Index Formation at the Monarch showing, now submerged by the Columbia River. Thinly foliated talc-altered greenschists and ankeritic talc schist may represent zones of hydrothermal exhalation rather than altered ultramafic rock.

The mineralogy and host stratigraphy of the C-1 showing are similar to the stratiform Rift lead-zinc deposit (082M 190) located approximately 22 kilometres north. The Rift consists of a number of layers of massive sphalerite, pyrite, pyrrhotite and galena up to 2 metres thick. Sulphides are hosted by a predominantly schistose package of staurolite grade quartz-granet pelitic schist and layered calcsilicate with lesser psammite and marble. A sheared and metamorphosed ultramafic body, 15 metres thick, intrudes the metasediments above the massive sulphide layer. It consists of magnesite, antigorite, talc and magnetite. Similar ultramafic rocks occur in the Keystone area (082M 089) and are intimately associated with massive sulphides at the Standard deposit (082M 090) farther south.

BIBLIOGRAPHY

EMPR ASS RPT 20890, *23871
EMPR FIELDWORK *1994, pp. 215-241
EMPR OF 1995-2; 1999-2
WWW <http://www.orphanboy.com/gstream.html>

DATE CODED: 1996/02/05
DATE REVISED: 1996/09/13

CODED BY: MC
REVISED BY: MC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082M 264**

NATIONAL MINERAL INVENTORY:

NAME(S): **LOCOJO**, MCKINNON CREEK

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 41 N
LONGITUDE: 118 03 02 W
ELEVATION: 2060 Metres

NORTHING: 5683124
EASTING: 426752

LOCATION ACCURACY: Within 500M

COMMENTS:

COMMODITIES: Copper Zinc Lead

MINERALS

SIGNIFICANT: Pyrrhotite Sphalerite Pyrite Galena Arsenopyrite
Chalcopyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Layered Massive
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Index	

LITHOLOGY: Black Phyllite
Quartzite
Meta Chert
Black Graphitic Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

CAPSULE GEOLOGY

An interval of interlaminated, very fine grained quartzite (metachert?) and black graphitic phyllite, at least 15 metres thick and up to about 30 metres in structural thickness where it has been thickened by folding, is exposed to the west, in the headwaters of McKinnon Creek, in a separate panel of black phyllite. Four to five metres of gossan within this siliceous unit contains fine-grained laminated pyrite and sphalerite and massive sulphide lenses up to 30 centimetres thick by about 1 metre long. The massive sulphide lenses contain pyrite, galena, arsenopyrite, possible sphalerite and minor chalcopyrite, and nodular quartz. A 10-centimetre layer of white fine-grained crystalline barite is present at one locality in the black phyllite unit.

BIBLIOGRAPHY

EMPR FIELDWORK *1995, pp. 107-125
EMPR OF 1996-2; 1999-2
PR REL Cross Lake Minerals Ltd., Nov.13, 2002
WWW <http://www.crosslakeminerals.com/>

DATE CODED: 1996/02/05
DATE REVISED: 1996/02/05

CODED BY: MC
REVISED BY: MC

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082M 265**

NATIONAL MINERAL INVENTORY:

NAME(S): **LADYBUG**, LADY BUG, BLACKJACK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5663345
EASTING: 353210

LATITUDE: 51 06 10 N
LONGITUDE: 119 05 48 W
ELEVATION: 1440 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Location of Blackjack showing, northwest of an old logging road;
GPS Mike Cathro, July 2002.

COMMODITIES: Zinc Silver Lead Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Magnetite Pyrite Chalcopyrite
ASSOCIATED: Quartz Tremolite Epidote
ALTERATION: Quartz Epidote Carbonate
ALTERATION TYPE: Silicific'n Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Vein Stratiform Massive
CLASSIFICATION: Replacement Skarn
TYPE: S01 Broken Hill-type Pb-Zn-Ag±Cu K02 Pb-Zn skarn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic
Devonian

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

Eagle Plutonic Complex

LITHOLOGY: Chert
Quartzite
Ortho Granodiorite Gneiss
Syenite
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1998

SAMPLE TYPE: Channel

COMMODITY

GRADE

Zinc	1.9000	Per cent
Silver	78.2000	Grams per tonne
Copper	0.1900	Per cent
Lead	1.1200	Per cent

COMMENTS: Sample over 9 metres.

REFERENCE: Cross Lake Minerals Ltd., Press Release, December 1998.

CAPSULE GEOLOGY

The Ladybug showing is exposed over 50 metres along an old logging road on Mount Fowler, north of Anglemont. The occurrence was originally discovered by N. Stephanishin and D. Pipe under a 1996 Prospectors Assistance Program grant. In 1998, Leo Lindinger, in partnership with Mr. Pipe, further explored the Ladybug under a 1998 Prospectors Assistance Program grant. Further discoveries were made on the property at this time.

The property is underlain by Paleozoic metasediments of the Eagle Bay Formation and Devonian Mount Fowler granodiorite orthogneiss. Galena, sphalerite, magnetite and rare pyrite are hosted by greenish, epidote-tremolite(?), locally calcareous rock. Lamintated, pale green quartz-epidote rock is also common and may be altered chert or quartzite. The mineralization has the appearance of stratabound, Shuswap type Pb-Zn mineralization, however, the presence of calc-silicate minerals and nearby Tertiary felsic dikes suggests that it may have formed through metasomatic processes.

CAPSULE GEOLOGY

Cross Lake Minerals Ltd. optioned the property in December 1998. Channel sampling by Jim Millar-Tait returned up to 9 metres of 1.9 per cent zinc, 78.2 grams per tonne silver, 0.19 per cent copper and 1.12 per cent lead, including 0.5 metre of 7.42 per cent zinc, 550.0 grams per tonne silver, 0.92 per cent copper and 6.65 per cent lead (Cross Lake Minerals Ltd. Press Release, December 10, 1998). The company completed IP, magnetic and soil surveys in 1999. Five holes (approximately 300 metres) were drilled in 1999.

BIBLIOGRAPHY

EM EXPL 1998-64
EM INF CIRC 2000-1, p. 19
EMPR OF 1996-20
GSC MAP 48-1963
GSC OF 290; 637
GSC P 75-1A
GCNL #239 (Dec.14), 1998
PERS COMM Mike Cathro, June 1998
PR REL Cross Lake Minerals Ltd., Dec. 10, 1998
WWW <http://www.crosslakeminerals.com>;
<http://www.infomine.com/index/properties/LADYBUG.html>
EMPR OF 2000-22

DATE CODED: 1998/06/08
DATE REVISED: 1998/12/08

CODED BY: LDJ
REVISED BY: MSC

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 266**

NATIONAL MINERAL INVENTORY:

NAME(S): **CAM-GLORIA**, GLORIA, HONEYMOON BAY

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E 082M05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 15 00 N
LONGITUDE: 119 33 00 W
ELEVATION: 1000 Metres

NORTHING: 5680716
EASTING: 322043

LOCATION ACCURACY: Within 1 KM
COMMENTS: Centre of claim group.

COMMODITIES: Gold Silver Lead Copper Bismuth

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Galena Chalcopyrite Sphalerite

ASSOCIATED: Arsenopyrite Fluorite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Skarn
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Lower Cambrian
Cretaceous

GROUP

Unnamed/Unknown Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

Baldy Batholith

LITHOLOGY: Quartz Monzonite
Gneissic Metasedimentary

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

Follow up on anomalous samples from the 1997 Geological Survey Branch's till geochemistry survey release, led to the Cam-Gloria discovery, by Camille Berube in 1998. A large, rusty, auriferous quartz vein contains pyrite, galena and chalcopyrite. The vein, which is up to 10 metres wide and 200 metres in length, is hosted by Cretaceous monzonite of the Baldy Batholith near its contact with gneissic metasediments of the Eagle Bay Assemblage.

The main vein occupies a 35 to 40 metre wide, 700-metre long zone of variable alteration shearing and quartz veining in quartz monzodiorite of the Honeymoon Stock. The alteration zone strikes northeasterly 025 to 045 degrees and dips northwest from 45 to 70, and appears to pinch and swell along strike.

The veins may be 7 metres wide, and contain an average 1-5 coarse grained sulphides, mainly pyrite and pyrrhotite, with traces of galena, chalcopyrite, sphalerite and arsenopyrite. Gold values are variable but appear to be associated with galena, fine-grained bluish-grey sulphides and local discordant gouge or brecciated zones.

Grab samples taken by BC geologists assayed up to 3.754 grams per tonne gold and 61.4 grams per tonne silver. Samples collected by C. Berube assayed up to 27.4 grams per tonne gold (Exploration in BC 1997, page 40). The vein also contains anomalous values of bismuth (to 120 ppm), copper (to 794 ppm), lead (to 534 ppm), molybdenum (to 33 ppm), tellurium (to 4.1 ppm) and tungsten (to 86 ppm), and weakly anomalous arsenic (to 35 ppm) (Mike Cathro, personal communication, 1998). Trenching, drilling (7 holes, 836 metres), mapping, prospecting and VLF geophysics were conducted in 1999 by Teck Corporation.

Quartz veins and alterations were traced over a strike length of 700 metres and a width of 40 metres.

BIBLIOGRAPHY

EM EXPL *1997, p.40; 1999-33-39; 2001, pp. 237-246
EM FIELDWORK 1998, pp. 297-306; *1999, pp. 193-206, 209-210, 225-236;
2000, pp. 231-252

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 974
REPORT: RGEN0100

BIBLIOGRAPHY

EM INF CIRC 2000-1, pp. 14, 19
EM OF 1997-9, 1998-9; 1999-3; 2000-7

DATE CODED: 1998/08/26
DATE REVISED: 2003/03/02

CODED BY: LDJ
REVISED BY: MPS

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 267**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLDSTRIKE**, BIZAR, BIZ,
ROAD

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M14E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 51 52 49 N
LONGITUDE: 119 09 49 W
ELEVATION: 1143 Metres

NORTHING: 5749935
EASTING: 351079

LOCATION ACCURACY: Within 500M

COMMENTS: The Bizar showing is located on the Bizar 1-4 and Biz claims,
2.7 kilometres west of Tuntum Lake in the upper Adams River drainage.
It is 16 kilometres northeast of Avola.

COMMODITIES: Gold Bismuth Copper Silver Tellurium
Selenium Arsenic

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Bismuthinite

COMMENTS: Traces of bismuthinite (?).

ASSOCIATED: Quartz

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Stockwork
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Shuswap Metamorphic Complex

LITHOLOGY: Micaceous Quartzite
Quartz Muscovite Biotite Schist
Gneiss
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1998
SAMPLE TYPE: Grab
COMMODITY GRADE
Gold 56.8000 Grams per tonne
Bismuth 0.5271 Per cent
Copper 0.3423 Per cent
Silver 5.4000 Grams per tonne

COMMENTS: Chip sample over 20 centimetres.
REFERENCE: Mike Cathro, December 1998.

CAPSULE GEOLOGY

The Bizar showing is located on the Bizar 1-4 and Biz claims (Goldstrike Group), 2.7 kilometres west of Tuntum Lake in the upper Adams drainage. It is 16 kilometres northeast of the village of Avola.

This showing was discovered by prospector/geologist Leo Lindinger in 1998, under the Prospectors Assistance Program. The showing is exposed on an overgrown logging road, however, there is no record and minimal evidence of any previous exploration work in the area. A 50 by 20 metre roadcut exposes a small stockwork zone of quartz-pyrrhotite-pyrite-chalcopyrite veinlets with attitudes of predominantly 300 degrees, 40-90 degrees north to vertical and 360 degrees, 30 degrees east. About 2 to 4 veinlets per metre are present, ranging from 1-3 centimetres in width. The largest vein is about 20 centimetres wide and contains up to 50 per cent sulphides in places, mainly pyrrhotite, pyrite and lesser chalcopyrite.

CAPSULE GEOLOGY

The veins are hosted in micaceous quartzite and quartz-muscovite-biotite schist of the Shuswap Metamorphic Complex (mapped as Unit 1c of Wheeler). The foliation of the schist dips moderately to the northeast and strikes at about 300 degrees at the showing. Pegmatite dikes, granitic rocks (mid Cretaceous) and gneiss are also common in the general area.

A semi-concordant layer of auriferous massive pyrrhotite and minor chalcopyrite, up to 20 centimetres wide, occupies the west end of the discovery showing.

The layer is concordant with synmetamorphic foliation and has been deformed together with the schists into southerly plunging crenulation folds. Tight fracture and narrow grey quartz veins trend northerly and dip steeply, crosscutting quartzite and schists.

High grade gold values are found in massive sulphide where it is associated with bismuth. The veins carry anomalous values in gold.

A 20-centimetre chip sample of quartz-sulphide vein breccia assayed 56.8 grams per tonne gold, 5.4 grams per tonne silver, 6 ppm arsenic, 5270.5 ppm bismuth, 151 ppm cobalt, 3423 ppm copper, 13 ppm molybdenum, 140 ppm nickel, 11.3 ppm selenium, 11.8 ppm tellurium, and 18 ppm tungsten. A 5-centimetre chip sample of massive sulphide vein assayed 11.69 grams per tonne gold, 2.2 grams per tonne silver, 36 ppm arsenic, 769 ppm bismuth, 318 ppm cobalt, 1939 ppm copper, 30 ppm molybdenum, 292 ppm nickel, 4.8 ppm selenium, 1.5 ppm tellurium and 60 ppm tungsten. Values for arsenic, antimony, mercury, lead, zinc, cadmium and tin are low. (Mike Cathro, December 1998).

Cassidy Gold Corp. optioned the Goldstrike group in December 1998 and conducted drilling (5 holes) in 1999.

BIBLIOGRAPHY

EM FIELDWORK *1999, pp. 193-206,210,212-213; 2000, pp. 231-252
EM INF CIRC 2000-1, p. 19
EM OF 1999-3
EMPR OF 1999-3
GSC MAP 19-1957; 94A; 711; 1418A; 1426; 48-1963
PERS COMM Mike Cathro, December 1998
PR REL Cassidy Gold Corp., Dec. 17, 1998; Dec. 6, 1999
WWW <http://www.infomine.com/>

DATE CODED: 1998/10/18
DATE REVISED: 2003/03/02

CODED BY: MSC
REVISED BY: MPS

FIELD CHECK: Y
FIELD CHECK: Y

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 977
REPORT: RGEN0100

MINFILE NUMBER: **082M 268**

NATIONAL MINERAL INVENTORY:

NAME(S): **AP98-408**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 52 N
LONGITUDE: 119 28 56 W
ELEVATION: 1630 Metres

NORTHING: 5661776
EASTING: 326139

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper Lead Zinc Silver

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Sphalerite Galena
ASSOCIATED: Pyrrhotite Quartz
ALTERATION: Quartz
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Exhalative
DIMENSION: 3 x 1 Metres STRIKE/DIP: 115/10N TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Undefined Group Eagle Bay

LITHOLOGY: Siliceous Calc-silicate Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Adams Plateau
TERRANE: Kootenay

CAPSULE GEOLOGY

A small trench at the northeast end of the map area has exposed a massive pyrrhotite layer with minor chalcopyrite, sphalerite and galena. The sulphide layer has an exposed thickness of 80 centimetres and a length of a few metres. It is within a very rusted, siliceous calcsilicate gneiss. Based on its base and precious metal content, and location relative to the projected eastern extension of EBGI, it may be at approximately the same stratigraphic level as the Lucky Coon (082M 012) sulphide layer. A high pyrrhotite content, relative to pyrite, may reflect higher metamorphic grade.

BIBLIOGRAPHY

EM FIELDWORK 1998, p. 242

DATE CODED: 1998/11/10
DATE REVISED: 1998/11/10

CODED BY: TH
REVISED BY: TH

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082M 268**

MINFILE NUMBER: **082M 269**

NATIONAL MINERAL INVENTORY:

NAME(S): **AP98-46**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 08 N
LONGITUDE: 119 32 08 W
ELEVATION: Metres

NORTHING: 5660544
EASTING: 322357

LOCATION ACCURACY: Within 500M
COMMENTS:

COMMODITIES: Copper

MINERALS

SIGNIFICANT:	Chalcopyrite	Pyrrhotite	Pyrite
ASSOCIATED:	Quartz	Amphibole	Chlorite
ALTERATION:	Quartz	Chlorite	
ALTERATION TYPE:	Silicific'n	Chloritic	
MINERALIZATION AGE:			

DEPOSIT

CHARACTER:	Stratabound	Massive
CLASSIFICATION:	Volcanogenic	
SHAPE:	Tabular	
DIMENSION:	3 x 1	Metres

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Adams Plateau

CAPSULE GEOLOGY

A small pod of very rusty-weathering massive sulphides is exposed within amphibolite of Unit EBG1. The sulphide exposure is several metres in length and up to a metre in thickness. It comprises mainly pyrrhotite and chalcopyrite, with subrounded granular quartz eyes, in a dark green chlorite-amphibole-quartz matrix. Sulphides are typically banded, commonly swirled and cut by late, thin chalcopyrite veinlets. Small euhedral pyrite grains may overgrow the massive sulphides.

Assays of two samples of the massive sulphide layer returned 0.48 and 0.23 per cent copper, with low lead and zinc content and only trace silver and gold (EM Fieldwork 1998, p. 243).

BIBLIOGRAPHY

EM FIELDWORK 1998, p. 243

DATE CODED: 1998/11/10
DATE REVISED: / /

CODED BY: TH
REVISED BY:

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082M 270**

NATIONAL MINERAL INVENTORY:

NAME(S): **OTTER CREEK**, F.A.B.

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M11E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 42 26 N
LONGITUDE: 119 12 39 W
ELEVATION: 1370 Metres

NORTHING: 5730789
EASTING: 347246

LOCATION ACCURACY: Within 1 KM
COMMENTS: Location of F.A.B. claims.

COMMODITIES: Tungsten Uranium

MINERALS

SIGNIFICANT: Scheelite Autunite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Pegmatite
Gneiss
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP:

GRADE: Amphibolite

CAPSULE GEOLOGY

The F.A.B. claims were staked in 1983 as a result of a discovery of tungsten skarn mineralization in float. The Otter Creek property is located west of Adams River, 10 kilometres southeast of Avola.

The property is underlain by gneiss, schist, pegmatites and interbedded limestone of the Shuswap Metamorphic Complex. Scheelite and autunite occur within pegmatite dikes.

BIBLIOGRAPHY

EMPR ASS RPT *11904

DATE CODED: 1998/10/21
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 271**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORTYNINE CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M08W 082M07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 28 22 N
LONGITUDE: 118 29 55 W
ELEVATION: 600 Metres

NORTHING: 5703467
EASTING: 395918

LOCATION ACCURACY: Within 500M

COMMENTS: Located in the alluvial fan at the mouth of Fortynine Creek at the Columbia River.

COMMODITIES: Garnet Kyanite

MINERALS

SIGNIFICANT: Garnet Kyanite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer Industrial Min.
TYPE: C01 Surficial placers

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Muscovite Schist
Biotite Schist
Marble
Quartzite
Calc-silicate Gneiss
Hornblende Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The area lies within the Shuswap Metamorphic Complex along the eastern margin of the Frenchman Cap Dome. The core of the dome is mantled by an unconformably overlying succession of meta-sedimentary rocks consisting of calc-silicate gneiss, quartzite, hornblende gneiss and marble.

A high accumulation of garnet and kyanite is reported to occur in the alluvial fan of Fortynine Creek, at its confluence with the Columbia River (Personal Communication, Z.D. Hora, 1998).

BIBLIOGRAPHY

EMPR MAP 43
GSC MAP 12-1964
GSC OF 637

DATE CODED: 1998/11/18
DATE REVISED: 1998/11/18

CODED BY: GJP
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 272**

NATIONAL MINERAL INVENTORY:

NAME(S): **LUCKY-J**, SAM, GRAFFIN

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 21 07 N
LONGITUDE: 119 43 26 W
ELEVATION: 750 Metres

NORTHING: 5692486
EASTING: 310331

LOCATION ACCURACY: Within 500M

COMMENTS: Location of drill hole (Assessment Report 22834).

COMMODITIES: Graphite

MINERALS

SIGNIFICANT: Graphite
ASSOCIATED: Pyrrhotite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Industrial Min.
TYPE: P04 Crystalline flake graphite

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Devonian	Undefined Group	Eagle Bay	
Cretaceous			Baldy Batholith

LITHOLOGY: Graphitic Schist
Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

Granite of the Cretaceous Baldy batholith intrudes Devonian Eagle Bay metasediments consisting of mica schists, quartzites, argillites and slates. Graphite occurs within the metasediments. Two steeply dipping (45 to 65 degrees) sections of graphite were interested by drilling. One was from 42 to 49 metres and the other from 73 to 77 metres. The graphite, as determined by X-ray diffraction, is crystalline, flake variety and returned values from 2.50 to 4.62 per cent graphite (Assessment Report 22834).

BIBLIOGRAPHY

EMPR ASS RPT 18182, *22834, 23393, 25127
EMPR P 1987-2
GSC MAP 48-1963

DATE CODED: 1999/06/21
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 273**

NATIONAL MINERAL INVENTORY:

NAME(S): **GQ**, PERRY RIVER, SECOND CREEK,
SW, SE, NE

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M02W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 08 28 N
LONGITUDE: 118 46 30 W
ELEVATION: 1500 Metres

NORTHING: 5667015
EASTING: 375831

LOCATION ACCURACY: Within 500M
COMMENTS: GQ Claims.

COMMODITIES: Gold Copper Bismuth Tungsten

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Scheelite Pyrite

ASSOCIATED: Quartz Calc-Silicate Tourmaline

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein Disseminated

CLASSIFICATION: Hydrothermal

TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER

Proterozoic Middle Cretaceous Shuswap Metamorphic Complex
ISOTOPIC AGE: U-Pb Long Ridge Pluton

MATERIAL DATED: 92-94 Ma

LITHOLOGY: Quartz Mica Schist
Garnet Para Gneiss
Amphibolite
Granite
Syenite
Marble
Calc-silicate
Pegmatite
Gneiss

HOSTROCK COMMENTS: R.R. Parrish, 1995, CJES Vol. 32.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Monashee

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: NE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1999

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold	1.2500	Grams per tonne
Copper	0.0510	Per cent
Tungsten	0.0250	Per cent
Bismuth	0.0090	Per cent

COMMENTS: Grab sample by W. Gruenwald.

REFERENCE: Fieldwork 1999, page 210.

CAPSULE GEOLOGY

Several new pegmatite-related Au-W-Cu-Bi occurrences were discovered northeast of Shuswap Lake in September, 1999 by geologist Warner Gruenwald. He was following up silt samples with anomalous gold values that he had collected during the summer. The showings outcrop on new logging roads in the Second Creek drainage, a northwest flowing tributary of the Anstey River. The GQ claims were staked in fall 1999 to cover the area.

Quartz-sulphide zones have been located in outcrop over an area of about 1.5 by 1.5 kilometres on the GQ claims, and anomalous gold values have been encountered at the SW, SE and NE showings. The mineralization is hosted by garnet-bearing paragneiss, orthogneiss

CAPSULE GEOLOGY

and quartz-mica schist, and lesser calc-silicate rock, marble and amphibolite of the Shuswap metamorphic complex. These high-grade metamorphic rocks occur in the hangingwall of the Monashee decollement, to the west of the Frenchman's Cap gneiss dome, part of the Monashee complex. Massive to foliated, granitic intrusive rocks of the mid-Cretaceous Long Ridge pluton (92-94 Ma, U-Pb, R.R. Parrish, 1995, CJES Vol. 32) occur a few hundred metres to the west of the SW showing. The schist/gneiss package is also intruded by abundant pegmatite dikes, some of which contain tourmaline and minor pyrrhotite.

Mineralization consists of 10 to 30 centimetre wide lenses of quartz, calc-silicate and sulphides which occur along the margins of conformable or slightly discordant, locally tourmaline-bearing pegmatite sills, where they are in contact with marble or schist. Sulphide content ranges from a few percent up to 20-30 per cent in semi-massive pods, consisting mainly of pyrrhotite, minor pyrite and traces of chalcopyrite and scheelite. In all cases, the mineralization has an unusual granular texture with euhedral hexagonal to rounded apatite(?) and quartz grains surrounded by sulphides. In addition to gold values ranging from 115 ppb to 1.73 grams per tonne gold, many of the grab samples from the showings have anomalous geochemical values for bismuth (20 to 235 ppm), copper (305 to 734 ppm), tellurium (5.7 to 11.2 ppm), and tungsten (33.6 to 1210 ppm) (Fieldwork 1999, pages 210, 213).

BIBLIOGRAPHY

EM FIELDWORK *1999, pp. 208,210,213; 2000, pp. 231-252
EM INF CIRC 2000-1, p. 19
GSC MAP 12-1964
GSC P 64-32
CJES Vol. 32, pp. 1618-1642

DATE CODED: 2000/04/06
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 274**

NATIONAL MINERAL INVENTORY:

NAME(S): **E-D 1**, MANTO, GOSSAN 1,
 GOSSAN 2

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5694850
 EASTING: 291756

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082M05W 092P08E
 BC MAP:
 LATITUDE: 51 22 00 N
 LONGITUDE: 119 59 30 W
 ELEVATION: 1550 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Manto 2 Claim.

COMMODITIES: Gold Copper Bismuth Tungsten Zinc

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Sphalerite
 ASSOCIATED: Quartz Calcite
 MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Podiform
 CLASSIFICATION: Replacement
 TYPE: J04 Sulphide manto Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	
Carboniferous	Undefined Group	Fennell	
Middle Cretaceous			Baldy Batholith

LITHOLOGY: Limestone
 Calc-silicate Sediment/Sedimentary
 Basalt
 Quartz Monzonite
 Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional

Slide Mountain PHYSIOGRAPHIC AREA: Shuswap Highland
 RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: GOSSAN 1 REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1999
 SAMPLE TYPE: Grab

COMMODITY	GRADE	
Gold	3.3000	Grams per tonne
Copper	0.1146	Per cent
Tungsten	0.1487	Per cent
Zinc	0.1320	Per cent
Bismuth	0.0262	Per cent

COMMENTS: Grab sample of limonitic pyrrhotite-chalcopyrite manto.
 REFERENCE: Fieldwork 1999, page 210.

CAPSULE GEOLOGY

The E-D 1 claims, owned by Manto Mining Corporation, are located approximately 500 metres south of the southern contact of the Baldy batholith in the headwaters of Birk Creek. The showings were discovered in 1995 by Wayne Tyner, and have received limited mapping, hand trenching, sampling, and geophysical surveys. Three holes were drilled in 1997, but no logs or assays are available.

The mineralization occurs at the contact between a grey limestone unit and an underlying green and pink-banded rock, interpreted to be calc-silicate-altered sediments. Regionally, these rocks are mapped as Mississippian-aged Unit EBPl of the Eagle Bay Assemblage and the faulted contact with basalt of the Fennell Formation (Slide Mountain Terrane) occurs a few hundred metres to the west. The Gossan 1 and 2 showings consist of stratabound pods of partially oxidized, massive pyrrhotite with lesser pyrite, chalcopyrite and sphalerite. They are up to 2 metres thick and several metres in length and dip moderately to the southwest. Three

CAPSULE GEOLOGY

surface grab samples indicates that the sulphides contain significant gold (to 3300 ppb), bismuth (to 377 ppm), copper (to 1348 ppm), zinc (to 1537 ppm), and tungsten (to 1487 ppm) values and are also weakly anomalous in silver, cadmium, molybdenum, selenium, and tellurium (Fieldwork, 1999, pages 210, 211).

The stratabound sulphide mineralization has the appearance and characteristics of a manto-style deposit. The metal assemblage of gold-copper-zinc-tungsten-bismuth with anomalous tellurium and molybdenum, combined with proximity to the Baldy batholith and the presence of weakly calc-silicate altered rocks in the footwall suggest that mineralization formed by replacement of limestone adjacent to the batholith.

BIBLIOGRAPHY

EM FIELDWORK *1999, pp. 208, 210, 211-212
EMPR ASS RPT 20244, 25026
EMPR P 1987-2
GSC MAP 48-1963

DATE CODED: 2000/04/06
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 275**

NATIONAL MINERAL INVENTORY:

NAME(S): **LUCKY BEAR** LITTLE CREEK, FLAT ROCK,
WATER TANK

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M05W
BC MAP:
LATITUDE: 51 19 04 N
LONGITUDE: 119 39 49 W
ELEVATION: 900 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Little Creek occurrence, Fieldwork 1999.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5688542
EASTING: 314393

COMMODITIES: Tungsten Bismuth Zinc Gold

MINERALS

SIGNIFICANT: Pyrrhotite Scheelite Chalcopyrite
ASSOCIATED: Quartz
ALTERATION: Sericite
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal
TYPE: I02 Intrusion-related Au pyrrhotite veins

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic
Middle Cretaceous

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

Baldy Batholith

LITHOLOGY: Granodiorite
Ortho Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Shuswap Highland

CAPSULE GEOLOGY

Prospecting by Camille Berube and Dave and Len Piggin has located several new small W-Bi-Zn, W and W-Au showings on the Lucky Bear claim group near East and North Barriere Lakes. The showings are within, or adjacent, to the mid-Cretaceous Baldy batholith. The "Little Creek" W-Au showing is hosted by sericite- and biotite-altered granodiorite. Steeply dipping, north-trending, sheeted quartz veinlets range up to 10 centimetres in width in a 10 metre-wide blasted roadcut exposure. The veinlets contain minor sericite and pyrrhotite. Ultraviolet lamping has identified scheelite grains up to 1.5 centimetres long which occur in scattered patches in the veins, and selected samples collected by the owners have returned up to 6.15 per cent tungsten (D. and L. Piggin, written communication, 1999). One chip sample contained 370 ppb gold over 2 metres; otherwise the results were not significant for gold, bismuth or tungsten, confirming that tungsten, at least, is very irregularly distributed (Fieldwork 1999, page 210, 211). Approximately 500 metres to the east at the "Flat Rock" W showing is an irregular, half-metre-wide quartz vein with 1-3 per cent pyrrhotite and traces of chalcopyrite and scheelite. The vein is hosted by quartz-feldspar-biotite gneiss, part of the Devonian Orthogneiss (Schiarizza and Preto, 1987). A grab sample of the vein ran 1480 ppm tungsten (Fieldwork 1999, page 210, 211) and selected samples taken by the owners ran up to 0.39 per cent tungsten, 80 ppb gold, and 135 ppm bismuth (L. and D. Piggin, written communication, 1999). Scheelite-bearing pegmatite and garnet-tremolite-biotite-quartz skarn boulders ranging from 30 centimetres to 1 metre in diameter are found 2 kilometres to the northeast of the Little Creek showing in the "Water Tank" area (UTM 11 0314806E 5690793N). A grab sample of one of the skarn float boulders returned 0.437 per cent tungsten, 205 ppm bismuth and 1515 ppm zinc (Fieldwork 1999, page 210, 211). Although this mineralization has not yet been found in outcrop, the boulders suggest that skarn and pegmatite-hosted tungsten mineralization is associated with the margin of the Baldy batholith.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 987
REPORT: RGEN0100

BIBLIOGRAPHY

EM FIELDWORK *1999, pp. 208, 210, 211
GSC MAP 48-1963

DATE CODED: 2000/04/06
DATE REVISED: / /

CODED BY: LDJ
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 276**

NATIONAL MINERAL INVENTORY:

NAME(S): **TWIN 3, REAR ZONE, SILVER ZONE,
 TWIN MOUNTAIN**

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082M04W
 BC MAP:
 LATITUDE: 51 08 05 N
 LONGITUDE: 119 47 51 W
 ELEVATION: 1430 Metres

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5668528
 EASTING: 304286

LOCATION ACCURACY: Within 500M
 COMMENTS: Location of 1987 drill holes (including Hole Twin 3) that intersected massive sulphide (Assessment Report 16774, Map No. 1).

COMMODITIES: Gold Silver Zinc Lead Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite
 MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Concordant Disseminated Massive
 CLASSIFICATION: Volcanogenic Industrial Min.
 TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn
 SHAPE: Irregular
 DIMENSION: Metres STRIKE/DIP: 150/48E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Undefined Group	Eagle Bay	

LITHOLOGY: Siltstone
 Argillite
 Sericitic Chert
 Chert Pebble Conglomerate
 Quartz Sericite Schist
 Chlorite Schist
 Greenschist
 Limestone
 Dolomite
 Basalt

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
 TERRANE: Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1991
 SAMPLE TYPE: Drill Core

COMMODITY	GRADE	
Silver	250.2900	Grams per tonne
Gold	30.8500	Grams per tonne
Copper	0.2400	Per cent
Lead	2.1000	Per cent
Zinc	0.7700	Per cent

COMMENTS: From a 1.8-metre drill intersection.
 REFERENCE: Assessment Report 22389, page 15.

CAPSULE GEOLOGY

The Twin 3 occurrence is underlain by Devonian or older rocks of the Eagle Bay Formation consisting of calcareous chlorite-sericite-quartz schist within unit EBG (Map 56). The schists were derived largely from mafic to intermediate volcanic and volcanoclastic rocks. The metavolcanics contain several thin layers of limestone and dolomite, as well as remnant pillow basalt structures. The Tshinakin limestone member lies to the northeast of the property.

In this area, the Rea zone is a continuous, well-defined stratigraphic horizon which hosts several massive sulphide lenses (such as the Rea Gold (092M 191). A second mineralized stratigraphic

CAPSULE GEOLOGY

horizon parallels the Rea zone to the northeast and is referred to as the Silver zone. This zone hosts the Samatsum deposit (082M 244).

Mineral exploration on the Twin property started in the 1930s. The Twin Mountain occurrence (082M 020) is located about 1.5 kilometres to the southeast and is a silver-lead-zinc bearing quartz-dolomite vein discovered in 1936 and explored sporadically by several operators. The Twin claims were staked in 1980. In 1983, Lincoln Resources Inc. entered into an option agreement with Apex Energy Corp to work on the Twin property. A grid was established and a soil survey carried out. Falcobridge Copper acquired the property in 1984 and conducted mapping, rock sampling, Max-Min II and VLF-EM geophysical surveys. Two diamond drill holes were completed also. Lincoln Resources received the property back in 1985 and conducted a limited fill-in soil survey. In 1986, Lincoln extended the grid and conducted further rock and soil sampling and mapping. Genie EM and trenching were also conducted. In late 1986, Esso Minerals Canada optioned the property from Lincoln Resources and Apex Energy. Early in 1987, Esso Minerals conducted a VLF EM geophysical survey over geochemical target areas. This was followed by 2269 metres of diamond drilling which resulted in the discovery of a small gold-rich massive sulphide/barite lens on the Twin 3 claim. During the summer of 1988, Esso Minerals drilled 1278 metres in 8 holes and did additional geophysics and geological mapping. Homestake Canada acquired Esso's option in 1989 and did a limited amount of trenching on the Twin Mountain zone. In 1990, Homestake completed 4017 metres of diamond drilling in nine holes, and 2235 metres of down-hole Pulse EM geophysical surveying in six of the holes. Homestake conducted a further 4069 metres of diamond drilling in 6 holes in 1991. During this program the Silver zone, was intersected by 4 holes on the Twin property.

In 1987, Apex reported a 1.83-metre drill interval (Hole Twin 3 on the Rea Zone) that assayed 30.86 grams per tonne gold, 250.29 grams per tonne silver, 0.77 per cent zinc, 2.1 per cent lead and 0.24 per cent copper (George Cross Newsletter, No. 237, December 10, 1987). A 4.1-metre drill interval from the Twin property was reported to have yielded 12.8 grams per tonne gold, 108 grams per tonne silver, 0.2 per cent copper, 1.5 per cent lead and 0.6 per cent zinc (Assessment Report 22389, page 1). It may be that the former assay was a sub-interval of the latter.

The Silver zone consists of 50 metres of interbedded graphitic argillite and siltstone, sericitic chert, and pyritic sediments. The pyritic sediments range from fine siltstone to coarse chert pebble conglomerates. Chert pebble conglomerate with interbedded wacke contain 30 to 40 per cent pyrite occurring both as very fine-grained matrix and recrystallized granoblasts. Traces of blebby sphalerite, galena and chalcopyrite also occur. This zone remains open along strike and down dip.

BIBLIOGRAPHY

- EMPR AR 1939-D39; 1953-A101
EMPR ASS RPT 1783, 2093, 8942, 9882, 11990, 13614, 15568, 16774, 16989, 19734, *22389
EMPR EXPL 1983-157-158; 1985-C103
EMPR FIELDWORK 1979, pp. 28-36; 1980, pp. 15-23; 1984, pp. 67-76
EMPR GEM 1969-234
EMPR MAP *56
EMR MP CORPFILE (Camoose Mines Ltd.)
GSC MAP 48-1963; 5320G
GSC OF 637
CMH 1952, p. 146
GCNL #117, 1983; #216, 1986; #237, 1987; #212, 1989
Dickie, G.J., Preto, V.A. and Schiarizza, P. (in preparation 1986):
*Mineral Deposits of the Adams Plateau-Clearwater Area.
Stockwatch Dec. 11, 1987

DATE CODED: 2000/06/19
DATE REVISED: 2000/06/19

CODED BY: GJP
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 277**

NATIONAL MINERAL INVENTORY:

NAME(S): **K-7, KAMAD 7, K7**

STATUS: Developed Prospect

MINING DIVISION: Kamloops

REGIONS: British Columbia

NTS MAP: 082M04W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 51 08 26 N

NORTHING: 5669218

LONGITUDE: 119 48 47 W

EASTING: 303223

ELEVATION: 1520 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: The K-7 zone on the northern slopes of Samatsum Mountain, 25 kilometres east of Barriere and 60 kilometres north of Kamloops (Assessment Report 18822, Map No. 2).

COMMODITIES: Silver

Gold

Zinc

Lead

Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratabound Massive

CLASSIFICATION: Volcanogenic

TYPE: G06 Noranda/Kuroko massive sulphide Cu-Pb-Zn I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Undefined Group

FORMATION

Eagle Bay

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Altered Sediment/Sedimentary
 Cherty Sediment/Sedimentary
 Altered Argillite
 Altered Wacke

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: LENS

REPORT ON: Y

CATEGORY: Unclassified
 QUANTITY: 375000 Tonnes

YEAR: 1991

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	55.0000	Grams per tonne
Gold	4.0000	Grams per tonne
Copper	0.5000	Per cent
Lead	4.8000	Per cent
Zinc	6.1000	Per cent

COMMENTS: This inventory is based on several drill holes.

REFERENCE: Assessment Report 22389, page 1.

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Drill Core

YEAR: 1888

COMMODITY

GRADE

COMMODITY	GRADE	UNIT
Silver	77.8000	Grams per tonne
Gold	3.5600	Grams per tonne
Copper	0.5600	Per cent
Lead	6.8500	Per cent
Zinc	8.4000	Per cent

COMMENTS: From an 11.6-metre drill interval.

REFERENCE: Assessment Report 18822, page 17.

CAPSULE GEOLOGY

The K-7 prospect is located in structurally complex metasedimentary and metavolcanic rocks of the Paleozoic (Lower Cambrian and older(?) to Mississippian) Eagle Bay Assemblage (Formation). The assemblage has a complex deformational history involving multiple stages of thrust faulting and folding during the Jura-Cretaceous which produced strongly foliated and overturned rocks

CAPSULE GEOLOGY

trending northwest and dipping northeast. These Paleozoic rocks are intruded by mid-Cretaceous granodiorite and quartz monzonite (such as the Baldy batholith about 30 kilometres to the north of the deposit), and Early Tertiary quartz-feldspar porphyry, basalt and lamprophyre dykes. These are all locally overlain by Miocene plateau lavas, now represented in the area by occasional erosional remnants.

The area can be divided into several northwest trending, northeast dipping units. From northeast to southwest these are: 1) the Tshinikan Limestone which forms steep, massive landforms dominating the area; 2) mixed sediments consisting of interbedded cherts and argillite; 3) mafic volcanics; 4) the "Mine Series" of rocks which consist of a zone of more mixed sediments and mafic volcanics, with minor felsic to intermediate volcanics, which form the host stratigraphy for both the Samatosum and Discovery or Rea Gold zone (082M 191) deposits; and finally 5) a thick unit of argillites and wackes and a package of felsic rocks which lie in the structural footwall of the Mine Series. See the Samatosum past producer (082M 244) for further details of area geology.

There is no record of work in the K-7 area prior to the discovery of the Rea Gold zone (082M 191) to the north. The Rea find resulted in geophysics and minor diamond drilling to be carried out in 1983 on the Kamad 7 claim. Further geophysics followed in 1984. Five holes totalling 369.7 metres were drilled on the Kamad 7 claim in 1985 for a company called "259146 B.C. Limited". Esso Minerals Canada optioned the property from Kamad Silver Company in 1985. In 1986, Esso carried out basic linecutting, geochemical sampling, HLEM - EM geophysical surveying and 1814 metres of drilling in 11 diamond drill holes. In 1988, Esso drilled 17 holes on the Kamad 7 claim and 7 holes intersected massive sulphide mineralization within the "Rea zone" and called it the K-7 lens.

One diamond drill hole (K88033) intersected intensely dolomitized mafic volcanics from 2.6 metres to 32.1 metres which forms the footwall of the Rea zone. Massive, polymetallic sulphides (32.1 to 34.0 metres) were found in sharp contact with the volcanics. The sulphides were medium-grained and crudely banded on a centimetre scale. Bands of massive chalcopyrite and sphalerite/galena were also observed as were "splashes" of galena and chalcopyrite up to 2 centimetres across. A weighted average of 4 assays yielded 1.82 metres of 1.26 per cent copper, 6.51 per cent lead, 6.87 per cent zinc, 53.51 grams per tonne silver, 7.54 grams per tonne gold and 5.30 per cent arsenic (Assessment Report 18822, page 9). Another drill hole (K88040) intersected semi-massive sulphide from 108.8 to 110.6 metres and banded, medium-grained, polymetallic massive sulphide from 110.6 to 120.0 metres. Assays from an 11.60 metre section yielded 0.56 per cent copper, 6.85 per cent lead, 8.40 per cent zinc, 77.8 grams per tonne silver, 3.56 grams per tonne gold and 2.65 per cent arsenic (Assessment Report 18822, page 17). A rough estimate of the K-7 zone surface area as shown on Map 2 (Assessment Report 18822) is 100 by 200 metres.

A resource for the K-7 zone, attributed to Kamad Silver Company, was reported to be 375,000 tonnes grading 4 grams per tonne gold, 55 grams per tonne silver, 0.5 per cent copper, 4.8 per cent lead and 6.1 per cent zinc (Assessment Report 22389, page 1).

No work occurred on the property after the 1988 work was completed.

BIBLIOGRAPHY

- EMPR ASS RPT 12540, 15154, 16230, *18822, 22389
- EMPR EXPL 1983-xxxii, 157; 1986-B7-B19,C113; 1990-53
- EMPR FIELDWORK 1984, pp. 67-83; 1985, pp. 59-68
- EMPR MAP 56; 65 (1989)
- EMPR OF 1992-1
- GSC MAP 48-1963; 5320G
- GSC OF 637
- Dickie, G.J., Preto, V.A. and Schiarizza, P. (1986): Mineral Deposits of the Adams Plateau - Clearwater area
- Preto, V.A. and Schiarizza, P. (1985): Geology and Mineral Deposits of the Adams Plateau - Clearwater Region - GSA Cordilleran Section Meeting, May 1985, pp. 16-1 to 16-11

DATE CODED: 2000/06/19
DATE REVISED: 2000/09/08

CODED BY: GJP
REVISED BY: GJP

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **082M 278**

NATIONAL MINERAL INVENTORY:

NAME(S): **SPIRE**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M09W
BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 35 36 N
LONGITUDE: 118 30 58 W
ELEVATION: 700 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5716898
EASTING: 394980

LOCATION ACCURACY: Within 500M

COMMENTS: The location is for the central area of Spire claims in December 2000.

COMMODITIES: Copper Zinc Silver

MINERALS

SIGNIFICANT: Pyrrhotite Chalcopyrite Sphalerite Pyrite

ASSOCIATED: Quartz Chlorite Calcite

MINERALIZATION AGE:

DEPOSIT

CHARACTER: Stratiform Massive Stratabound Disseminated
CLASSIFICATION: Volcanogenic
TYPE: G04 Besshi massive sulphide Cu-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Lardeau

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Sericitic Quartzite
Calcareous Phyllite
Chloritic Phyllite
Quartzitic/Quartzose Phyllite
Greenstone
Pelitic Schist
Limestone
Calc-silicate Gneiss
Biotite Gneiss
Marble

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 2000

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Copper

0.5100

Per cent

Zinc

1.0800

Per cent

COMMENTS: From a 3.12 metres drill interval.

REFERENCE: Imperial Metals Corp. New Release, Dec.4, 2000.

CAPSULE GEOLOGY

The Spire prospect is located about 7.5 kilometres southwest of the past producing Goldstream mine (082M 141). The stratigraphic setting of the Spire is believed to be the same as the Goldstream.

The Spire prospect is underlain by Lower Cambrian and younger metasediments and metavolcanics of the Lardeau Group. It is flanked on the west by the Precambrian-Paleozoic(?) Shuswap Metamorphic Complex and on the east by Hadrynian Horsethief Creek Group rocks.

The metasedimentary and metavolcanic rocks comprise five major lithologic packages. The lowest unit consists of dominantly pelitic and calcareous schists and marble and lies to the east of the property. This unit is overlain by a succession of rocks consisting of four main divisions (Bulletin 71).

The lower quartzite-schist division consists dominantly of pelitic schist and micaceous quartzite. The overlying calc-silicate gneiss division is comprised of calcareous phyllite and quartzite, marble and biotite gneiss. The metavolcanic-phyllite division, consisting of massive greenstone units, chloritic phyllite,

CAPSULE GEOLOGY

ultramafic pods and dark calcareous to pelitic schists, is the host for the Goldstream deposit. The final carbonate-phyllite division consists of dolomite and limestone.

The dominant structure in the area are large, tight to isoclinal, east dipping to recumbent phase 2 folds. The average strike in the deposit area is 290 degrees with 35 degree northeast dips.

The Spire copper-zinc massive sulphide discovery is reported to be similar to Goldstream ore in appearance and grade. At Goldstream, the sulphide layer consists mainly of intimately intermixed pyrrhotite, chalcopyrite and sphalerite with numerous subrounded inclusions of quartz, phyllite and carbonate.

This new occurrence was tested in September 2000 with 7 drillholes totalling 720 metres. A news release by owner Imperial Metal Corp (December 4, 2000) showed that Hole 1 intersected 3.12 metres grading 0.51 per cent copper and 1.08 per cent zinc and hole 4 intersected 3.7 metres grading 0.24 per cent copper and 1.49 per cent zinc. Silver values up to 51 grams per tonne were also obtained from grab samples. The mineralized zone has a true thickness of 3 metres (Imperial Metals News Release, Dec.4, 2000). This new zone is masked by overburden laterally, and dips steeply into the ground to the south. Sampling of the Spire showing revealed pods of high-grade copper and zinc mineralization within a broader zone of iron sulphide (Imperial Metals Corporation 2000 Annual Report).

BIBLIOGRAPHY

- EM EXPL 2000-33-41
EMPR BULL 71
EMPR MINING 1981-1985
EMPR OF 1992-1; 1994-1
EMPR P 1991-4, pp. 107,108
GSC MAP 12-1964
GSC OF 637
CMH 1983-84, p. 256; 1984-85, pp. 279,281
CMJ Vol.99, No.4, pp. 39-42 (Reinertson, L.C. (1978)); Oct. 1981, p. 53; April 1992
ECON GEOL *Vol.79, No.5, pp. 789-814 (Hoy, T., Gibson, G. and Berg, N.W. (1984))
N MINER Dec.11, 2000
WWW <http://www.infomine.com/>
Hoy, T. and Berg, N. (1983): Goldstream Deposit in Stratabound Base Metal Deposits in Southeast B.C.- GAC MAC CGU 1983, pp. 11-1 to 11-9
Hoy, T. and Nelson, W.I. (1977): Goldstream: a massive sulphide Cu-Zn deposit in Eocambrian metasediments, southeastern B.C. - Abstract, GAC 1977 Annual Meeting, p. 25
Lane, L.S. (1977): Structure and stratigraphy, Goldstream River-Downie Creek area, Selkirk Mountains, B.C.; Unpublished M.Sc. Thesis, Ottawa, Carleton University
New Release Imperial Metals Corp, Oct.17, Dec.4, 2000

DATE CODED: 2000/12/22
DATE REVISED: 2000/12/22

CODED BY: GJP
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082M 279**

NATIONAL MINERAL INVENTORY:

NAME(S): **NAVAN**, NAVAN A, NAVAN B,
BROKEN HILL

MINING DIVISION: Kamloops

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 49 49 N
LONGITUDE: 119 14 32 W
ELEVATION: 1385 Metres

NORTHING: 5744540
EASTING: 345500

LOCATION ACCURACY: Within 500M

COMMENTS: Located approximately 10 kilometres northeast of Avola, 0.2 kilometres west of Fowler Lake at the 7.4 kilometre point of the Cornice logging road.

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrrhotite Pyrite
ALTERATION: Garnet Diopside Quartz
ALTERATION TYPE: Skarn Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratabound Stratiform
CLASSIFICATION: Sedimentary Exhalative
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag S01 Broken Hill-type Pb-Zn-Ag±Cu
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Marble
Quartzite
Mica Schist
Calc-silicate Schist
Pegmatite
Ortho Gneiss

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Monashee Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SHOWING REPORT ON: N
CATEGORY: Assay/analysis YEAR: 2000
SAMPLE TYPE: Unknown
COMMODITY GRADE
Silver 17.0000 Grams per tonne
Lead 4.0500 Per cent
Zinc 23.0000 Per cent

REFERENCE: L.Lindinger, personal communication, January 2001.

CAPSULE GEOLOGY

The Broken Hill prospects, located near Avola, B.C., were discovered by geologist Leo Lindinger on September 6, 2000 while working on a grassroots exploration project funded in part through the Ministry of Energy and Mines Prospectors Assistance Grant Program. In October of 2000, Cassidy Gold Corporation entered into an agreement with Lindinger to acquire the 1800 hectare property. The following deposit description is in large part taken from a report by Leo Lindinger, provided to the Ministry of Energy and Mines in January 2001. Some additional information was also provided by BC Geological Survey geologist T. Hoy who visited the showings after their discovery in 2000.

The Navan showings of the Broken Hill property lie northwest of Frenchman Cap Dome within the Proterozoic(?) Shuswap Metamorphic Complex. Paleoproterozoic (Aphebian) core gneisses of the dome are

CAPSULE GEOLOGY

overlain by a cover sequence of metasedimentary rocks consisting of micaceous schist, calcsilicate schist and gneiss, with intercalated layers of marble. Pegmatite and associated medium-grained granitic rocks replace and intrude the metasediments.

The Navan A showing is a poorly exposed, partially weathered band of dark brown, fine-grained massive sulphides (sphalerite and galena) hosted by disrupted (frost heaved?) calcsilicates and impure quartzites, probably correlative with the cover sequence of the dome. The grade and style of mineralization is very similar to the Vista A showing (082M 280); however, the highest grade exposures of Navan A are totally within calcsilicate hostrocks. Massive sulphide mineralization up to 25 centimetres across and grading up to 23 per cent zinc, 4.05 per cent lead and 17 grams per tonne silver occurs as boulders that were dug out of subcrop exposures. Exposed hangingwall rocks include thin, impure quartzite layers with minor disseminated pyrrhotite. The host succession appears to trend northward and dip at moderate angles to the east.

The Navan B showing is about 130 metres north of the Navan A exposure. Here, a 1.5-metre long and 5 to 10-centimetre thick band of massive sphalerite occurs in west-dipping quartz-rich schistose rocks. No real bedrock exposures can be seen and the rock hosting the sulphides may be a large rotated subcrop boulder. A 0.3-metre thick sample which included the massive sulphide mineralization yielded 5.6 per cent zinc, 0.6 per cent lead and 8.4 grams per tonne silver.

An open ended soil anomaly immediately north (up ice) and west (down-hill) of the Navan B showing contains the highest zinc (2590 ppm) and lead (412 ppm) values in soil (600+ samples) found to date.

See also the Vista (082M 280) and Mike (082M 281) occurrences of the Broken Hill property.

BIBLIOGRAPHY

- EM EXPL 2001-33-43
- EM FIELDWORK 2000, pp. 85-113
- EMPR BULL 57; 80
- EMPR OF 1992-1
- EMR MIN BULL MR 223 B.C. 81
- GSC MAP 12-1964
- GSC OF 637
- GSC P 64-32, pp. 27-28
- C STOCKWATCH Oct.12,17, Nov.15,30, 2000
- CIM Special Volume 8, p. 244 (Muraro, T.W. 1966; No.8, pp. 231-237 (Fyles, J.T. 1966); Vol.75, No.840, pp. 119-121 (Hoy, T. 1982))
- PR REL B2B Solutions Inc., Dec.19, 2002
- WWW <http://www.cassidygold.com/>;
www.infomine.com/index/properties/LEO_-_CASSIDY.html
- Hoy, T. (1979): Stratigraphic and structural setting of stratabound lead-zinc deposits in the Shuswap Complex; abstract, Cordilleran Section, GAC 1979 Meeting, p. 18
- *J.E.L. (Leo) Lindinger, personal communication, January 2001
- North Thompson News, Dec.11, 2001

DATE CODED: 2001/01/08
DATE REVISED: 2001/01/08

CODED BY: TH
REVISED BY: TH

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082M 280**

NATIONAL MINERAL INVENTORY:

NAME(S): **VISTA**, BROKEN HILL, VISTA A,
VISTA B, VISTA C

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082M14W
BC MAP:
LATITUDE: 51 50 15 N
LONGITUDE: 119 15 31 W
ELEVATION: 1415 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Located approximately 1 kilometre northwest of Fowler Lake and 10 kilometres north-northeast of Avola.

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5745380
EASTING: 344390

COMMODITIES: Zinc Lead Copper Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite Pyrrhotite Pyrite
ALTERATION: Garnet Diopside Quartz
ALTERATION TYPE: Skarn Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratabound Stratiform
CLASSIFICATION: Sedimentary Exhalative
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag S01 Broken Hill-type Pb-Zn-Ag±Cu
SHAPE: Tabular
MODIFIER: Folded

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Proterozoic Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Marble
Mica Schist
Calc-silicate Schist
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Shuswap Highland
TERRANE: Monashee Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: SHOWING REPORT ON: N
CATEGORY: Assay/analysis YEAR: 2000
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 72.0000 Grams per tonne
Lead 4.9000 Per cent
Zinc 24.0000 Per cent

REFERENCE: L.Lindinger, personal communication, January 2001.

CAPSULE GEOLOGY

The Broken Hill prospects, located near Avola, B.C., were discovered by geologist J.E.L. Lindinger on September 6, 2000 while working on a grassroots exploration project funded in part through the Ministry of Energy and Mines Prospectors Assistance Grant Program. In October of 2000, Cassidy Gold Corporation entered into an agreement with Lindinger to acquire the 1800 hectare property. The following deposit description is in large part taken from a report by Lindinger, provided to the Ministry of Energy and Mines in January 2001. Some additional information was also provided by BC Geological Survey geologist T. Hoy who visited the showings after their discovery in 2000.

The Vista showings of the Broken Hill property lie northwest of Frenchman Cap Dome within the Proterozoic(?) Shuswap Metamorphic Complex. Paleoproterozoic (Aphebian) core gneisses of the dome are overlain by a cover sequence of metasedimentary rocks consisting of micaceous schist, calcsilicate schist and gneiss, with intercalated layers of marble. Pegmatite and associated medium-grained granitic

CAPSULE GEOLOGY

rocks replace and intrude the metasediments.

The Vista A showing is a partially exposed band of very dark brown fine to medium grained massive sphalerite with subordinate galena, pyrrhotite, chalcopyrite and pyrite(?). The band was exposed by blasting to establish a road surface for the Cornice Logging road at about kilometre 9.3. The band is at the contact of sulphidic siliceous gneisses in the structural footwall and an overlying 2 (plus) metre thick band of calcsilicate rocks that appear to be highly metamorphosed limestones. The showing appears to be part of a moderately (10-20 degrees) southeast plunging partially eroded antiform or northeast dipping monocline. Rocks to the northeast change dip to moderate to steep northeast dips. Exposures to the southwest are eroded off, and covered by glacial debris, or have not been mapped.

The observed mineralization is in the form of planar to swirled bands of nearly massive sulphides up to 35 centimetre thick that grade up into bands of semi-massive sulphides in a calcsilicate host. The contact with the underlying silicate rock appears very sharp. The band of Vista A type mineralization is exposed discontinuously over about 20 metres; it is assumed to be continuous although it is truncated at surface to the northwest by a northwest-striking, moderately northeast dipping fault that brings a pegmatite dyke into direct contact with the mineralization. To the southeast it plunges below the logging road. Selected grab samples from bedrock exposures assayed up to 24 per cent zinc, 4.9 per cent lead and 72 grams per tonne silver (Lindinger, personal communication, Jan.2001).

Vista B type mineralization occurs 2 to 3 meters structurally above the Vista A horizon in calcsilicate rocks. This zone also appears to be stratiform, exposed as a 5 to 10-centimetre thick band of dark brown, coarse grained massive to semi-massive sphalerite. No lead, silver or copper is reported. The band is exposed in its unweathered form for at least 5 meters, about 20 meters southeast of the Vista A discovery outcrop. To the northwest it is eroded off. To the southeast it also plunges below the road. To the northeast, if continuous it would dip to the northeast as part of the stratigraphic package.

Vista C type mineralization (discovered by Warner Gruenwald, P.Geo.) are fault-hosted(?) 4 to 6 centimetre thick silvery-grey, medium to fine grained massive to semi-massive sphalerite and galena bands that appear to both occupy the top of and crosscut the calcsilicate horizon hosting the Vista A and B mineralization. Weathered exposures are visible over an 8 by 2.5 metre exposure of the top of the calcsilicate horizon above the fresh exposures of the Vista B mineral band. A sample (0.8 metres long by 8 centimetres thick) taken by Gruenwald yielded 6.6 per cent zinc, 4.1 per cent lead and 6.2 grams per tonne silver (Lindinger, personal communication, Jan.2001).

The calcsilicate unit hosting the various types of zinc-rich sulphide mineralization appears to contain erratically distributed, weakly disseminated sphalerite and possibly galena. Traces of other iron and copper bearing sulphides are also present. This uncertainty is due to the generally well weathered nature of the surface exposures and lack of sample assay data.

See also the Navan (082M 279) and Mike (082M 281) occurrences of the Broken Hill property.

BIBLIOGRAPHY

- EM FIELDWORK 2000, pp. 85-113
- EMPR BULL 57; 80
- EMPR OF 1992-1
- EMR MIN BULL MR 223 B.C. 81
- GSC MAP 12-1964
- GSC OF 637
- GSC P 64-32, pp. 27-28
- C STOCKWATCH Oct.12,17, Nov.15,30, 2000
- CIM Special Volume 8, p. 244 (Muraro, T.W. 1966; No.8, pp. 231-237 (Fyles, J.T. 1966); Vol.75, No.840, pp. 119-121 (Hoy, T. 1982))
- PR REL B2B Solutions, Dec.19, 2002
- WWW <http://www.cassidygold.com/>
- www.infomine.com/index/properties/LEO_-_CASSIDY.html
- Hoy, T. (1979): Stratigraphic and structural setting of stratabound lead-zinc deposits in the Shuswap Complex; abstract, Cordilleran Section, GAC 1979 Meeting, p. 18
- *J.E.L. (Leo) Lindinger, personal communication, January 2001
- North Thompson News, Dec.11, 2001

MINFILE NUMBER: **082M 281**

NATIONAL MINERAL INVENTORY:

NAME(S): **MIKE**, BROKEN HILL, MIKE FLOAT

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082M14E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 47 49 N
LONGITUDE: 119 13 39 W
ELEVATION: 1610 Metres

NORTHING: 5740800
EASTING: 346400

LOCATION ACCURACY: Within 500M

COMMENTS: Located approximately 0.5 kilometres northwest of Shannon Lake, 4 kilometres south-southeast of the Navan A showing (092M 379) at kilometre 15.2 on the Shannon Creek logging road.

COMMODITIES: Zinc

MINERALS

SIGNIFICANT: Sphalerite
ASSOCIATED: Pyrrhotite
ALTERATION: Garnet Diopside Quartz
ALTERATION TYPE: Skarn Silicific'n
MINERALIZATION AGE:

DEPOSIT

CHARACTER: Massive Stratabound Stratiform
CLASSIFICATION: Sedimentary Exhalative
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag S01 Broken Hill-type Pb-Zn-Ag±Cu

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic			Shuswap Metamorphic Complex

LITHOLOGY: Calc-silicate Gneiss
Mica Schist
Calc-silicate Schist
Marble
Quartzite
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Shuswap Highland
Kootenay RELATIONSHIP:
GRADE: Amphibolite

INVENTORY

ORE ZONE: SHOWING REPORT ON: N
CATEGORY: Assay/analysis YEAR: 2000
SAMPLE TYPE: Grab
COMMODITY GRADE
Zinc 19.6000 Per cent
REFERENCE: W.Gruenwald, personal communication,2000.

CAPSULE GEOLOGY

The Broken Hill prospects, located near Avola, B.C., were discovered by geologist J.E.L. Lindinger in late 2000 while working on a grassroots exploration project funded in part through the Ministry of Energy and Mines Prospectors Assistance Grant Program. In October of 2000, Cassidy Gold Corporation entered into an agreement with Lindinger to acquire the 1800 hectare property which includes the Mike showing. The following deposit description is in large part taken from a report by Lindinger, provided to the Ministry of Energy and Mines in January 2001. Some additional information was also provided by BC Geological Survey geologist T. Hoy who visited the showings after their discovery in 2000.

The Mike showing of the Broken Hill property occurs northwest of Frenchman Cap Dome within the Proterozoic(?) Shuswap Metamorphic Complex. Paleoproterozoic (Aphebian) core gneisses of the dome are overlain by a cover sequence of metasedimentary rocks consisting of micaceous schist, calcsilicate schist and gneiss, with intercalated layers of marble. Pegmatite and associated medium-grained granitic rocks replace and intrude the metasediments.

The Mike float showing contain cobbles and boulders of dark

CAPSULE GEOLOGY

brown massive, semi massive and disseminated, fine to coarse grained sphalerite and pyrrhotite associated with garnetiferous calc-silicate, pyrrhotitic silicate and coarse grained pegmatitic rocks that are exposed over 40 meters in a series of pits dug for material to upgrade the Shannon Creek logging road. The boulders and cobbles can be dug out of the bank and occur within discrete stratigraphic zones near to and overlying possibly disrupted pegmatitic bedrock. Northwest of the float occurrence is an area of calcsilicate float and bedrock extending for over 2 kilometres. To the southeast is deep glacial till extending to Shannon Lake.

One sample of a massive sphalerite boulder yielded 19.6 per cent zinc and 352 ppm cadmium (Gruenwald, personal communication, 2000). The lead content of this and other samples have consistently lower lead values than the Navan (082M 279) and Vista (082M 280) prospects of the Broken Hill property.

BIBLIOGRAPHY

- EM FIELDWORK 2000, pp. 85-113
EMPR BULL 57; 80
EMPR OF 1992-1
EMR MIN BULL MR 223 B.C. 81
GSC MAP 12-1964
GSC OF 637
GSC P 64-32, pp. 27-28
C STOCKWATCH Oct.12,17, Nov.15,30, 2000
CIM Special Volume 8, p. 244 (Muraro, T.W. 1966; No.8, pp. 231-237 (Fyles, J.T. 1966); Vol.75, No.840, pp. 119-121 (Hoy, T. 1982))
Hoy, T. (1979): Stratigraphic and structural setting of stratabound lead-zinc deposits in the Shuswap Complex; abstract, Cordilleran Section, GAC 1979 Meeting, p. 18
*L.Lindinger, personal communication, January 2001
W.Gruenwald, personal communication, January 2001
North Thompson news Dec.11, 2001
WWW <http://www.cassidygold.com/>;
www.infomine.com/index/properties/LEO_-_CASSIDY.html

DATE CODED: 2001/01/08
DATE REVISED: 2001/01/08

CODED BY: TH
REVISED BY: TH

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082N 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOBERLY, MOBERLY MOUNTAIN, MOUNT MOBERLY,
MOUNTAIN MINERALS, MT. MOBERLY, HIGHWOOD RESOURCES**

STATUS: Producer Open Pit

MINING DIVISION: Golden

REGIONS: British Columbia

NTS MAP: 082N07W

BC MAP:

LATITUDE: 51 22 18 N

LONGITUDE: 116 57 53 W

ELEVATION: 1554 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry, just south of Moberly Creek on the east side of the Columbia River, about 8 kilometres north of Golden (Open File 1987-15).

UTM ZONE: 11 (NAD 83)

NORTHING: 5691158

EASTING: 502456

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Quartz

MINERALIZATION AGE: Ordovician

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R07 Silica sandstone

SHAPE: Regular

DIMENSION: 90

Metres

STRIKE/DIP: 140/74N

TREND/PLUNGE:

COMMENTS: Quartz sandstone zone is 90 to 120 metres thick.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Ordovician

GROUP

Undefined Group

FORMATION

Mount Wilson

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite

Quartz Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

INVENTORY

ORE ZONE: MOBERLY

REPORT ON: Y

CATEGORY: Probable

YEAR: 1985

QUANTITY: 10000000 Tonnes

COMMODITY

GRADE

Silica

99.6000

Per cent

COMMENTS: Estimated reserves of friable quartz sandstone, from company specifications.

REFERENCE: Z.D. Hora, personal communication, 1991.

CAPSULE GEOLOGY

The Moberly quarry is located 8 kilometres north of Golden on the southwest slopes of Moberly Mountain, just south of Moberly Creek on the east side of the Columbia River.

Two bands of Middle and/or Upper Ordovician Mount Wilson Formation quartzite cross the property striking at about 140 degrees with dips varying from 74 degrees northeast to vertical. The northeasterly band has an average indicated true thickness of 790 metres while the southwesterly band has an approximate true thickness of 455 metres. Due to thrusting, the bands are separated by about 600 metres.

A friable quartz sandstone zone, with a thickness of 90 to 120 metres, is located parallel and close to the southwest margin of the southwest quartzite band. An anticlinal axis trends down the middle of the southwest quartzite band. The compact quartzite is frosty white and consists of well-rounded quartz-cemented grains 0.125 to 0.25 millimetre in diameter. The quartz sandstone is pale buff to almost white with rounded grains falling into two size groups; 0.5 millimetre and 0.15 to 0.25 millimetre. An analysis of washed sand yielded: 99.67 per cent SiO₂, 0.02 per cent Fe₂O₃, 0.06 per cent Al₂O₃, 0.06 per cent CaO, 0.02 per cent MgO, 0.01 per cent Na₂O, 0.02 per cent K₂O, 0.01 per cent TiO₂ and 0.12 per cent LOI (Open File 1987-15).

CAPSULE GEOLOGY

Quarrying operations have taken place mainly on the quartz sandstone zone. Production began in 1980 and the quarry is operated by Mountain Minerals Company Ltd. Estimated reserves in 1985, from company specifications, amounted to 10 million tonnes of friable quartz sandstone grading 99.6 per cent (Z.D. Hora, personal communication, 1991) and 50 million tonnes of quartzite grading 99 per cent plus (Open File 1987-15; 1992-1). The product is used as glass, foundry and blasting sand. Estimated annual production for 1980-1985 is 80,000 to 100,000 tonnes per season.

Mountain Minerals Company Ltd. is producing approximately 80,000 tonnes annually at Moberly for shipment to Springfield, Oregon (Information Circular 1996-1, page 9).

In 1996, the mine was producing approximately 140,000 tonnes per year with shipments going to Springfield, Oregon; Lavington, B.C. and other destinations (Information Circular 1997-1). The mine is operated by Highwood Resources Ltd.

BIBLIOGRAPHY

- EMPR AR 1958-104; 1959-199; 1960-155; 1961-157; 1962-164;
1963-152; 1965-276
EMPR ASS RPT 6479, 7124, 10630
EMPR ENG INSP Annual Report 1989; 1990
EMPR EXPL 1977-E256; 1978-E294; 1979-336; 1985-A49; 1996-A13;
1997-51; 1998-74; 1999-51; 2000-53; 2001-
EMPR INF CIRC 1995-1, p. 9; 1996-1, p. 9; 1997-1, p. 12; 1998-1,
p. 13
EMPR MAP 65 (1989)
EMPR MINING 1975-1980 Vol.I, pp. 48,49; 1981-1985, pp. 69,70; 1986-
1987, p. 95; 1988, p. 94
EMPR OF *1987-15, p. 9; 1991-23; 1992-1; 1992-9; 1994-1
EMPR PF (82N General File - Prospector's map, 1937; various short
reports 1981 to 1985; Analysis of Moberly Sand, 1980)
GSC MAP 295A; 1497A
GSC MEM 55
GSC OF 481
GSC P 68-1A
WWW <http://www.highwood-resources.com>;
http://www.infomine.com/index/properties/MOBERLY_SILICA_QUARRY.html

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/26

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 002**

NATIONAL MINERAL INVENTORY: 082N2 Ba1

NAME(S): **PARSON**, PARSON MINE, PARSON BARITE,
 HILLTOP, MOUNTAIN MINERALS, HIGHWOOD RESOURCES

STATUS: Past Producer	Open Pit	Underground	MINING DIVISION: Golden
REGIONS: British Columbia			UTM ZONE: 11 (NAD 83)
NTS MAP: 082N02E			
BC MAP:			NORTHING: 5652694
LATITUDE: 51 01 31 N			EASTING: 524488
LONGITUDE: 116 39 03 W			
ELEVATION: 1127 Metres			
LOCATION ACCURACY: Within 500M			
COMMENTS: Quarries on Lot 14351, 5 kilometres south of the village of Parson, and west of the Columbia River (Minister of Mines Annual Report 1952).			

COMMODITIES: Barite

MINERALS

SIGNIFICANT: Barite
 ASSOCIATED: Hematite Quartz Pyrite Chalcopyrite Siderite
 Calcite
 COMMENTS: Minor to trace amounts.
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal Industrial Min.
 TYPE: E17 Sediment-hosted barite
 DIMENSION: 9 Metres STRIKE/DIP: 350/90W TREND/PLUNGE:
 COMMENTS: Barite veins dip steeply west and are up to 9.1 metres wide.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Proterozoic	Hamill	Undefined Formation	

LITHOLOGY: Quartzite
 Dolomite
 Shale

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Purcell Mountains
 TERRANE: Ancestral North America
 METAMORPHIC TYPE: Regional RELATIONSHIP:
 GRADE:

CAPSULE GEOLOGY

The Parson deposit is located 7 kilometres southwest of the town of Parson.

Much of the area is covered by surficial deposits and good bedrock exposures are minimal, generally restricted to steep slopes and knolls. Bedrock in the area consists of a thick series of quartzites, possibly of the Hadrynian to Lower Cambrian Hamill Group. The quartzites are thin to thick bedded and coarsely granular. Underlying the quartzite is a 3 to 6 metre thick bed of slaty, dark grey shale, in turn underlain by blue-grey, crystalline, brown-weathering dolomite approximately 30 metres thick.

Rocks in the Parson mine area strike northwesterly with dips of 70 degrees to the southwest and appear to be on the east limb of a major syncline. Locally, the strike changes to north-northeast with dips of 48 to 75 degrees to the southwest.

Barite occurs in two irregular fissure veins 90 to 100 metres apart. These veins strike 350 degrees and dip steeply to the west. They are confined between two fault planes with negligible horizontal movement. Underground, the veins appear to coalesce. The East vein varies from 1.5 to 9.1 metres wide, and the West vein from 3.3 to 9.1 metres wide.

The barite is white to creamy white, coarse grained and crystalline; much of it is iron stained. Minor to trace amounts of hematite, quartz, pyrite, chalcopyrite, siderite and calcite are found in the barite. The barite is used in drilling mud and extender applications.

Production at the Parson operation commenced in 1941 and except for some short periods of non-production, has continued producing to the present day. Initially, barite was quarried from three open pits. In 1957, adits were driven into the deposit and all mining

CAPSULE GEOLOGY

since that time has been from underground.

The production statistics (1944-1973) have been compiled from Minister of Mines Annual Reports and are incomplete. Mountain Minerals Co. Ltd. have provided their production figures for the years 1982 to 1992.

It was reported, at the end of 1996, that reserves were almost depleted and the mine may close by the year 2000. The company is looking for new sources of barite. Highwood Resources Ltd. drilled in 1997. The mine closed in 1999.

BIBLIOGRAPHY

- EM EXPL 1996-A13; 1997-50;; 1998-74; 1999-51
EMPR AR 1944-80,81; 1945-130; 1946-203,204; 1947-203,204; 1948-183;
1949-246; 1950-217; *1952-243-245; 1953-185; 1954-175; 1955-90;
1956-148,149; 1957-77; 1958-84; 1959-151; 1960-134,135; 1961-140,
141; 1962-147; 1963-138; 1964-179,181; 1965-258,259; 1966-260;
1967-300; 1968-296
EMPR ENG INSP Annual Report 1989
EMPR GEM 1969-382; 1970-490; 1971-455; 1972-579; 1973-539; 1974-373
EMPR INF CIRC 1984-1, p. 33; 1985-1, p. 44; 1986-1, p. 67; 1987-1,
p. 75; 1991-1, p. 71; 1995-1, p. 9; 1996-1, p. 9; 1997-1, p. 12;
1998-1, p. 13
EMPR MAP 65 (1989)
EMPR MINING 1975-1980 Vol.I, p. 42; 1981-1985, p. 53; 1986-1987,
p. 80; 1988, p. 79
EMPR OF 1991-23; 1992-1; 1992-9; 1994-1
EMPR PF (82N General File - Prospector's map, 1937; *Butrenchuk, S.
(1988), internal unpublished draft manuscript on barite; Sketch
maps by J.W. McCammon, 1958)
EMR MP CORPFILE (Mountain Minerals Limited)
GSC MAP 295A; 1501A
GSC MEM 55
GSC OF 481
GSC P 91-1A, pp. 27-31
GSC SUM RPT 1932 Part AII, pp. 106-176
CANMET IR 60, p. 18
WWW <http://www.highwood-resources.com>;
http://www.infomine.com/index/properties/PARSON_BARITE_MINE.html

DATE CODED: 1985/07/24
DATE REVISED: 1991/01/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082N 003**

NATIONAL MINERAL INVENTORY: 082N4 Pb3

NAME(S): **SNOWFLAKE**, STANNITE, STANNEX,
SUNSET A (L.8576), SNOWFLAKE A-C (L.8571-3)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 11 40 N
LONGITUDE: 117 55 01 W
ELEVATION: 1691 Metres

UTM ZONE: 11 (NAD 83)
NORTHING: 5671848
EASTING: 435928

LOCATION ACCURACY: Within 500M

COMMENTS: Portal of No. 4 level on Lot 8576 (Sunset A), about 1 kilometre west of Clabon Creek which is a tributary to Woolsey (Silver) Creek, 8 kilometres north of Albert Canyon Station of the Canadian Pacific Railway, 34 kilometres north-northeast of Revelstoke (Property File - Plan of underground workings).

COMMODITIES: Lead Silver Zinc Copper Gold
 Tungsten Tin

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Tetrahedrite Pyrrargyrite
 Stannite Scheelite Silver
ASSOCIATED: Quartz Calcite Pyrite Pyrrhotite Fluorite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au E14 Sedimentary exhalative Zn-Pb-Ag

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Lardeau Undefined Formation

LITHOLOGY: Graphitic Slate
 Argillaceous Limestone
 Limy Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

CAPSULE GEOLOGY

The area is underlain by black, fissile graphitic slates with local minor variations in carbonate and silica content, and thin bedded dark grey argillaceous limestone and limy argillite, of the Lower Cambrian and younger Lardeau Group. These rocks strike northwest and dip from 35 to 60 degrees northeast. A well developed slaty cleavage parallel to bedding is universally present. A pronounced system of jointing trends northeast and dips steeply southeast. All of the sediments are cut by numerous, small, barren quartz stringers.

A system of northwest striking, mineralized subparallel quartz veins occur in slates over an area of 3.5 by 1 kilometres, and have been subjected to exploration and underground development on the Snowflake and Woolsey (082N 004) properties. The veins are from a few centimetres to 6 metres wide, but widths between 0.6 and 2.4 metres are most common. To 1940, the Snowflake had been developed by about 609 metres of underground workings. By 1969, the Woolsey was developed by about 5940 metres of underground workings. Fourteen underground levels on the combined Snowflake and Woolsey properties were developed on six subparallel quartz veins.

The main or No. 1 vein on the Snowflake property was followed easterly onto the adjoining Woolsey property for approximately 99 metres, and has been developed by underground workings on the Woolsey property.

The quartz veins are generally coarsely crystalline, crushed and fractured and normally contain wallrock fragments and minor calcite. The veins strike northwesterly and dip 60 to 35 degrees northeast, with faulting both across and along the veins. They are variably mineralized with argentiferous galena, sphalerite, pyrite and minor chalcopyrite. Minor amounts of tetrahedrite, pyrrargyrite, native

CAPSULE GEOLOGY

silver and pyrrhotite were identified by microscope examination. The oreshoots are extremely irregular, pinching and swelling in the vein, and their continuity cannot be assumed to extend for any distance beyond an exposure. The oreshoots generally occur on the footwall sides of the veins but are occasionally found in the hangingwall.

In 1928, stannite was identified from a sample of the mineralized vein in the Snowflake workings and is associated with pyrite-chalcopyrite-sphalerite. It occurs very sparingly in the Woolsey workings. Scheelite has also been identified in the Snowflake workings but occurs widely in the Woolsey workings as small masses widely scattered in the veins, and as concentrations in pyritic lenses. Fluorite has also been reported to occur with the scheelite.

Scheelite has been of primary interest at the Woolsey property; a 45-tonne mill was built underground at the Woolsey in 1938, designed to make a silver-lead and tungsten concentrate, but was not an economic or metallurgical success (Sargent, 1942).

BIBLIOGRAPHY

- EMPR AR 1922-N213; 1927-C289,C289; 1928-C312; 1929-C330,C331; 1930-A259; 1949-A209; 1950-A158; 1951-A193; 1952-A205; 1953-A156; 1954-A152; 1967-263,264; 1968-263
EMPR ASS RPT 8963
EMPR BC METAL MM00629
EMPR BULL 10, pp. 81-92; 10 (Revised, 1943), pp. 120-130
EMPR EXPL 1980-148
EMPR GEM 1969-339
EMPR Miscellaneous Publications 1928-43, Reports on Snowflake and Waverley-Tangier Mineral Properties, J.D. Galloway (1928)
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976; *Sargent, H. (1942): Report on Woolsey and Snowflake Properties; Plans and sections of underground workings; Assay plans; (see 082N 004, Woolsey - Numerous assay plans, plans of underground workings, drillholes and assays; Report on the Woolsey Group by N.E. Nelson; Guernsey, F.W. (1930): Report on Regal Silver Mine; Lord, C.S. (1943): Diamond Drilling and Sampling at Regal Silver and Snowflake Properties))
EMR MP CORPFILE (Glasair Mining Corporation, Limited; Snowflake Mining Company, Limited; Morton Woolsey Consolidated Mines, Limited; Regal Silver Mines Limited; Consolidated Tungsten-Tin Mines, Limited; Columbia Lead & Zinc Mines Ltd.; Columbia Metals Corporation Limited; Stannex Minerals Ltd.)
GSC EC GEOL 17, pp. 92,93
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1928 Part A, pp. 182-186
CANMET IR 720 (1929), pp. 101-116; 724 (1930), pp. 112-115; 797 (1938), pp. 78-82; 1404 (1943); 70-44 (1970)
CIM Structural Geology of Canadian Ore Deposits (1948), Regal Silver Mine, pp. 196-199, Lord, C.S.

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 004**

NATIONAL MINERAL INVENTORY: 082N4 Pb3

NAME(S): **WOOLSEY, REGAL SILVER, REGAL, MORTON-WOOLSEY, STANNITE**

STATUS: Past Producer	Underground	MINING DIVISION: Revelstoke
REGIONS: British Columbia		
NTS MAP: 082N04W		UTM ZONE: 11 (NAD 83)
BC MAP:		
LATITUDE: 51 11 43 N		NORTHING: 5671931
LONGITUDE: 117 54 20 W		EASTING: 436725
ELEVATION: 1358 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Portal of No. 10 level on Lot 14193 (Big Ledge No. 2), about 200 metres west of Clabon Creek which is a tributary to Woolsey (Silver) Creek, 8 kilometres north of Albert Canyon Station of the Canadian Pacific Railway, 34 kilometres north-northeast of Revelstoke (Property File - Plan maps of underground workings).		

COMMODITIES: Lead Silver Zinc Copper Gold
 Tungsten Tin

MINERALS

SIGNIFICANT: Galena	Sphalerite	Chalcopyrite	Tetrahedrite	Pyrrargyrite
Stannite	Scheelite	Silver		
ASSOCIATED: Quartz	Calcite	Pyrite	Pyrrhotite	Fluorite
MINERALIZATION AGE: Unknown				

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Lardeau	Undefined Formation	

LITHOLOGY: Graphitic Slate
 Argillaceous Limestone
 Limy Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay	
METAMORPHIC TYPE: Regional	RELATIONSHIP:
	GRADE:

INVENTORY

ORE ZONE: TOTAL	REPORT ON: Y
CATEGORY: Unclassified	YEAR: 1982
QUANTITY: 590703 Tonnes	
<u>COMMODITY</u>	<u>GRADE</u>
Silver	71.6000 Grams per tonne
Copper	1.1000 Per cent
Lead	2.6600 Per cent
Tin	0.1300 Per cent
Tungsten	0.0150 Per cent
Zinc	1.2600 Per cent

COMMENTS: Reported reserves.
 REFERENCE: Prospectus, Gunsteel Resources Inc., April 29, 1986.

CAPSULE GEOLOGY

The area is underlain by black, fissile graphitic slates with local minor variations in carbonate and silica content, and thin bedded dark grey argillaceous limestone and limy argillite, of the Lower Cambrian and younger Lardeau Group. These rocks strike northwest and dip from 35 to 60 degrees northeast. A well developed slaty cleavage parallel to bedding is universally present. A pronounced system of jointing trends northeast and dips steeply southeast. All of the sediments are cut by numerous, small, barren quartz stringers.

A system of northwest striking, mineralized subparallel quartz veins occur in slates over an area of 3.5 by 1 kilometres, and have been subjected to exploration and underground development on the Snowflake (082N 003) and Woolsey properties. The veins are from a

CAPSULE GEOLOGY

few centimetres to 6 metres wide, but widths between 0.6 and 2.4 metres are most common. To 1940, the Snowflake had been developed by about 609 metres of underground workings. By 1969, the Woolsey was developed by about 5940 metres of underground workings. Fourteen underground levels on the combined Snowflake and Woolsey properties were developed on six subparallel quartz veins.

The main or No. 1 vein on the Snowflake property was followed easterly onto the adjoining Woolsey property for approximately 99 metres, and has been developed by underground workings on the Woolsey property.

The quartz veins are generally coarsely crystalline, crushed and fractured and normally contain wallrock fragments and minor calcite. The veins strike northwesterly and dip 60 to 35 degrees northeast, with faulting both across and along the veins. They are variably mineralized with argentiferous galena, sphalerite, pyrite and minor chalcopryrite. Minor amounts of tetrahedrite, pyrargyrite, native silver and pyrrhotite were identified by microscope examination. The oreshoots are extremely irregular, pinching and swelling in the vein, and their continuity cannot be assumed to extend for any distance beyond an exposure. The oreshoots generally occur on the footwall sides of the veins but are occasionally found in the hangingwall.

In 1928, stannite was identified from a sample of the mineralized vein in the Snowflake workings and is associated with pyrite-chalcopryrite-sphalerite. It occurs very sparingly in the Woolsey workings. Scheelite has also been identified in the Snowflake workings but occurs widely in the Woolsey workings as small masses widely scattered in the veins, and as concentrations in pyritic lenses. Fluorite has also been reported to occur with the scheelite.

Scheelite has been of primary interest at the Woolsey property; a 45-tonne mill was built underground at the Woolsey in 1938 designed to make a silver-lead and tungsten concentrate, but was not an economic or metallurgical success (Sargent, 1942).

In 1982, reported reserves at Woolsey was 590,703 tonnes grading 71.6 grams per tonne silver, 2.66 per cent lead, 1.26 per cent zinc, 1.1 per cent copper, 0.13 per cent tin and 0.015 per cent tungsten (Prospectus, Gunsteel Resources Inc., April 29, 1986).

BIBLIOGRAPHY

- EMPR AR 1918-K155; 1919-N140,N141,N150; 1922-N213; 1924-B204; 1925-A259; 1926-A270; 1927-C289,C290; 1928-C312,C313; 1929-C331-C333; 1930-A259,A260; 1938-E44; 1940-A87; 1941-A81; 1949-A209; 1950-A158,A159; 1951-A193; 1952-A205; 1953-A156,A157; 1954-A152; 1967-263,264; 1968-263,264
EMPR ASS RPT 8963
EMPR BC METAL MM00645
EMPR BULL *10, pp. 81-92; 10 (Revised, 1943), pp. 120-130
EMPR EXPL 1980-148
EMPR GEM 1969-339
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976; *Sargent, H. (1942): Report on Woolsey and Snowflake Groups; Numerous assay plans, plans of underground workings, drillholes and assays; Report on the Woolsey Group by N.E. Nelson; Guernsey, F.W. (1930): Report on Regal Silver Mine; Lord, C.S. (1943): Diamond Drilling and Sampling at Regal Silver and Snowflake Properties)
EMR MIN BULL 223, B.C. 84
EMR MP CORPFILE (Glasair Mining Corporation, Limited; Snowflake Mining Company, Limited; Morton Woolsey Consolidated Mines, Limited; Regal Silver Mines Limited; Consolidated Tungsten-Tin Mines, Limited; Columbia Lead & Zinc Mines Ltd.; Columbia Metals Corporation Limited; Stannex Minerals Ltd.)
GSC EC GEOL 17, pp. 92,93
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT 1928 Part A, pp. 186,187
CANMET IR 720 (1929), pp. 101-116; 724 (1930), pp. 112-115; 797 (1938), pp. 78-82; 1404 (1943); 70-44 (1970)
CIM Structural Geology of Canadian Ore Deposits (1948), Regal Silver Mine, pp. 196-199, Lord, C.S.
GCNL Nov.21, 1970
N MINER Dec.3, 1953
Prospectus, Gunsteel Resources Inc., April 29, 1986
EMPR OF 1998-10

MINFILE NUMBER: **082N 005**

NATIONAL MINERAL INVENTORY: 082N3 Au2

NAME(S): **ELLEN D (L.1114)**, BUCKSKIN (L.1115)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N03E
BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 39 N
LONGITUDE: 117 05 58 W
ELEVATION: 2408 Metres

NORTHING: 5654741
EASTING: 493029

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 1114, located on the southeast slope of Beverly Peak, near the headwaters of a southeast flowing tributary of Bobbie Burns Creek, about 30 kilometres south-southwest of Golden (NTS Map 82N/3E).

COMMODITIES: Lead Silver Gold Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Horsethief Creek Undefined Formation

LITHOLOGY: Schist
Quartzite
Grit
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Purcell Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Ellen D (Lot 1114) occurrence is located on the southeast slope of Beverly Peak, near the headwaters of a southeast flowing tributary of Bobbie Burns Creek, about 30 kilometres south-southwest of Golden. Old workings consist of a 20-metre adit on Lot 1114 and a 15-metre crosscut adit on Lot 1115 (Buckskin claim).

Hostrocks in the occurrence area comprise schists, quartzites, grits and minor limestone of the Hadrynian Horsethief Creek Group. An adit on the Ellen D claim was driven on a quartz vein that varied from 0.9 to 1.8 metres wide. The vein is mineralized with pyrite, galena and tetrahedrite. Samples have yielded high gold and silver values. A crosscut adit on Lot 1115 intersects a number of quartz stringers which are similarly mineralized.

BIBLIOGRAPHY

EMPR AR *1892-536; *1898-1048,1054,1187; 1899-593; 1921-G346
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 006**

NATIONAL MINERAL INVENTORY: 082N3 Au3

NAME(S): **FLYING DUTCHMAN**, BRYAN (L.3951), LINCOLN (L.3952),
LUCKY JACK (L.3953)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N03E
BC MAP:

Underground

MINING DIVISION: Golden

LATITUDE: 51 00 57 N
LONGITUDE: 117 06 03 W
ELEVATION: 1867 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5651590
EASTING: 492927

LOCATION ACCURACY: Within 500M

COMMENTS: A lower crosscut adit located on the northwest side of Bobbie Burns
Creek about 2 kilometres west of its confluence with Carbonate Creek,
about 30 kilometres south-southwest of Golden (Minister of Mines
Annual Report 1936, page E28).

COMMODITIES: Gold

MINERALS

SIGNIFICANT: 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: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian	Horsethief Creek	Undefined Formation	

LITHOLOGY: Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Purcell Mountains

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1934

SAMPLE TYPE: Grab

COMMODITY

GRADE

Gold

15.7000

Grams per tonne

COMMENTS: Sample across a 0.5 metre quartz vein.

REFERENCE: Minister of Mines Annual Report 1934, page E28.

CAPSULE GEOLOGY

The Flying Dutchman property is located on, and along the northwest side of Bobbie Burns Creek about 2 kilometres west of its confluence with Carbonate Creek, about 30 kilometres south-southwest of Golden. The property included the Lincoln (Lot 3952), Lucky Jack (Lot 3953) and Bryan (Lot 3951) claims. Workings consist of a 27-metre adit on the Lincoln claim and a 6-metre adit on the Bryan claim. On the Flying Dutchman claim in this same vicinity, 2 adits totalling 54 metres were driven at elevations of 1867 and 1935 metres in 1890. By 1898, the underground workings comprised 100 metres of drifts and crosscuts (National Mineral Inventory 82N/3 Au 3).

Hostrocks on the property consist of highly contorted slates of the Hadrynian Horsethief Creek Group. Cutting the slates are quartz veins (with minor calcite) striking from 030 to 080 degrees with 38 to 70 degree north dips. The veins have irregular widths which range from 0.3 to 1.2 metres. Mineralization consists of pyrite which occurs as massive lenses or pods, or is irregularly disseminated through the quartz.

In the Flying Dutchman lower crosscut adit, a grab sample taken from a quartz vein at the southwest drift face assayed 15.7 grams per tonne gold across 0.5 metre (Minister of Mines Annual Report 1934, page E28).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1010
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1894-748; *1898-1049,1050,1054; 1899-594; 1900-979; 1920-
N350; *1934-E27,E28; *1936-E26,E28,E33
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **PRATTLE CREEK, PTC**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 59 03 N
LONGITUDE: 117 32 47 W
ELEVATION: 1981 Metres

NORTHING: 5759418
EASTING: 462477

LOCATION ACCURACY: Within 500M

COMMENTS: Hand trench, located 250 metres northwest of a small unnamed lake, west of Prattle Creek, about 90 kilometres northwest of Golden (Assessment Report 21524).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Sphalerite Galena
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Ordovician-Silurian
Middle Cambrian

GROUP

Undefined Group
Undefined Group

FORMATION

Beaverfoot
Snake Indian

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Dolomite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY

YEAR: 1990

Lead
Zinc

GRADE	Per cent
0.2000	Per cent
2.4800	Per cent

REFERENCE: Assessment Report 21524.

CAPSULE GEOLOGY

The Prattle Creek occurrence area is underlain by westerly dipping (60 degrees) carbonate rocks of the Middle Ordovician to Silurian Beaverfoot Formation and Middle Cambrian Snake Indian Formation. The carbonates are alternating conformable beds of dolomite and limestone within a tightly folded recumbent syncline. See PTC (083C 002) for a detailed regional geology description.

At one showing near a small unnamed lake, a silicified dolomite hosts disseminated red sphalerite with minor galena. A chip sample from a hand trench analysed 2.48 per cent zinc and 0.20 per cent lead (Assessment Report 21524). Another mineralized showing is situated 1.75 kilometres southeast of the trenched showing. Here, disseminated cubic galena occurs in white crystalline limestone.

BIBLIOGRAPHY

EMPR ASS RPT *19814, *21524
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32; 91-A, pp. 163-169

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/01

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 008**

NATIONAL MINERAL INVENTORY: 082N3 Au1

NAME(S): **ROBERT E. BURNS (L.1002)**, NUGGET (L.777), BOBBIE BURNS,
BOBBY BURNS, MILL SITE (L.1091), HIGHLAND MARY (L.1982),
RIDER (L.776)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N03E

Open Pit

MINING DIVISION: Golden

BC MAP:
LATITUDE: 51 01 33 N

UTM ZONE: 11 (NAD 83)

LONGITUDE: 117 06 46 W

NORTHING: 5652704

ELEVATION: 2255 Metres

EASTING: 492091

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of the Robert E. Burns claim (Lot 1002), located at the headwaters of a southeasterly flowing tributary of Bobbie Burns Creek, 2 kilometres west of the confluence of Bobbie Burns Creek and Carbonate Creek, about 30 kilometres south-southwest of Golden (Minister of Mines Annual Report 1923, page A197).

COMMODITIES: Gold Silver Lead

MINERALS

SIGNIFICANT: Pyrite Galena Arsenopyrite Gold

ASSOCIATED: Quartz

ALTERATION: Limonite

COMMENTS: Inferred from surface oxidation of iron sulphides.

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Slate
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Purcell Mountains

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1923

SAMPLE TYPE: Bulk Sample

COMMODITY

GRADE

Silver

34.2000

Grams per tonne

Gold

10.2000

Grams per tonne

COMMENTS: Highest values from ninety kilograms of pulverized ore quartered down into two samples.

REFERENCE: Minister of Mines Annual Report 1923, page A198.

CAPSULE GEOLOGY

The Robert E. Burns property is located at the headwaters of a southeasterly flowing tributary of Bobbie Burns Creek, 2 kilometres west of the confluence of Bobbie Burns Creek and Carbonate Creek, about 30 kilometres south-southwest of Golden. The property is on the south side of the pass (Spillimacheen Range) into McMurdo Creek.

Quartz vein showings discovered in about 1889 were staked as the Bobbie Burns claim. A 5-stamp mill was installed at the 2072-metre elevation in 1891. During 1892 about 27 tonnes of ore were taken from an opencut and run through the mill, but gold recoveries were low. Litigation as to the ownership of the Bobbie Burns claim resulted in the claim being restaked at the Robert E. Burns (Lot 1002). In 1923, the property consisted of the Robert E. Burns, Mill Site (Lot 1091), Nugget (Lot 777), Highland Mary (Lot 1982) and Rider (Lot 776) claims.

Hostrocks on the property consist of northwest striking, steeply

CAPSULE GEOLOGY

southeast dipping slates and schists of the Hadrynian Horsethief Creek Group. A series of quartz veins, 0.3 to 1.2 metres wide, strike northwest and cut the metasediments. Smaller crosscutting quartz veins are nearly at right angles to the northwest striking system. The quartz veins are locally mineralized with disseminated pyrite and small amounts of galena and arsenopyrite. The mineralization tends to be concentrated in the smaller vein system and where the smaller vein system crosscuts the larger veins.

There was some near-surface oxidation of sulphides that resulted in leached and honeycombed quartz, which when washed produced native gold. A pile of about 90 tonnes of ore was left outside the feeding platform at the mill; about 90 kilograms of the ore was taken from different parts of the pile, pulverized, and quartered down into two samples which assayed 10.2 and 9.5 grams per tonne gold, and 34.2 and 13.7 grams per tonne silver respectively (Minister of Mines Annual Report 1923, pages A197, A198).

BIBLIOGRAPHY

EMPR AR 1890-373; 1891-568; 1892-535,536; 1893-1064; 1894-748; 1895-672; 1896-556; *1898-1048,1049; *1923-A197,A198; 1934-E27; 1936-E26-E28,E32,E33; 1966-236
EMPR ASS RPT 865
EMPR FIELDWORK 2000, pp. 231-252
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/18

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 009**

NATIONAL MINERAL INVENTORY: 082N3 Pb1

NAME(S): **CROWN POINT**, MCMURDO CREEK, A,
B, RIALTO, BLUFF,
C, GOLD, REGINA (L.11631),
NEW CROWN POINT (L.11630), PRESIDENT (L.6650)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N03E
BC MAP:

Underground

MINING DIVISION: Golden

LATITUDE: 51 02 18 N
LONGITUDE: 117 08 46 W
ELEVATION: 2286 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5654098
EASTING: 489756

LOCATION ACCURACY: Within 500M

COMMENTS: Underground workings on Lot 11630, at the head of McMurdo Creek, a northeasterly flowing tributary of the Spillimacheen River, about 30 kilometres south-southwest of Golden (Minister of Mines Annual Report 1932, page A161).

COMMODITIES: Lead Silver Zinc Gold

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite

ASSOCIATED: Quartz Siderite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Podiform Massive Vein
CLASSIFICATION: Replacement Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au J01 Polymetallic manto Ag-Pb-Zn
E14 Sedimentary exhalative Zn-Pb-Ag

DIMENSION: 103 x 15 x 7 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: A zone.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Hadrynian GROUP: Horsethief Creek FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Limestone
Slate
Schist
Quartzite
Grit
Chlorite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Purcell Mountains

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: A SHOWING REPORT ON: Y
CATEGORY: Indicated YEAR: 1948
QUANTITY: 35857 Tonnes
COMMODITY: Silver 117.2000 Grams per tonne
Lead 6.2400 Per cent
Zinc 0.1800 Per cent

REFERENCE: Northern Miner - August 20, 1970.

CAPSULE GEOLOGY

The Crown Point property is located between the 1828 to 2438 metre elevation at the head of McMurdo Creek, a northeasterly flowing tributary of the Spillimacheen River, about 30 kilometres south-southwest of Golden. Early work on the property consisted of surface stripping, adits and raises carried out at five locations. The most extensive are at the A showing at the 2069-metre elevation. Located northwesterly from the A showing are the Rialto, B, Bluff and C showings. The C workings are on the northwest side of a small tributary of McMurdo Creek about 1.2 kilometres northwest of the A workings and 91 metres higher. A series of veins known as the Gold showing are located about 800 metres southeast of the A workings at an elevation of about 2286 metres. The B showing lies 548 metres

CAPSULE GEOLOGY

northwest of the A showing; the Bluff showing lies west of the B showing. The Rialto showing is located 304 metres northwest of the A showing.

By 1936, the A workings comprised 4 adits and 5 raises totalling 762 metres of underground development and are located on the Regina (Lot 11631), New Crown Point (Lot 11630) and President (Lot 6650) claims. The B workings consist of a 7-metre adit and opencuts; the Bluff workings, 2 short adits; the C workings, about 97 metres of drifts and crosscuts in 3 adits; and the Rialto, an adit.

Hostrocks on the property consist of schists, quartzites, grits and limestone of the Hadrynian Horsethief Creek Group. They are folded into a broad anticline with, apart from local anomalies, moderate to gently dipping limbs. The crest of this anticline, one of a series of open rolls, can be seen several kilometres to the northwest and also to the southeast, across "Bobbie Burns Basin" where the Robert E. Burns (082N 008) and Flying Dutchman (082N 006) occurrences are located. The dominant cleavage is nearly vertical, axial to the anticline.

The most important mineralization is at the A showing and is hosted in limestone on the southwest limb of the main anticline. The limestone and enclosing slate are complexly dragfolded, crumpled and faulted. About 7 to 12 metres of limestone and limy strata are involved in a series of asymmetrical dragfolds that are cut by faults of relatively small displacement. An ore zone, only the fringes of which are exposed in an adit, consists of stringers, pods and lenses of galena and lesser sphalerite, pyrite and siderite; the sulphides vein and replace the limestone. In 1948, the A zone was established as being 103 metres long, 15 metres wide and 7 metres thick. The same zone has, according to early reports, about 35,857 tonnes of indicated ore grading 117.2 grams per tonne silver, 6.24 per cent lead and 0.18 per cent zinc (Northern Miner - August 20, 1970).

The C showing, 1.2 kilometres north of the A showing, consists of an irregular quartz vein in quartzite and schist. The C vein is related to an irregular, sharp crumple and is exposed for a length of about 22 metres on a steep slope. The vein is from several centimetres to 3 metres wide and contains pods and lenses of galena-sphalerite-pyrite. At the upper end of a stripped area the vein splits, and the branches appear to be very irregular. A sample of selected mixed sulphides assayed 12.3 grams per tonne gold, 377 grams per tonne silver, 23.3 per cent lead and 0.2 per cent zinc (Minister of Mines Annual Report 1936, page E37).

Just beneath a small glacier, several quartz veins, known as the Gold showings, occur in an area about 37 square metres. These veins are on the crest of the anticline and for the most part are axial to it, although some have a northerly or easterly strike. The veins are from a few centimetres to as much as 3 metres wide and are very sparsely mineralized with pyrite. The veins are hosted in quartzite, which is about 30 metres thick; most of the veins pinch out in underlying schist. The veins may represent fracture fillings in the shattered, more competent rock in the anticlinal crest.

The B showing lies 548 metres northwest of the A showing and comprises a quartz vein hosted in flat-lying grey schist with some local limestone evident. The vein varies from 15 to 91 centimetres wide, and splits into two branches to the east. Mineralization consists of galena and pyrite.

The Bluff showing lies west of the B showing and is underlain by schist and limestone in fault contact. The limestone is impregnated with disseminated grains of galena and sphalerite. Some of the better disseminated mineralization assayed 34.2 grams per tonne silver, 2.5 per cent lead and 9.6 per cent zinc (Minister of Mines Annual Report 1936, page E37).

The Rialto showing is located 304 metres northwest of the A showing. An outcrop of numerous, narrow, pyritic quartz stringers aggregating 7.6 metres in width cut across the schistosity of the host chlorite schist. A grab sample from a 4.5-tonne dump of sorted pyritic quartz at the mouth of the Rialto tunnel assayed 5.4 grams per tonne gold and 13.7 grams per tonne silver (Minister of Mines Annual Report 1932, page A160).

BIBLIOGRAPHY

- EMPR AR 1890-364; 1895-673; 1898-1052-1054; 1899-594; 1909-K272;
1928-C275; 1929-C285,C290,C291; 1930-A232-A234; *1932-A160,A161;
*1936-E25-E28,E33-E37; 1947-A177; 1948-A152; 1949-A204,A205
EMPR BC METAL MM00554
EMPR FIELDWORK 2000, pp. 231-252
EMPR PF (82N General File - Prospector's map, 1937; Surface geology
map of a portion of the McMurdo Creek property; Plan of the
surface geology of the A workings)
EMR MIN BULL MR 223, B.C. 83

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1016
REPORT: RGEN0100

BIBLIOGRAPHY

EMR MP CORPFILE (Beverly Mines, Limited; New Chemcrude Resources
Ltd.)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32
CANMET IR 2575 (1949)
N MINER *Aug.20, 1970

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/25

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 010**

NATIONAL MINERAL INVENTORY: 082N3 Pb2

NAME(S): **DIAMOND E (L.543)**, NO. ONE (L.542), CARBONATE MOUNTAIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N03E
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 21 N
LONGITUDE: 117 03 08 W
ELEVATION: 2347 Metres

NORTHING: 5650475
EASTING: 496336

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 543, located on the east side of the east fork of Carbonate Creek about 2 kilometres south of Bobbie Burns Creek, approximately 32 kilometres south of Golden (NTS Map 82N/3E).

COMMODITIES: Lead Silver Copper

MINERALS

SIGNIFICANT: Galena Tetrahedrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Horsethief Creek	Undefined Formation	

LITHOLOGY: Slate
Grit

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Purcell Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Diamond E (Lot 543) occurrence is located on the east side of the east fork of Carbonate Creek about 2 kilometres south of Bobbie Burns Creek, approximately 32 kilometres south of Golden. Old showings of small lenticular quartz veins in grey slate and buff grit of the Hadrynian Horsethief Creek Group were stripped along the road between elevations of 2286 to 2438 metres (Minister of Mines Annual Report 1967, page 266). Mineralization consists of argentiferous galena and tetrahedrite.

BIBLIOGRAPHY

EMPR AR 1888-310,311; 1896-556; 1936-E37; 1966-236; *1967-266
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 011**

NATIONAL MINERAL INVENTORY: 082N4 Pb2

NAME(S): **DONALD**, ROUND HILL, ROUND HILL (L.201),
 WOOLSEY

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082N04E
 BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 14 25 N
 LONGITUDE: 117 41 41 W
 ELEVATION: 1676 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5676775
 EASTING: 451504

LOCATION ACCURACY: Within 500M

COMMENTS: Shafts and adit on Lot 201 (survey cancelled), located on the east slope of Fidelity Peak about 1 kilometre west of Bostock Creek, in Glacier National Park, 2.5 kilometres north-northwest of Flat Creek Station of the Canadian Pacific Railway, about 54 kilometres west of Golden (Geological Survey of Canada Summary Report 1928 Part A, page 172).

COMMODITIES: Lead Silver Zinc Copper Gold

MINERALS

SIGNIFICANT: Pyrite Pyrrhotite Galena Sphalerite Chalcopyrite
 ASSOCIATED: Quartz Siderite Ankerite
 ALTERATION: Sericite
 ALTERATION TYPE: Sericitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform
 CLASSIFICATION: Epigenetic 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>
Paleozoic	Unnamed/Unknown Group	Unnamed/Unknown Formation	Unnamed/Unknown Informal
Jurassic			

LITHOLOGY: Porphyritic Granodiorite
 Quartzite
 Mica Schist
 Phyllite
 Slate
 Hornblende Granite Dike
 Granite Aplite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
 TERRANE: Plutonic Rocks Kootenay
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: VEIN REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1928
 SAMPLE TYPE: Grab

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	113.1000	Grams per tonne
Gold	0.6800	Grams per tonne
Lead	4.0000	Per cent
Zinc	1.5000	Per cent

COMMENTS: Sample of mineralized quartz vein.
 REFERENCE: Minister of Mines Annual Report 1929, page C333.

CAPSULE GEOLOGY

The Donald workings are located on the east slope of Fidelity Peak about 1 kilometre west of Bostock Creek, in Glacier National Park, 2.5 kilometres north-northwest of Flat Creek Station of the Canadian Pacific Railway, about 54 kilometres west of Golden.

The original claim on the property was staked in the late 1880s and the first recorded work was performed in 1896 with sporadic development until 1929. Workings consist of a shaft, a short adit and several opencuts on the Round Hill claim (Lot 201, survey cancelled); and two other shallow shafts, numerous opencuts and a

CAPSULE GEOLOGY

274-metre long crosscut adit.

The property is underlain by a small Middle and/or Late Jurassic stock of porphyritic granodiorite which intrudes a series of Lower Paleozoic quartzites, mica schists, phyllites and slates that strike from northwest to north and dip steeply east or west. Hornblende granite and granite aplite dikes are also evident. Mineralization occurs in three major, and several minor quartz-siderite-ankerite veins which cut the granodiorite. Sulphides consisting of pyrite, pyrrhotite, sphalerite, galena and chalcopyrite occur as irregular bodies (up to 3.3 metres) or stringers, in and alongside the quartz veins. Near some of the veins, wallrocks are extensively bleached and sericitized.

The most important vein is the westerly one and has been developed by two shafts, three or four opencuts and a short drift. The vein is 0.9 to 3 metres wide, strikes northerly and dips irregularly but generally steeply west.

In 1929, a quartz vein was exposed about 30 metres southeast of the most northerly shaft that explores the main vein. The vein is 7.3 metres wide and is mineralized with pyrrhotite, pyrite, galena, sphalerite and very minor chalcopyrite. A sample across the vein analysed 0.68 gram per tonne gold, 113.1 grams per tonne silver, 4 per cent lead and 1.5 per cent zinc (Minister of Mines Annual 1929, page C333).

BIBLIOGRAPHY

- EMPR AR 1889-279; 1896-539,560; 1898-1062; 1899-677; 1900-811; 1916-K193; 1917-F182; 1924-B204; 1928-C313; 1929-C333,C334
EMPR BC METAL MM00644
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976; *Report of Mine Examination by K.J. Christie, 1950; *Geological Report by H.C. Gunning, 1929; Results of assays (1949); Various memoranda; Plan and geology of underground workings, 1929; Prospectus, The Woolsey Group of Mineral claims, The Glasair Mining Corporation Limited; Property description by H.L. Batten, 1928)
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1928 Part A, pp. 142,147,156,172-175

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/12

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 012**

NATIONAL MINERAL INVENTORY: 082N4 Pb6

NAME(S): **LANARK (L.1592A)**, LANARK MINE, MAPLE LEAF (L.1562)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 13 21 N
LONGITUDE: 117 43 53 W
ELEVATION: 1699 Metres

NORTHING: 5674822
EASTING: 448925

LOCATION ACCURACY: Within 500M

COMMENTS: Tunnel B on Lot 1592A, on the southerly slope of Fidelity Peak 2 kilometres north of the Trans-Canada Highway, about 1 kilometre west of Glacier National Park, 58 kilometres west of Golden (Property File - Plan map of mine workings).

COMMODITIES: Lead Silver Zinc Gold Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Tetrahedrite Chalcopyrite
ASSOCIATED: Quartz Calcite Carbonate
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Massive
CLASSIFICATION: Replacement
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Lardeau

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillaceous Limestone
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: TRENCH

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Channel

YEAR: 1990

COMMODITY

Silver

GRADE

504.9000

Grams per tonne

Lead

11.5000

Per cent

Zinc

15.3000

Per cent

COMMENTS: Sample across 0.33 metre of massive galena.
REFERENCE: Assessment Report 21390.

CAPSULE GEOLOGY

The Lanark property is underlain primarily by thin bedded, dark, incompetent slates interbedded with lesser amounts of thinly bedded, dark, argillaceous limestones, of the Lower Cambrian and younger Lardeau Group. The bedding strikes between 320 and 340 degrees and dips from 50 to 60 degrees to the northeast. The limestone is the hostrock for the deposit and has been partly to completely replaced by silica, locally.

Replacement-type quartz veins are mineralized with massive argentiferous galena, sphalerite, pyrite, and minor tetrahedrite and chalcopyrite. Calcite and silicified and crushed limestone wallrock also forms part of the gangue. The veins are often folded, averaging 35 to 45 degree dips to the east-northeast. The veins apparently flatten towards the summit of the mountains. Most of the veins are parallel with the bedding, but also pass from one bedding plane to another.

The mine workings developed a vein about 7.6 metres wide in the upper levels, which decreased to 1.5 metres wide in the lower workings. Two shafts and three adits explored the extension of the Lanark main vein system on the adjoining Maple Leaf claim (Lot 1562).

CAPSULE GEOLOGY

A channel sample across 0.33 metre of massive galena from a trench in the vicinity of the Lanark shaft analysed 504.9 grams per tonne silver, 15.3 per cent zinc and 11.5 per cent lead. At another location on the property a rock sample analysed up to 3 grams per tonne gold (Assessment Report 21390).

The Lanark claim was staked about 1883. By 1888, an incline shaft was sunk on the vein for 30 metres, with about 152 metres of tunnels completed on the 30 and 122 metre levels, and 91 metres of drifting. Development continued until 1893. The property was re-opened in 1896. All available ore was stoped out and work was suspended prior to 1900. In 1915, more ore was discovered and mined out by 1923. In 1925, all work ceased and the plant dismantled.

The mine comprised adits and raises to a depth of 122 metres and below that by a winze 42 metres deep with a drift at the bottom.

BIBLIOGRAPHY

EMPR AR 1887-266; 1888-304,323; 1889-279; 1890-364; 1891-565; 1893-1050; 1895-692; 1896-538,539; 1897-464,528,529,572,619; 1899-678; 1903-H107; 1913-K122; 1914-K243; 1915-K117,K446; 1916-K193,K517; 1917-F152,F182; *1918-K153,K155,K189,K190; 1919-N140; 1920-N127, N142; 1921-G152,G168; 1922-N212; 1924-B204; 1925-A259
EMPR ASS RPT 21118, *21390
EMPR BC METAL MM00615
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976; *Plan maps and cross-sections of Lanark mine workings, location map of claims (1897))
GSC ANN RPT 1892-93 Volume VI, p. 59R
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1928 Part A, pp. 142,154,187,188

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 013**

NATIONAL MINERAL INVENTORY: 082N4 Ag5

NAME(S): **DUNVEGAN**, ALMA

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 07 11 N
LONGITUDE: 117 36 56 W
ELEVATION: 1219 Metres

NORTHING: 5663319
EASTING: 456918

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of Lot 7636 in Glacier National Park, on Bain Brook, 1.5 kilometres from its confluence with the Incomappleux River, about 50 kilometres east-northeast of Revelstoke (NTS Map 82N/4E Edition 2; Minister of Mines Annual Report 1918, page K157).

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
DIMENSION: 3 Metres
COMMENTS: Dunvegan vein.

STRIKE/DIP: 355/50E TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Paleozoic Lardeau Undefined Formation

LITHOLOGY: Slate
Calcareous Shale

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DUMP REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1918
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 2502.0000 Grams per tonne
Lead 65.2000 Per cent
Zinc 7.2000 Per cent

COMMENTS: A sample from a small pile of carefully sorted ore from the uppermost tunnel.

REFERENCE: Minister of Mines Annual Report 1918, page K157.

CAPSULE GEOLOGY

The Dunvegan occurrence is located in Glacier National Park, on Bain Brook, 1.5 kilometres from its confluence with the Incomappleux River, about 50 kilometres east-northeast of Revelstoke.

The Dunvegan vein strikes 355 degrees and dips 50 degrees east, and is hosted in a shear zone in slate and calcareous shale of the Lower Cambrian and younger Lardeau Group. The vein is reported to have been 2.4 to 3 metres wide. Mineralization consists of galena and sphalerite in a quartz (inferred) gangue.

Two adit tunnels were driven about 33 metres apart vertically to exploit the vein. Another short tunnel was driven only 4.5 metres vertically above the lower adit. The lower tunnel was driven for 60 metres, the uppermost tunnel for 21 metres, and the middle tunnel for 15 metres. A sample from a small pile of carefully selected ore from the uppermost tunnel analysed 2502 grams per tonne silver, 65.2 per cent lead and 7.2 per cent zinc (Minister of Mines Annual Report 1918, page K157).

The Alma claim covered a southwesterly extension of the Dunvegan vein and an adit was driven for 30 metres.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1023
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1889-280; 1890-365; 1893-1050; 1896-539; 1899-677; 1917-
F153,F182; *1918-K157,K158; 1925-A259; 1929-C334
EMPR BC METAL MM00599
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/20

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 014**

NATIONAL MINERAL INVENTORY: 082N5 Ag2

NAME(S): **WAVERLEY (L.3597)**, MONTAGUE (L.3596), WAVERLEY-TANGIER

STATUS: Developed Prospect

Underground

MINING DIVISION: Revelstoke

REGIONS: British Columbia

NTS MAP: 082N05W

BC MAP:

LATITUDE: 51 27 00 N

LONGITUDE: 117 57 35 W

ELEVATION: 1829 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Adits on Lot 3597, located 1.75 kilometres southeast of the confluence of Sorcerer and Holway creeks, on the western slope of Sorcerer Mountain, about 56 kilometres northeast of Revelstoke. The Tangier occurrence (082N 015) lies 750 metres to the west (Geological Survey of Canada Summary Report 1928 Part A, page 176).

UTM ZONE: 11 (NAD 83)

NORTHING: 5700305

EASTING: 433311

COMMODITIES: Lead

Silver

Gold

Zinc

Copper

MINERALS

SIGNIFICANT: Galena Anglesite Cerussite Smithsonite Tetrahedrite

ASSOCIATED: Carbonate Calcite Quartz

ALTERATION: Limonite Anglesite Cerussite Malachite Azurite

Smithsonite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Vein Shear

CLASSIFICATION: Replacement

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au J01 Polymetallic manto Ag-Pb-Zn

SHAPE: Cylindrical

DIMENSION: 114 x 21 x 12 Metres

STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Largest oreshoot.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Lower Cambrian Unnamed/Unknown Group

Unnamed/Unknown Formation

LITHOLOGY: Limestone
Quartzite
Argillaceous Schist
Carbonaceous Graphitic Schist
Phyllite
Talcose Sericitic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

Ancestral North America

PHYSIOGRAPHIC AREA: Selkirk Mountains

INVENTORY

ORE ZONE: ORE SHOOT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1928

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

606.7000

Grams per tonne

Lead

5.8000

Per cent

COMMENTS: Average assays for samples taken from the main oreshoot over an average width of 2 metres and a length of about 21 metres.

REFERENCE: Special Bulletin (1928), Report on the Waverley Property by Galloway.

CAPSULE GEOLOGY

The Waverley occurrence is located 1.75 kilometres southeast of the confluence of Sorcerer and Holway creeks, on the western slope of Sorcerer Mountain, about 56 kilometres northeast of Revelstoke. The Tangier occurrence (082N 015) lies 750 metres to the west.

The property is underlain by northwest striking and steep (60 to 90 degrees) northeast dipping Lower Cambrian strata comprised of light grey, coarsely crystalline limestone with argillaceous and siliceous varieties, fine-grained quartzites, argillaceous and carbonaceous to graphitic schists and phyllites, and minor grey talcose and sericitic schists. Complex minor folding, shear zones and fissures are common.

CAPSULE GEOLOGY

At the Waverley "mine", two replacement vein-like orebodies have been explored and developed by underground workings that total 914 lineal metres. The principal workings crosscut and develop an oreshoot on the Waverley claim (Lot 3597) throughout a vertical depth of about 114 metres. This oreshoot has an apparent average length of 21 metres and a maximum width of about 12 metres and is developed by the No. 2 and 3 tunnels and connecting winze and raise from which three intermediate levels have been driven. The No. 1 tunnel and winze explores the other oreshoot or "Montague vein". About 228 metres to the northwest of the No. 1 tunnel, a short crosscut adit and winze on the Montague claim (Lot 3596) has exposed about 1.2 metres of oxidized ore on a northwest strike continuation of the "Montague vein".

Average assays for samples taken from the main oreshoot on the Waverley claim were 5.8 per cent lead and 606.7 grams per tonne silver over an average width of 2 metres and a length of about 21 metres (Special Bulletin (1928), Report on Waverley-Tangier Property, by J.D. Galloway). A sample of ore from the No. 2 tunnel analysed 4.1 grams per tonne gold, 1588.1 grams per tonne silver, 2.1 per cent lead, 26.7 per cent zinc and 1.35 per cent copper (Geological Survey of Canada Summary Report 1928 Part A, page 179).

The ore occurs in well-defined fissures and replaces dark grey or black fine-grained limestone and is found as irregular bodies more or less elongated along predominant shear and fault zones that trend about 320 degrees. Veins of quartz and calcite, striking more northerly than the main oreshoots, are barren in most places.

The ore is highly oxidized and consists of limonite, anglesite, cerussite, malachite, azurite, smithsonite and occasional nodules of galena and tetrahedrite in a gangue of decomposed limestone, calcite and quartz.

Most of the underground work on the Waverley property was performed between 1896 and 1898 by Gold Fields of British Columbia, an English company. The operation was closed down in 1899 and was idle until 1918. Some development took place in the summer months between 1918 and 1921.

BIBLIOGRAPHY

- EMPR *Special Bulletin (1928), Report on Waverley-Tangier Property by J.D. Galloway, pp. 17,18)
EMPR AR 1896-543,544; 1898-1062; 1915-K117; 1919-N140; 1920-N127; *1921-G156-G159; 1923-A232; 1924-B204; 1925-A259; 1929-C333; 1951-A193
EMPR PF (Structural plans of individual levels (1925); Cross-sections of mine workings (1925))
EMR MP CORPFILE (Waverley-Tangier Mines, Limited)
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1928 Part A, pp. 154, 175-182

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 015**

NATIONAL MINERAL INVENTORY: 082N5 Ag2

NAME(S): **TANGIER (L.3600)**, WAVERLEY-TANGIER

STATUS: Developed Prospect

Underground

MINING DIVISION: Revelstoke

REGIONS: British Columbia

NTS MAP: 082N05W

BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 27 04 N

LONGITUDE: 117 58 09 W

ELEVATION: 1463 Metres

NORTHING: 5700438

EASTING: 432656

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft, located along Sorcerer Creek immediately below and west of the Waverley workings (082N 014), about 1 kilometre southeast of the confluence of Sorcerer and Holway creeks, on the west slope of Sorcerer Mountain, about 56 kilometres northeast of Revelstoke (Geological Survey of Canada Summary Report 1928 Part A, page 176).

COMMODITIES: Lead
Antimony

Silver

Zinc

Gold

Copper

MINERALS

SIGNIFICANT: Pyrite Jamesonite Galena Sphalerite Tetrahedrite

ASSOCIATED: Calcite Carbonate Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform

CLASSIFICATION: Replacement

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au J01 Polymetallic manto Ag-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Marble
Limestone
Carbonaceous Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

Ancestral North America

PHYSIOGRAPHIC AREA: Selkirk Mountains

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1921

SAMPLE TYPE: Grab

COMMODITY

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	548.4000	Grams per tonne
Gold	2.0500	Grams per tonne
Lead	8.5000	Per cent
Zinc	5.0000	Per cent

COMMENTS: Ore dump near a shaft.

REFERENCE: Minister of Mines Annual Report 1921, page G159.

CAPSULE GEOLOGY

The Tangier occurrence is located along Sorcerer Creek immediately below and west of the Waverley workings (082N 014), about 1 kilometre southeast of the confluence of Sorcerer and Holway creeks, on the west slope of Sorcerer Mountain, about 56 kilometres northeast of Revelstoke.

At the Tangier workings, Lower Cambrian strata comprising a considerable thickness of pyritic black carbonaceous schist is in contact with a band of white to grey marble at least 36 metres wide. The marble strikes 330 to 325 degrees and dips very steeply east or is vertical and also contains at least two small bands of black carbonaceous schist. A vein-like oreshoot occurs in the marble, between two fault walls, at or near the marble-schist contact. The replacement mineralization is composed of calcite and some quartz and a fine-grained mixture of pyrite, jamesonite, galena, sphalerite and minor amounts of tetrahedrite. The width of the oreshoot varies from 0.4 to 1.8 metres, averaging 0.6 metre. Some mineralization occurs in the schist to the west of the oreshoot. Large calcite/quartz veins and lenses also occur and contain minor amounts of pyrite. The

CAPSULE GEOLOGY

ore at Tangier differs from the Waverley in that there is not much evidence of oxidation.

Several hundred metres to the northwest of the Tangier shaft, which explores the mineralized zone, quartz veins and stringers across about 15 metres of limestone are mineralized with tetrahedrite and minor pyrite, sphalerite and galena.

The development on the Tangier property consists of a double-compartment shaft about 33 metres deep, 243 to 274 metres of tunnelling in two drifts and an adit, and a 30-metre winze.

Ore piled on a dump near the shaft amounts to "several hundred tons", and consists of galena, sphalerite, pyrite and small amounts of tetrahedrite in a gangue of quartz, calcite and limestone. A grab sample from this large pile assayed 2.05 grams per tonne gold, 548.4 grams per tonne silver, 8.5 per cent lead and 5 per cent zinc. A separate pile (roughly estimated at 181 tonnes) near the shaft dump consists of black decomposed ore and apparently came from the winze below the 30-metre level. A grab sample of this material assayed 8.2 grams per tonne gold, 726.7 grams per tonne silver, 8.5 per cent lead and 15 per cent zinc (Minister of Mines Annual Report 1921, page G159).

It is reported that about 13 tonnes of carefully hand-picked sulphide ore was shipped to Wales which yielded 51.4 grams per tonne gold, 4456.4 grams per tonne silver and 25 per cent lead (Geological Survey of Canada Summary Report 1928 Part A, page 182).

BIBLIOGRAPHY

EMPR *Special Bulletin (1928), Report on Waverley-Tangier Property by J.D. Galloway, pp. 18,19)
EMPR AR 1896-544; 1898-1062; 1915-K117; 1919-N140; 1920-N127; *1921-G159; 1924-B204; 1925-A259; 1929-C333; 1951-A193
EMR MP CORPFILE (Waverley-Tangier Mines, Limited)
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1928 Part A, pp. 154, 175-182
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/08

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 016**

NATIONAL MINERAL INVENTORY: 082N4 Pb4

NAME(S): **ALLCO, IRON CAP, LIMESTONE DIKE**
 ALLCO SILVER, LIMESTONE DIKE NO. 3 (L.14858)

STATUS: Past Producer	Underground	MINING DIVISION: Revelstoke
REGIONS: British Columbia		UTM ZONE: 11 (NAD 83)
NTS MAP: 082N04W		NORTHING: 5675214
BC MAP:		EASTING: 431256
LATITUDE: 51 13 27 N		
LONGITUDE: 117 59 04 W		
ELEVATION: 1889 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: No. 2 adit on Lot 14858 (Limestone Dike No. 3), located at the headwaters of Woolsey (Silver) Creek, 13.5 kilometres northwest of Albert Canyon Station of the Canadian Pacific Railway, 34 kilometres north-northeast of Revelstoke (Assessment Report 16907).		

COMMODITIES: Lead Tin Silver Zinc Gold Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Tetrahedrite Stannite
 ASSOCIATED: Quartz Carbonate Pyrite Arsenopyrite
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Stratiform Massive
 CLASSIFICATION: Replacement Epigenetic Sedimentary
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au J01 Polymetallic manto Ag-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian Paleozoic	Undefined Group Lardeau	Badshot Undefined Formation	

LITHOLOGY: Limestone
 Siliceous Limestone
 Ortho Quartzite
 Argillite
 Argillaceous Limestone
 Silty Limestone
 Limestone Conglomerate
 Graphitic Argillite
 Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
 TERRANE: Kootenay

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1986
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	1216.0000 Grams per tonne
Lead	15.0000 Per cent
Zinc	4.8000 Per cent
COMMENTS: Average assays of high-grade samples.	
REFERENCE: Assessment Report 15559.	

CAPSULE GEOLOGY

The Allco property is located at the headwaters of Woolsey (Silver) Creek, 13.5 kilometres northwest of Albert Canyon Station of the Canadian Pacific Railway, 34 kilometres north-northeast of Revelstoke.

The occurrence area is underlain by strata of the Lower Cambrian Badshot Formation and Lower Cambrian and younger Lardeau Group. Five stratigraphic units have been identified and consist of: 1) massive grey limestone; 2) a 9-metre marker unit consisting of buff, siliceous limestone at the base grading upward into black orthoquartzite; 3) dark grey, thinly bedded argillite and argillaceous limestone (this unit is about 30 metres thick); 4) distinct buff, silty limestone and limestone conglomerate (maximum

CAPSULE GEOLOGY

thickness of 60 metres); and 5) black, slaty, graphitic argillite and phyllite of considerable unknown thickness.

Units 1 through 4 are equated with the Badshot Formation and unit 5 with the Lardeau Group. The four units of the Badshot Formation have an average strike of 282 degrees and 44 degrees north dip in the central part of the area, changing to 314 degrees strike and 60 degrees north dip in the northwest part. A major northwest trending fault separates the underlying Badshot Formation from the Lardeau Group.

Numerous showings of galena, sphalerite, chalcopyrite, tetrahedrite and pyrite occur within limestone in an area of approximately 3000 by 500 metres, trending northwest. Four distinct modes of mineralization have been found either in the buff limestone unit or along the contact between the buff and grey units and comprise: 1) stratiform, banded massive galena-sphalerite-chalcopyrite lenses found along the contact of buff and grey limestone units (adit 4); 2) replacement, massive galena-sphalerite or sphalerite-pyrite-arsenopyrite veins and pods in joints and joint intersections (in and around adits 1, 2 and 3); 3) stockwork, massive galena-sphalerite accompanying quartz-carbonate veins in brecciated limestone (in trenches 100 metres west of adit 3); and 4) locally occurring galena, sphalerite and pyrite in a 1-2 metre wide quartz vein found intermittently along a major fault.

Small percentages of tin associated with galena were reported from underground workings and is probably due to the presence of stannite.

Average assays of high grade chip samples were 15 per cent lead, 4.8 per cent zinc and 1216 grams per tonne silver (Assessment Report 15559).

Major exploration and development work was carried out between 1934 and 1937 by Allco Silver Mines, Limited during which some ore shipments were made. The development work included 282 metres of drifts and crosscuts in 4 adits, a 20-metre shaft and a 15-metre winze.

BIBLIOGRAPHY

- EMPR AR 1919-N141; 1927-C290; 1930-A260; 1931-A149-A151; 1933-A212;
*1935-E19-E21; 1937-A40,E56
EMPR ASS RPT 12041, 13288, 14403, *15559, *16907
EMPR BC METAL MM00589
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
EMR MP CORPFILE (Allco Silver Mines, Limited)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT 1928 Part A, p. 165
CANMET IR 771, p. 222 (1935)

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/28

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 017**

NATIONAL MINERAL INVENTORY: 082N5 Ag1

NAME(S): **GEORGE**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N05W
BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 21 18 N
LONGITUDE: 117 51 16 W
ELEVATION: 1371 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5689650
EASTING: 440503

LOCATION ACCURACY: Within 500M

COMMENTS: The occurrence is situated 500 metres east of the Tangier River and about 250 metres north of its confluence with Moloch Creek, approximately 50 kilometres northeast of Revelstoke (Geological Survey of Canada Summary Report 1928 Part A, page 191).

COMMODITIES: Silver Gold Copper Lead Zinc

MINERALS

SIGNIFICANT: Pyrite Sphalerite Galena Boulangerite Tetrahedrite

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

J01 Polymetallic manto Ag-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

Ancestral North America

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

The George occurrence is situated 500 metres east of the Tangier River about 250 metres north of its confluence with Moloch Creek, approximately 50 kilometres northeast of Revelstoke.

Lower Cambrian dull grey, flaggy crystalline limestone with slaty intercalations strikes 345 degrees and dips 30 to 50 degrees east. Irregular lenticular quartz-calcite veins, up to 20 centimetres wide, cut the limestone and are mineralized with pyrite, sphalerite and galena. A mineral, thought to be tetrahedrite in the field, resembles boulangerite under the microscope (Geological Survey of Canada Summary Report 1928 Part A, page 191).

In the period 1896 to 1898, the vein was stripped for 60 metres and an adit driven 48 metres to cut the vein at depth. A winze, depth unknown, was sunk from the adit. These workings were badly caved when examined in 1928. In 1899, a 3.6-tonne shipment of selected ore was sent to the Trail smelter for testing and yielded "satisfactory" assays in gold, silver and copper. In August 1903, 5.5 tons was shipped to the Trail smelter and gave returns of \$110 per ton; in November of the same year, 2.5 tons was sent to Tacoma and gave returns of \$116 per ton, mainly in silver respectively (Geological Survey of Canada Summary Report 1928 Part A, page 191).

BIBLIOGRAPHY

EMPR AR 1898-1062; 1899-677; 1903-H108,H109; 1929-C333; 1968-264
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1928 Part A, pp. 156, 191

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

metres in width; the depth of alluvium is not known. The gravels are finer than that of the bench gravels.

The valley of Quartz and "Porcupine" creeks is underlain by slates and phyllites which are overlain, as observed on the ridges, by limestone and quartzite, all of the Hadrynian Horsethief Creek Group. Many small veins and stringers of milky white quartz parallel the cleavage of the slates and phyllites and a number of stronger veins occur in the massive strata. Small amounts of pyrite and occasionally galena and chalcopryrite are found in the veins; the secondary development of ferruginous carbonate (ankerite) is pronounced in the enclosing strata. No native gold has been seen in any of the veins (Geological Survey of Canada Summary Report 1932 Part A II, page 172). Arsenopyrite, galena, chalcopryrite and native silver have been recovered from sluicing.

BIBLIOGRAPHY

EMPR AR 1884-424; *1888-306; 1889-285; 1890-371; 1892-535; 1899-610,
663,664; 1900-802; 1926-A239; 1927-C264; 1929-C292; 1935-E36
EMPR ASS RPT 12761
EMPR BULL 28, pp. 35,36
GSC MAP 295A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1932 Part A II, pp. 170-172

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 019**

NATIONAL MINERAL INVENTORY: 082N8 Zn1

NAME(S): **MONARCH**, MONARCH MINE, MONARCH-KICKING HORSE,
MONARCH (L.551), EAST MONARCH, WEST MONARCH,
COUVERAPEE, ST. ETIENNE (L.2813)

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N08W
BC MAP:
LATTITUDE: 51 24 56 N
LONGITUDE: 116 26 16 W
ELEVATION: 1615 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit, on a north-facing cliff of Mount Stephen in Yoho National Park,
just south of Highway 1, the Kicking Horse River and the Canadian
Pacific Railway, 4 kilometres northeast of Field (Property File -
Proposed drilling and mine plan map, 1951).

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

NORTHING: 5696188

EASTING: 539097

COMMODITIES: Zinc Lead Silver Cadmium Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Chalcopyrite
COMMENTS: Trace chalcopyrite.
ASSOCIATED: Pyrite
ALTERATION: Dolomite
ALTERATION TYPE: Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Replacement Breccia Disseminated
TYPE: E12 Mississippi Valley-type Pb-Zn Hydrothermal
SHAPE: Tabular
DIMENSION: 536 x 48 x 6 Metres STRIKE/DIP: TREND/PLUNGE: 165/8
COMMENTS: West Monarch orebody.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE: Middle Cambrian
GROUP: Undefined Group
FORMATION: Cathedral
IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Dolomite
Brecciated Dolomite
Limestone
Carbonate Rock

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Monarch and Kicking Horse (082N 020) deposits occur in the steep cliffs on either side of the Kicking Horse River, about 4 kilometres northeast of Field, in Yoho National Park. The Kicking Horse deposit is at the 1524-metre elevation on Mount Field on the north side of the river, and the East and West Monarch deposits are at the 1560 and 1621-metre elevations respectively, on Mount Stephen, on the south side of the river. The Monarch deposit was located in 1884 during construction of the Canadian Pacific Railway. The East Monarch ore zone was the first to be recognized, and the West Monarch zone, known originally as the Couverapee, was not discovered until about 1916. The original Couverapee property was owned by W.D. Adkins who shipped 20 tonnes in 1916. The workings consisted of one large pillared stope with some crosscutting and drifting. In 1919 there was litigation regarding boundaries between the owners of the Couverapee and (East) Monarch properties. A survey proved that the Couverapee was within the Monarch holdings and the two properties were amalgamated under the management of Mr. Adkins. The Couverapee and the original Monarch mine became known as the West and East Monarch, respectively. The Kicking Horse showings, known originally as the Black Prince, were mentioned briefly in old reports but received little attention until 1925.

The region is within the fold-and-thrust belt of the Cordillera. Although the structural style varies within the area, northeast-directed thrust faults and associated folds and overturned folds with northwest axes dominate. The Monarch-Kicking Horse deposits occur in

CAPSULE GEOLOGY

a thick succession of massive to thin-bedded limestone and dolomite of the Middle Cambrian Cathedral Formation. Characteristically, the deposits are in close proximity to carbonate bank margins. The Monarch-Kicking Horse deposits are in platformal carbonates just east of a transition to basinal shale and limestone of the Middle Cambrian Chancellor Group (Fieldwork 1980, page 105).

The Monarch and Kicking Horse deposits lie on the east limb of a gentle anticline, the axis of which strikes about 335 degrees and plunges northward at a small angle. The deposits comprise a number of separate and discrete mineralized zones within massive to brecciated dolomite that forms a 60-metre stratigraphic interval in the lower 125 metres of the Cathedral Formation. The dolomite zone cuts sharply into underlying well-bedded limestone and dolomite and is overlain by well-bedded carbonate rock. The brecciated dolomite that hosts the orebodies consists either of a stockwork of white dolomite veins in grey dolomite or of light grey dolomite fragments in dark grey dolomite. Dolomite alteration zones immediately underlying the orebodies have original bedding preserved. The dolomite zones and orebodies trend northerly, parallel to both late normal faults, and to the abrupt carbonate platform-basinal shale transition zone.

The orebodies occur as narrow elongate runs in brecciated dolomite. They die out gradually along trend into barren, unmineralized dolomite but have sharp lateral boundaries. Sulphides, consisting of amber-coloured sphalerite, galena, minor pyrite and trace chalcopyrite, are disseminated in the dolomite matrix of breccias and form irregular veinlets cutting both matrix and fragments. Coarse sphalerite and galena commonly rim dark dolomite fragments; spar dolomite is interstitial.

Dolomitization and the development of breccia and associated cavities cannot be directly related to any late fault structures. Faults cutting the deposits are not conspicuous and one of the two supposed boundary faults, the Stephen-Dennis fault, is dominantly a stratigraphic, not a structural break. The location of the Monarch-Kicking Horse deposits in dolomitized breccia adjacent to a platformal bank margin suggests rather a regional stratigraphic control of mineralization (Fieldwork 1980, page 106).

The West Monarch orebody was 536 metres long, 48 metres wide and 2.4 to 16.7 metres thick, averaging 5.7 metres. The orebody rises at an angle of 8 degrees in a direction of 165 degrees.

The original East Monarch orebody lies about 198 metres east of the West Monarch orebody and is parallel to it. As first mined, it consisted of two closely-spaced orebodies but later development indicated a number of orebodies occurring in an en echelon manner over an explored length of 701 metres.

The Kicking Horse orebodies appear to line up with those of the Monarch across a gap of 1158 metres between the cliff faces of Mount Stephen and Mount Field. Because of this fact and because they occur in essentially the same structural position, it is probable that they are parts of a major ore zone that has been eroded by the Kicking Horse Valley (Minister of Mines Annual Report 1949, page A208). The No. 1 Kicking Horse orebody or zone was 176 metres long in a direction of 330 degrees and is flat. In its southern part it averaged 12.1 metres wide and 4.5 metres thick. The No. 2 or Western zone was 426 metres long, trending 320 degrees for 213 metres then changing direction to 303 degrees; it is irregular in outline.

Grade is variable in all the orebodies. Lead is more localized than zinc, and the end limits of the orebodies tend to be more zinc-rich than the average. The Monarch mine orebodies contained a higher percentage of lead than the Kicking Horse mine.

Production from the East Monarch deposit began in 1888 and continued intermittently until 1925, and amounted to about 42,545 tonnes. Development work continued through 1926 and most of 1927. The mine began producing again in 1929, with only one year, 1932, in which all work was suspended. There was no production in 1931 and 1932. By the end of 1935 ore reserves had been largely depleted, and the mill was closed. Development work was done during the following four years (1936 to 1939), and milling operations were resumed in 1940. The intermittent production from 1929 to 1940 was from the West Monarch deposit and amounted to about 318,024 tonnes. In 1941, ore from the Kicking Horse deposit was trucked to the mill for the first time, since which time this mine has produced most of the tonnage for the period 1941 to 1952 (about 466,440 tonnes). Mining and milling ceased at the Monarch and Kicking Horse mines in August 1952, when the Monarch orebody was exhausted. Remaining reserves at the Kicking Horse deposit are 27,213 tonnes grading 8 per cent zinc (Minister of Mines Annual Report 1952, page A205). Development and exploration work ceased at the Kicking Horse mine in November of the same year. Metal prices were not favourable for continued

CAPSULE GEOLOGY

exploration, and these properties remained idle during 1953. In September, 1954, they were abandoned, and all salvable material was removed from underground. In 1957, the mill equipment was removed and shipped to the property of Cowichan Copper Co. Ltd. on Cowichan Lake. While removing the equipment, lead and zinc concentrates were recovered and shipped to the Trail smelter.

BIBLIOGRAPHY

- EMPR AR 1888-311; 1890-370,372,373; 1891-570; 1893-1082; 1896-556; 1899-594; 1900-803, 1906-H134; 1907-L89; 1908-J88,J246; 1909-K97, K98; 1910-K92,K243; 1911-K126,K127; 1912-K139,K140; 1913-K115, K419; 1914-K235; *1915-K80-K82,K367,K444; 1916-K188,K428,K516; 1917-F144,F176,F447; 1918-K152,K153,K184; 1919-N113; 1920-N108; 1921-K123; 1922-N182; 1924-B180; 1925-A220,A221; 1926-A237; 1927-C264; 1928-C274,C275; *1929-C285,C290; 1930-A231,A232; 1931-A138; 1933-A199,A200; 1934-A25,A29; *1935-A27,A30,E1,E13-E19,G53; 1936-E51; 1937-E53; 1938-E27,E28; 1939-A97; 1940-A25,A82,A83; 1941-A25, A76,A77; 1942-A27,A74,A75; 1943-A45,A75,A76; 1944-A40,A42,A74,A75; 1945-A43,A111; 1946-A35,A173; 1947-A177; 1948-A152,A153; *1949-A205-A208; 1950-A157,A158; 1951-A40,A191,A192; 1952-A43,A204,A205; 1953-45; 1954-A151,A152; 1957-65
- EMPR BC METAL MM00569
- EMPR FIELDWORK *1980, pp. 104-106
- EMPR P 1991-4, p. 75
- EMPR PF (Plan of Kick Horse and Monarch Mine, 1926; Section of Monarch Mine, 1925; Assay Plan of the Monarch Mine, 1926; Plan of Monarch Mine, 1926; Starr, C.C. (1926): Report of Examination of the Monarch and Kicking Horse Mines, 21 p.; Starr, C.C. (1928): Report of Examination of the Monarch and Kicking Horse Mines, 21 p.; Letter from Wilbur Grant, Mining Engineer, 1928; Letter from Starr, 1930; Notes on the Geology of the Monarch Mine, C.C. Starr, 1930; Proposed drilling and mine workings plan map (1951), Base Metals Mining Corporation; Geology report by H. Sargent (1942); *Christie, K.J. (1948): Special Report on the Activities of Base Metals Mining Corporation Co. Ltd.; see Hawk Creek, 082N 021 - Report by Christie, 1951; 82N General File - Prospector's map, 1937)
- EMR MIN BULL MR 223, B.C. 85
- EMR MP CORPFILE (Couverapee Mining Company, Limited; Base Metals Mining Corporation Limited)
- GSC MAP 1483A
- GSC MEM 55, pp. 68, 109, 215-221
- GSC OF 481
- GSC SUM RPT 1910, pp. 142-143; 1911, pp. 182-184; 1912, pp. 175-176
- CANMET IR 670 (1925), pp. 56-58
- ECON GEOL Vol. 32 (1937), pp. 471-493; Vol. 63, No. 4 (1968), pp. 349-358
- GAC Special Paper No. 6 (1970), pp. 27-39
- Brown, W.L. (1948): Monarch and Kicking Horse Mines; CIM Symposium on Structural Geology of Canadian Ore Deposits, pp. 231-237
- Ney, C.S. (1954): Monarch and Kicking Horse Mines, Field, B.C.; Alberta Society of Petroleum Geologists Guidebook of Banff-Golden-Radium, 9th Field Conference, pp. 119-136
- Ney, C.S. (1957): Monarch and Kicking Horse Mines, in Structural Geology of Canadian Ore Deposits, CIM Congress Vol., pp. 143-152
- EMPR OF 1998-10

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/25

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

Couverapee was within the Monarch holdings and the two properties were amalgamated under the management of Mr. Adkins. The Couverapee and the original Monarch mine became known as the West and East Monarch, respectively. The Kicking Horse showings, known originally as the Black Prince, were mentioned briefly in old reports but received little attention until 1925.

The region is within the fold-and-thrust belt of the Cordillera. Although the structural style varies within the area, northeast-directed thrust faults and associated folds and overturned folds with northwest axes dominate. The Monarch-Kicking Horse deposits occur in a thick succession of massive to thin-bedded limestone and dolomite of the Middle Cambrian Cathedral Formation. Characteristically, the deposits are in close proximity to carbonate bank margins. The Monarch-Kicking Horse deposits are in platformal carbonates just east of a transition to basinal shale and limestone of the Middle Cambrian Chancellor Group (Fieldwork 1980, page 105).

The Monarch and Kicking Horse deposits lie on the east limb of a gentle anticline, the axis of which strikes about 335 degrees and plunges northward at a small angle. The deposits comprise a number of separate and discrete mineralized zones within massive to brecciated dolomite that forms a 60-metre stratigraphic interval in the lower 125 metres of the Cathedral Formation. The dolomite zone cuts sharply into underlying well-bedded limestone and dolomite and is overlain by well-bedded carbonate rock. The brecciated dolomite that hosts the orebodies consists either of a stockwork of white dolomite veins in grey dolomite or of light grey dolomite fragments in dark grey dolomite. Dolomite alteration zones immediately underlying the orebodies have original bedding preserved. The dolomite zones and orebodies trend northerly, parallel to both late normal faults, and to the abrupt carbonate platform-basinal shale transition zone.

The orebodies occur as narrow elongate runs in brecciated dolomite. They die out gradually along trend into barren, unmineralized dolomite but have sharp lateral boundaries. Sulphides, consisting of amber-coloured sphalerite, galena, minor pyrite and trace chalcopyrite, are disseminated in the dolomite matrix of breccias and form irregular veinlets cutting both matrix and fragments. Coarse sphalerite and galena commonly rim dark dolomite fragments; spar dolomite is interstitial.

Dolomitization and the development of breccia and associated cavities cannot be directly related to any late fault structures. Faults cutting the deposits are not conspicuous and one of the two supposed boundary faults, the Stephen-Dennis fault, is dominantly a stratigraphic, not a structural break. The location of the Monarch-Kicking Horse deposits in dolomitized breccia adjacent to a platformal bank margin suggests rather a regional stratigraphic control of mineralization (Fieldwork 1980, page 106).

The West Monarch orebody was 536 metres long, 48 metres wide and 2.4 to 16.7 metres thick, averaging 5.7 metres. The orebody rises at an angle of 8 degrees in a direction of 165 degrees.

The original East Monarch orebody lies about 198 metres east of the West Monarch orebody and is parallel to it. As first mined, it consisted of two closely-spaced orebodies but later development indicated a number of orebodies occurring in an en echelon manner over an explored length of 701 metres.

The Kicking Horse orebodies appear to line up with those of the Monarch across a gap of 1158 metres between the cliff faces of Mount Stephen and Mount Field. Because of this fact and because they occur in essentially the same structural position, it is probable that they are parts of a major ore zone that has been eroded by the Kicking Horse Valley (Minister of Mines Annual Report 1949, page A208). The No. 1 Kicking Horse orebody or zone was 176 metres long in a direction of 330 degrees and is flat. In its southern part it averaged 12.1 metres wide and 4.5 metres thick. The No. 2 or Western zone was 426 metres long, trending 320 degrees for 213 metres then changing direction to 303 degrees; it is irregular in outline.

Grade is variable in all the orebodies. Lead is more localized than zinc, and the end limits of the orebodies tend to be more zinc-rich than the average. The Monarch mine orebodies contained a higher percentage of lead than the Kicking Horse mine.

Production from the East Monarch deposit began in 1888 and continued intermittently until 1925, and amounted to about 42,545 tonnes. Development work continued through 1926 and most of 1927. The mine began producing again in 1929, with only one year, 1932, in which all work was suspended. There was no production in 1931 and 1932. By the end of 1935 ore reserves had been largely depleted, and the mill was closed. Development work was done during the following four years (1936 to 1939), and milling operations were resumed in 1940. The intermittent production from 1929 to 1940 was from the

CAPSULE GEOLOGY

West Monarch deposit and amounted to about 318,024 tonnes. In 1941, ore from the Kicking Horse deposit was trucked to the mill for the first time, since which time this mine has produced most of the tonnage for the period 1941 to 1952 (about 466,440 tonnes). Note that the production statistics for the Kicking Horse mine are included with that of the Monarch mine (082N 019). Mining and milling ceased at the Monarch and Kicking Horse mines in August 1952, when the Monarch orebody was exhausted. Remaining reserves at the Kicking Horse deposit are 27,213 tonnes grading 8 per cent zinc (Minister of Mines Annual Report 1952, page A205). Development and exploration work ceased at the Kicking Horse mine in November of the same year. Metal prices were not favourable for continued exploration, and these properties remained idle during 1953. In September, 1954, they were abandoned, and all salvable material was removed from underground. In 1957, the mill equipment was removed and shipped to the property of Cowichan Copper Co. Ltd. on Cowichan Lake. While removing the equipment, lead and zinc concentrates were recovered and shipped to the Trail smelter.

BIBLIOGRAPHY

- EMPR AR 1925-A221; 1927-C264; 1928-C275; *1929-C285,C290; 1930-A231, A232; *1935-A27,A30,E1,E13-E19,G53; 1936-E51; 1937-E53; 1940-A25, A82,A83; 1941-A25,A76,A77; 1942-A27,A74,A75; 1943-A45,A75,A76; 1944-A40,A42,A74,A75; 1945-A43,A111; 1946-A35,A173; 1947-A177; 1948-A152,A153; *1949-A205-A208; 1950-A157,A158; 1951-A40,A191, A192; *1952-A43,A204,A205; 1953-45; 1954-A151,A152; 1957-65
EMPR BC METAL MM00569
EMPR FIELDWORK *1980, pp. 104-106
EMPR P 1991-4, p. 75
EMPR PF (Plan of Kick Horse and Monarch Mines, 1925; Plan and Section of Kicking Horse Mine, 1926; Section of Monarch Mine, 1926; Assay Plan of the Monarch Mine, 1926; Plan of Monarch Mine, 1926; Starr, C.C. (1926): Report of Examination of the Monarch and Kicking Horse Mines, 21 p.; Starr, C.C. (1928): Report of Examination of Monarch and Kicking Horse Mine, 30 p.; Letter from Wilbur Grant, Mining Engineer, 1928; Letter from Starr, 1930; Notes on the Geology of the Monarch Mine, C.C. Starr, 1930; Proposed drilling and mine workings plan map (1951), Base Metals Mining Corporation; Geology report by H. Sargent (1942); *Christie, K.J. (1948): Special Report on the Activities of Base Metals Mining Corporation Co. Ltd.; see Hawk Creek, 082N 021 - Report by Christie, 1951; 82N General File - Prospector's map, 1937, see Monarch 082N 019)
EMR MIN BULL MR 223, B.C. 85
EMR MP CORPFILE (Couverapee Mining Company, Limited; Base Metals Mining Corporation Limited)
GSC MAP 1483A
GSC MEM 55, pp. 221, 222
GSC OF 481
GSC SUM RPT 1910, pp. 142-143; 1911, pp. 182-184; 1912, pp. 175-176
CANMET IR 670 (1925), pp. 56-58
ECON GEOL Vol. 32 (1937), pp. 471-493; Vol. 63, No. 4 (1968), pp. 349-358
GAC Special Paper No. 6 (1970), pp. 27-39
Brown, W.L. (1948): Monarch and Kicking Horse Mines; CIM Symposium on Structural Geology of Canadian Ore Deposits, pp. 231-237
Ney, C.S. (1954): Monarch and Kicking Horse Mines, Field, B.C.; Alberta Society of Petroleum Geologists Guidebook of Banff-Golden-Radium, 9th Field Conference, pp. 119-136
Ney, C.S. (1957): Monarch and Kicking Horse Mines, in Structural Geology of Canadian Ore Deposits, CIM Congress Vol., pp. 143-152

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/25

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 021**

NATIONAL MINERAL INVENTORY: 082N1 Zn1

NAME(S): **HAWK CREEK**, ALBION

STATUS: Developed Prospect

MINING DIVISION: Golden

REGIONS: British Columbia

NTS MAP: 082N01E

BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 06 12 N

LONGITUDE: 116 02 16 W

ELEVATION: 1706 Metres

NORTHING: 5661756

EASTING: 567368

LOCATION ACCURACY: Within 500M

COMMENTS: The showings are on the west side of Hawk Creek in Kootenay National Park, on the southern slopes of Isabelle Peak, about 2.5 kilometres east of Highway 93 and 46 kilometres south-southeast of Field (Minister of Mines Annual Report 1953, page A155).

COMMODITIES: Zinc Lead Silver Gold

MINERALS

SIGNIFICANT: Sphalerite Galena

ASSOCIATED: Calcite Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Disseminated Vein Shear

CLASSIFICATION: Replacement Hydrothermal Epigenetic

TYPE: E12 Mississippi Valley-type Pb-Zn

SHAPE: Cylindrical

DIMENSION: 75 x 15 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: A mineralized irregular-shaped cylindrical zone.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Cambrian-Ordovician

GROUP

Goodsir

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Argillaceous Limestone
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

INVENTORY

ORE ZONE: TOTAL

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 26759 Tonnes

YEAR: 1942

COMMODITY GRADE
Zinc 12.5000 Per cent

COMMENTS: One interpretation of drill results.

REFERENCE: Minister of Mines Annual Report 1953, page A156.

CAPSULE GEOLOGY

The Hawk Creek deposit is in Kootenay National Park on the west side of Hawk Creek, about 2.5 kilometres east of Highway 93 and approximately 46 kilometres south-southeast of Field. Access is via a road that leaves Highway 93 about 50 metres north of the Hawk Creek road bridge. The showings are on a gently sloping timbered hillside that forms the southern flank of Isabelle Peak.

The area in the vicinity of the showings are underlain by strongly cleaved, gently dipping or horizontal thin-bedded argillaceous limestones and argillites of the Cambrian to Ordovician Goodsir Group. A prominent, steep (dips 45 to 70 degrees southwest), northwest-striking shear zone appears to control the distribution of the vein and replacement mineralization. The shear zone and associated mineralization cuts sharply across bedding in the sedimentary rocks.

Mineralization comprises an irregular-shaped cylindrical zone roughly 15 metres in width and 75 metres in length. Amber-coloured sphalerite, the dominant sulphide, forms massive fine-grained pods, disseminations and stringers. Galena, which is less abundant, occurs as fine-grained disseminations and stringers associated with both sphalerite, calcite and minor pyrite.

In 1930, a 1.8-metre channel sample in the upper open-cut assayed

CAPSULE GEOLOGY

30.6 per cent zinc, 4.3 per cent lead, 54.8 grams per tonne silver and 1.7 grams per tonne gold (Minister of Mines Annual Report 1930, page A239).

The showings were discovered in November 1929 by Fred W. Jowett while constructing a trail under the employ of the Federal Government. The Albion claims were staked and recorded at Windermere where the mining recorder was not aware that the showings were in Kootenay National Park and, by terms of the act, not open to staking. Some trenching was done by an eastern Canadian mining company late in 1930, before snowfall. In 1932 the National Parks Board refused the stakers permission to do further assessment work. In the spring of 1942, due to the wartime shortage of zinc, Base Metals Mining Corporation Limited, which was operating the Monarch mine (082N 019) near Field, made representations to the Federal Metals Controller with regard to the occurrence; the company was retained by the Federal Government to carry out exploration work to determine the extent of the orebody. Work by the company during 1942 included trenching, driving a short adit and diamond drilling in 17 holes totalling about 503 metres. No further work was done. One interpretation of the 1942 drill results indicates a total of 26,759 tonnes averaging 12.5 per cent zinc (Minister of Mines Annual Report 1953, page A156).

BIBLIOGRAPHY

- EMPR AR *1930-A237-A239; *1953-A155,A156
EMPR FIELDWORK *1980, p. 108
EMPR PF (Starr, C.C. (1930): Report of Examination of the Albion Group, 3 p.; Sketch of Albion Group, (1"=20'), 1930; Christie, K.J. (1951): Investigation of the Mineral Claims on Hawk Creek in Kootenay Park and Mining Operations at Base Metals Mining Corporation in Yoho Park; *Rice, H.M.A. (1942): Final Report on the Hawk Creek Showings; *Brown, W.L. (1942): Report on the Hawk Creek Property; Richmond, A.M. (1942): Report on the Albion Group; *Galloway, J.D. (1942): Report on Hawk Creek Mineral Deposit; Field notes, letter; Numerous plans, sketch maps and sections of drillholes and trenches (1942, 1951))
EMR MIN BULL MR 223, B.C. 82
EMR MP CORPFILE (Base Metals Mining Corp. Ltd.)
GSC MAP 1476A
GSC OF 481
ECON GEOL Vol.63, June, July 1969, pp. 349, 359

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 022**

NATIONAL MINERAL INVENTORY: 082N7 Pb1

NAME(S): **QUEBEC**, FRENCHMAN CREEK, QUEBEC (L.511)

STATUS: Prospect

Underground

MINING DIVISION: Golden

REGIONS: British Columbia

NTS MAP: 082N07E

BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 44 N

LONGITUDE: 116 31 04 W

ELEVATION: 1448 Metres

NORTHING: 5684657

EASTING: 533610

LOCATION ACCURACY: Within 500M

COMMENTS: Adits on Lot 511 on Frenchman Creek, south of the Ottertail River and 10 kilometres south-southwest of Field, in Yoho National Park (Geological Survey of Canada Memoir 55, Map 142A).

COMMODITIES: Lead

Silver

Copper

MINERALS

SIGNIFICANT: Galena Tetrahedrite Azurite Malachite Pyrite

Arsenopyrite

ASSOCIATED: Quartz Calcite

ALTERATION: Azurite Malachite

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Middle Cambrian

GROUP

Chancellor

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Calcareous Slate

Slate

Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

PHYSIOGRAPHIC AREA: Continental Ranges

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Quebec showings are on Frenchman Creek, 10 kilometres southwest of Field, in Yoho National Park. The occurrence is underlain by red weathering, highly cleaved calcareous slates and slates with thin limestone interbeds, of the Middle Cambrian Chancellor Group.

Quartz-calcite veinlets cut the slates and are mineralized with galena, tetrahedrite, azurite, malachite, pyrite and arsenopyrite.

The showings were staked as the Quebec claim (Lot 511) which was Crown-granted in 1902. The Pioneer Mining Company held the property in 1885, installed a 10-stamp mill and a tramway about 3.2 kilometres long with wooden rails. Approximately 18 tonnes of ore had been transported before a forest fire destroyed the tramway in June 1887. The workings included a lower adit about 61 metres long with an 18-metre shaft at the end, and an upper adit 53 metres long.

BIBLIOGRAPHY

EMPR AR 1899-594; 1902-303

EMPR BULL 28, p. 53

EMPR PF (82N General File - Prospector's map, 1937)

GSC MAP 1496A

GSC MEM *55, pp. 222-224

GSC OF 481

GSC SUM RPT 1911, p. 185

ASPG Guidebook, 4th Annual Field Conference (Aug. 1954)

DATE CODED: 1985/07/24

DATE REVISED: 1993/06/30

CODED BY: GSB

REVISED BY: GO

FIELD CHECK: N

FIELD CHECK: N

MINFILE NUMBER: **082N 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **HASKINS CREEK**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N08W 082N07E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 16 39 N
LONGITUDE: 116 29 58 W
ELEVATION: 1676 Metres

NORTHING: 5680804
EASTING: 534914

LOCATION ACCURACY: Within 500M

COMMENTS: Located at the headwaters of Haskins Creek, south of the Ottertail River in Yoho National Park, about 30 kilometres east of Golden (Geological Survey of Canada Memoir 55, Map 142A).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite Pyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Cambrian	Chancellor	Undefined Formation	

LITHOLOGY: Slate

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

The Haskins Creek showing is at the headwaters of Haskins Creek in Yoho National Park, 30 kilometres east of Golden. Chalcopyrite and pyrite occurs in quartz veins hosted in highly cleaved slates of the Middle Cambrian Chancellor Group.

The showing was first worked pre-1914; the workings are filled in (Geological Survey of Canada Memoir 55, page 223).

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 1483A; 1496A
GSC MEM *55, pp. 222-223
GSC OF 481
ASPG Guidebook, 4th Annual Field Conference (Aug. 1954)

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVERSLOPE CREEK**

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082N08W
 BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 15 36 N
 LONGITUDE: 116 27 22 W
 ELEVATION: 2133 Metres

NORTHING: 5678879
 EASTING: 537951

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, at the headwaters of the southeast branch of Silverslope Creek, south of the Ottertail River and Fulmen Mountain, in Yoho National Park, 30 kilometres east of Golden (Geological Survey of Canada Memoir 55, Map 142A).

COMMODITIES: Lead Zinc Copper Silver

MINERALS

SIGNIFICANT: Galena Sphalerite Pyrite Chalcopyrite Argentite

ASSOCIATED: Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Podiform Disseminated
 CLASSIFICATION: Replacement Hydrothermal
 TYPE: E12 Mississippi Valley-type Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Cambrian	Chancellor	Undefined Formation	

LITHOLOGY: Limestone
 Slate

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

PHYSIOGRAPHIC AREA: Continental Ranges

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1914

SAMPLE TYPE: Grab

COMMODITY

	GRADE	
Silver	154.2000	Grams per tonne
Copper	0.3500	Per cent
Lead	15.3300	Per cent
Zinc	6.8700	Per cent

COMMENTS: An average sample.

REFERENCE: Geological Survey of Canada Memoir 55, page 223.

CAPSULE GEOLOGY

The Silverslope Creek occurrence is situated at the headwaters of the southeast branch of Silverslope Creek in Yoho National Park, about 30 kilometres east of Golden.

Reddish weathering slates of the Middle Cambrian Chancellor Group strike 125 degrees and dip 40 to 45 degrees south. Galena, sphalerite and pyrite with minor chalcopyrite and possibly argentite, occur as irregular lenses and in calcite stringers in a bed of partly recrystallized limestone 1.8 metres thick, that is interbedded in the slates. An average sample assayed 15.33 per cent lead, 6.87 per cent zinc, 0.35 per cent copper and 154.2 grams per tonne silver (Geological Survey of Canada Memoir 55, page 223).

A tunnel, above tree line, is about 61 metres long and was started 22 metres downslope of the mineralization in order to intersect it at greater depth, but was still a few metres from where the ore would be reached (Geological Survey of Canada Memoir 55, page 223).

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
 GSC MAP 1483A

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1044
REPORT: RGEN0100

BIBLIOGRAPHY

GSC MEM *55, pp. 222-223
GSC OF 481
ASPG Guidebook, 4th Annual Field Conference (Aug. 1954)

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 025**

NATIONAL MINERAL INVENTORY:

NAME(S): **SHINING BEAUTY**, SHINING BEAUTY CREEK

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N01W
BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 09 44 N
LONGITUDE: 116 28 00 W
ELEVATION: 1981 Metres

NORTHING: 5668000
EASTING: 537293

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, just north of Shining Beauty Creek on the slopes of Clawson Peak in Yoho National Park, west of the Ice River, about 34 kilometres east-southeast of Golden (Geological Survey of Canada Memoir 55, Map 142A).

COMMODITIES: Zinc Silver Lead Copper

MINERALS

SIGNIFICANT: Pyrite Galena Chalcopyrite Arsenopyrite Sphalerite
Bornite
ASSOCIATED: Quartz Calcite Zeolite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Massive Disseminated
CLASSIFICATION: Replacement Igneous-contact Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Tabular
DIMENSION: 304 x 1 Metres STRIKE/DIP: 325/68W TREND/PLUNGE:
COMMENTS: Quartz lens that closely follows the strike of limestone beds.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Undefined Group	Ottertail	
Paleozoic			Ice River Complex

LITHOLOGY: Limestone
Nepheline Syenite

HOSTROCK COMMENTS: The Ice River Complex is Devonian or Carboniferous.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Ancestral North America

CAPSULE GEOLOGY

Limestone of the Cambrian Ottertail Formation is intruded by nepheline syenite of the Devonian or Carboniferous Ice River Complex. The limestone separates lower calcareous shales of the Middle Cambrian Chancellor Group from a thick series of cherty slates of the Upper Cambrian-Middle Ordovician McKay Group.

The limestone beds at the Shining Beauty occurrence strike 325 degrees and dip from 68 to 72 degrees southwest. A lens-like mass of white granular quartz about 60 centimetres thick lays in a bedding plane, some 60 metres from the contact with nepheline syenite. The quartz is veined with minute stringers of calcite which frequently contain small greenish fibrous aggregations of zeolitic material. The lens is constant in width and has sharply defined walls; it closely follows the strike of the limestone, and in vertical extent is readily traceable for about 304 metres up the almost vertical cliff to the top of the ridge (Geological Survey of Canada Memoir 55, page 230). A little pyrite, galena and minor chalcopyrite occur in the lens, but the ore is found as irregular segregations in the surrounding limestone, consisting of massive arsenopyrite-quartz pods surrounded by disseminated pyrite, sphalerite, argentiferous galena and arsenopyrite; bornite has also been reported. The surrounding rock is highly stained with limonite.

Mining operations from 1908-1911 produced an unspecified amount of silver and zinc ore. The development by the Labourers' Co-operative Gold, Silver and Copper Mining Co. Ltd. consisted of 3 almost parallel tunnels about 60 metres apart, one above the other, following the quartz lens. The upper tunnel is 114 metres long, the middle one is 137 metres long, and the lower tunnel is only a couple

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1046
REPORT: RGEN0100

CAPSULE GEOLOGY

of metres long. The amount of ore actually shipped is unknown, but the reported value was \$20 per ton in silver and zinc (Geological Survey of Canada Memoir 55, page 231).

BIBLIOGRAPHY

EMPR AR 1901-1011; 1905-J144; 1906-H134; 1907-L89; 1908-J88;
1910-K93
EMPR PF (82N General File - Prospector's map, 1937)
GSC BULL *245, p. 9
GSC MAP 1477A
GSC MEM *55, pp. 229-231
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **ZINC CREEK**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 10 50 N
LONGITUDE: 116 24 46 W
ELEVATION: 2133 Metres

NORTHING: 5670068
EASTING: 541045

LOCATION ACCURACY: Within 500M

COMMENTS: Located on the north-facing slope of Zinc Mountain in Yoho National Park, in Zinc Creek valley, 2.2 kilometres east of Ice River and about 40 kilometres east-southeast of Golden (Geological Survey of Canada Memoir 55, Map 142A).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Pyrite Arsenopyrite Sphalerite Galena

ASSOCIATED: Quartz Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Podiform Massive
CLASSIFICATION: Replacement Igneous-contact Hydrothermal

TYPE: E12 Mississippi Valley-type Pb-Zn

DIMENSION: 9 x 3 x 2 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Mineralized zone.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Cambrian

GROUP

Chancellor

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Siliceous Limestone
 Calcareous Shale

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Zinc Creek showing occurs within a thick series of thin bedded, well-cleaved calcareous shales of the Middle Cambrian Chancellor Group. Interbedded with the shales are narrow bands of siliceous limestone 0.6 to 0.9 metre thick. Mineralization is developed within one of these bands.

An irregular lenticular pocket of quartz-calcite with bands of pyrite, arsenopyrite, sphalerite and galena replaces a siliceous limestone band about 3 metres thick. The mineralized zone rests conformably on calcareous shales which strike 115 degrees and dip 15 degrees south, into the slope of Zinc Mountain. The mineralized zone is about 2.4 metres in maximum thickness, and extends about 9.1 metres along the strike of the shales. It appears to pinch out about 3.6 metres down on the dip of the footwall. Other masses or lenses occur along strike in the same horizon.

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC BULL *245, p. 9
GSC MAP 1477A
GSC MEM *55, pp. 231-234
GSC OF 481
ASPG Guidebook, 4th Annual Field Conference (Aug. 1954)

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/29

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 027**

NATIONAL MINERAL INVENTORY: 082N1 T11

NAME(S): **MOOSE CREEK**, BOW, DEMON,
COLTI

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082N01W
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 11 40 N
LONGITUDE: 116 21 04 W
ELEVATION: 2380 Metres

NORTHING: 5671648
EASTING: 545341

LOCATION ACCURACY: Within 500M

COMMENTS: Talus material, on the northeast slope at the head of Moose Creek Valley and the headwaters of Moose Creek, between Sharp and Helmet mountains, 40 kilometres east-southeast of Golden (Prospectus, Moose Creek Magnetite Project, St. Paul Minerals Ltd., February 12, 1991).

COMMODITIES: Magnetite Titanium Rare Earths Niobium Thorium

MINERALS

SIGNIFICANT: Sphene Ilmenite Magnetite Perovskite Schorlomite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Unconsolidated
CLASSIFICATION: Magmatic Pegmatite Residual Industrial Min.
TYPE: N01 Carbonatite-hosted deposits

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Undefined Group	Ottertail	
Paleozoic			Ice River Complex

ISOTOPIC AGE: 380 Ma
DATING METHOD: Uranium/Lead
MATERIAL DATED: Zircon

LITHOLOGY: Jacupirangite
Ijolite
Nepheline Syenite
Urtite
Limestone
Quartzite
Shale
Talus
Pegmatite Dike

HOSTROCK COMMENTS: Age date from Open File 1987-17. The Ice River Complex is Devonian or Carboniferous.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Plutonic Rocks Ancestral North America

INVENTORY

ORE ZONE: MAIN REPORT ON: Y
CATEGORY: Inferred YEAR: 1991
QUANTITY: 1900000 Tonnes
COMMODITY: Magnetite GRADE: 5.5000 Per cent
COMMENTS: Magnetite contained in broken talus material. The average grade of ore is 5.5 per cent with a cutoff grade of 2.5 per cent.
REFERENCE: Prospectus, St. Paul Minerals Ltd., February 12, 1991.

ORE ZONE: MAIN REPORT ON: Y
CATEGORY: Indicated YEAR: 1991
QUANTITY: 362000 Tonnes
COMMODITY: Magnetite GRADE: 5.5000 Per cent
COMMENTS: Magnetite contained in broken talus material. The average grade of ore is 5.5 per cent with a cutoff grade of 2.5 per cent.
REFERENCE: Prospectus, St. Paul Minerals Ltd., February 12, 1991.

INVENTORY

ORE ZONE: MAIN REPORT ON: Y
CATEGORY: Measured YEAR: 1991
QUANTITY: 205000 Tonnes
COMMODITY: _____ GRADE _____
Magnetite 5.5000 Per cent
COMMENTS: Magnetite contained in broken talus material. The average grade of ore is 5.5 per cent with a cutoff grade of 2.5 per cent.
REFERENCE: Prospectus, St. Paul Minerals Ltd., February 12, 1991.

CAPSULE GEOLOGY

The Moose Creek deposit is located on the northeast slope at the head of Moose Creek valley.

Nepheline syenite of the Devonian or Carboniferous Ice River Complex intrudes folded and faulted limestone, quartzite and shale of the Cambrian Ottortail Formation. The intrusive rocks are mainly jacupirangite (an ultramafic plutonic rock that is part of the ijolite series and composed chiefly of titanite and magnetite) with a rim of ijolite-urtite. Irregular pegmatitic dikes and lenses occur in all rocks. Pegmatite minerals include calcite, biotite, pyroxene, magnetite-ilmenite and schorlomite, with minor pyrite, pyrrhotite, nepheline and accessories.

Ilmenite-magnetite mineralization, mainly as sphene and magnetite, occurs in quartzite, pegmatite and intrusive rocks. Assays range to 13.2 per cent TiO₂ and 20.6 per cent iron (Assessment Report 3389). Knopite, a cerium-bearing perovskite, is present in a pegmatite dike. Sodalite occurs as veins in the intrusion. Analysis for columbium/niobium yielded 0.67 per cent Cb₂O₅ (Assessment Report 3389).

A radioactive northeast-trending shear zone, 1200 metres to the south, yielded up to 0.019 per cent uranium. Other commodities include thorium (up to 0.077 per cent ThO₂ over 3 metres) and traces of rare earths, chiefly lanthanum and ytterbium (Minister of Mines Annual Report 1954, page 150).

Ilmenite-magnetite bearing gravels and sands occupy the valley along Moose Creek. A 10 by 300 metre area assayed up to 8.2 per cent TiO₂ (Assessment Report 3389).

A recent bulk sampling and analysis program on a large talus slope, developed from the erosion of the ultramafic intrusion (jacupirangite), has resulted in reserves of magnetite contained in the broken talus material. It appears that the magnetite-bearing rocks (segregation zones in the intrusion) are more friable than the hostrocks, resulting in talus in which the large, coarse material, up to large boulder size, contains very little magnetite. The fine fraction (minus 4 mesh) contains substantially all of the minerals of commercial interest. Proven (measured geological) reserves are 205,000 tonnes, indicated reserves are 362,000 tonnes and inferred (resource) reserves are 1.9 million tonnes of magnetite respectively, averaging 5.5 per cent magnetite at a cutoff grade of 2.5 per cent (Prospectus, Moose Creek Magnetite Project, St. Paul Minerals Ltd., February 12, 1991).

The proposed mining method is an earth moving operation utilizing bulldozers and front-end loaders (open pit in unconsolidated material (talus)).

BIBLIOGRAPHY

EMPR AR 1925-220; 1926-238; 1929-291; *1954-150
EMPR ASS RPT *3389, 21599
EMPR GEM 1971-443
EMPR MAP 22
EMPR OF 1987-17, pp. 23-30; 1990-32, p. 25; 1992-1; 1992-9
EMPR PF (82N General File - Prospector's map, 1937; Mine Development Review Process, Project Fact Sheet)
EMR MP CORPFILE (Albany Oil and Gas Limited)
GSC BULL 245
GSC EC GEOL 11, p. 138; 16 (2nd Ed.), p. 231; 29, pp. 72,134
GSC MAP 142A; 1477A
GSC MEM 55
GSC OF 481; 551
GSC P 87-2, pp. 33-37
GSC SUM RPT *1925 Part A, pp. 230-232
CANMET RPT 135
*Prospectus, Moose Creek Magnetite, St. Paul Minerals Ltd., February 12, 1991
Placer Dome File

MINFILE NUMBER: **082N 028**

NATIONAL MINERAL INVENTORY: 082N1 Pb2

NAME(S): **WATERLOO, QEM**

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 082N01W
 BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 10 00 N
 LONGITUDE: 116 22 59 W
 ELEVATION: 2190 Metres

NORTHING: 5668540
 EASTING: 543135

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, west of and near the headwaters of Moose Creek, on the east slope of Zinc Mountain, about 44 kilometres east-southeast of Golden (Assessment Report 3433).

COMMODITIES: Silver Gemstones Lead Uranium Zinc Nepheline Syenite Copper Gold

MINERALS

SIGNIFICANT: Pyrrhotite Pyrite Chalcopyrite Galena Sphalerite

Arsenopyrite Sodalite

ASSOCIATED: Calcite Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Concordant Massive Disseminated Vein
 CLASSIFICATION: Replacement Igneous-contact Hydrothermal Industrial Min.
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag J01 Polymetallic manto Ag-Pb-Zn
 N01 Carbonatite-hosted deposits
 SHAPE: Tabular

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Undefined Group	Ottertail	
Paleozoic			Ice River Complex

ISOTOPIC AGE: 380 Ma
 DATING METHOD: Uranium/Lead
 MATERIAL DATED: Zircon

LITHOLOGY: Limestone
 Nepheline Syenite
 Lamprophyre Sill

HOSTROCK COMMENTS: Age dating from Open File 1987-17. The Ice River Complex is Devonian or Carboniferous.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
 TERRANE: Ancestral North America Plutonic Rocks
 METAMORPHIC TYPE: Contact Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DUMP REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1914
 SAMPLE TYPE: Grab

COMMODITY	GRADE	
Silver	99.4000	Grams per tonne
Gold	1.7000	Grams per tonne
Copper	1.5900	Per cent
Lead	3.6900	Per cent
Zinc	16.1000	Per cent

COMMENTS: A representative sample of ore from an adit dump.
 REFERENCE: Geological Survey of Canada Memoir 55, page 225.

CAPSULE GEOLOGY

Limestone of the Cambrian Ottertail Formation is intruded by nepheline syenite of the Devonian or Carboniferous Ice River Complex. At the Waterloo occurrence, mineralization forms an almost continuous blanket of massive sulphide up to a metre thick along the base of a lamprophyre sill in the Ottertail Formation. The principal sulphide is pyrrhotite, in which occur nodules of pyrite, chalcopyrite and galena. Sphalerite and arsenopyrite have also been reported. Around the edges of massive sulphides, the Ottertail Formation has been recrystallized into coarse white calcite with

CAPSULE GEOLOGY

interstitial quartz.

A representative sample of ore from an adit dump assayed 3.69 per cent lead, 16.10 per cent zinc, 1.59 per cent copper, 27.30 per cent iron, 99.4 grams per tonne silver and 1.7 grams per tonne gold (Geological Survey of Canada Memoir 55, page 229). A sample of massive sulphide assayed 0.06 per cent uranium (Assessment Report 3433). The original Waterloo claims were located in the early 1900s, at which time two tunnels were driven for a total of about 83 metres.

Sodalite occurs as disseminations and veinlets in the nepheline syenite. Hand stripping and sampling resulted in a 0.9 tonne sodalite-bearing rock shipped out by helicopter for evaluation purposes (Geology, Exploration and Mining in British Columbia 1970, page 467). About 475 metres to the south-southeast of the trench, a new zone of sodalite has been discovered. The zone is 174 metres long, 24 metres wide and at least 53 metres in depth (Assessment Report 20207). A large area of nepheline syenite is 190 metres to the south of the trench and may hold potential for the ceramic and glass industry.

BIBLIOGRAPHY

- EMPR AR 1901-1012; 1902-133; 1954-150-151
- EMPR ASS RPT *3433, 20207
- EMPR GEM 1970-467; 1971-443,444; 1972-94
- EMPR MAP 22
- EMPR OF 1987-17, pp. 23-30; 1991-10
- EMPR PF (*Rpt. by A.G. Mackenzie, 1971; see Baldy, 082KNE048 - Prospectus, Purcell Development Co. Ltd., July 15, 1972; 82N General File - Prospector's map, 1937); (Addie, G.G. (1990): Geological Reconnaissance Report on the QEM Mineral Claims)
- EMR MP CORPFILE (Purcell Development Co. Ltd.)
- GSC BULL *245, p. 9
- GSC EC GEOL No. 16, 1962, p. 231; No. 16 (2nd Edit.) p. 231; No. 29, pp. 72,134
- GSC MAP 142A; 1477A
- GSC MEM *55, pp. 225-229
- GSC OF 481; 551
- GSC P 87-2, pp. 33-37
- GSC SUM RPT 1910, p. 141
- CANMET IR 135
- GCNL #193(Oct.1), 1973

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/28

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 029**

NATIONAL MINERAL INVENTORY: 082N4 Ag7

NAME(S): **EDINBURGH**, EDINBURGH (L.2867), RYCKMAN CREEK,
SILVER

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:
LATITUDE: 51 05 49 N
LONGITUDE: 117 35 07 W
ELEVATION: 1188 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Lot 2867 (survey cancelled), in Glacier National Park about 750 metres east of the Incomappleux River, 48 kilometres east-northeast of Revelstoke (Property File - claim location maps).

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)
NORTHING: 5660768
EASTING: 459017

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz Carbonate
ALTERATION: Manganite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic Cretaceous	Lardeau	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Meta Argillite
Silty Argillite
Biotite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
Plutonic Rocks
RELATIONSHIP:
PHYSIOGRAPHIC AREA: Selkirk Mountains
GRADE:

CAPSULE GEOLOGY

A number of showings are aligned north-south for 3 kilometres, starting from just inside Glacier National Park (Edinburgh, 082N 029; Elizabeth, 082N 030; Scotia, 082N 031) parallel to the Incomappleux River, about 750 metres east of the river, approximately 48 kilometres east of Revelstoke. These showings were previously covered by claims staked in the early 1890s and comprise the Edinburgh, Elizabeth (082N 030), Scotia (082N 031), Annie (082N 032), Agnes (082N 033), Heronback (082N 034) and Salmon (082N 035), aligned north-south starting from the north.

The area is underlain by a steeply dipping package of rusty weathering, thinly bedded, black, metamorphosed argillite and silty argillite of the Lower Cambrian and younger Lardeau Group, intruded by an Early and/or mid-Cretaceous biotite granite intrusion. The argillites have been extensively hydrothermally altered resulting in considerable deposition of manganese.

Quartz and quartz-carbonate zones from 3 to 4 metres wide occur in a north striking, vertical shear zone in argillite. Up to 6 metres of manganese alteration occurs on either side of the shear zone along with seams of manganite. Mineralization in the quartz-carbonate and quartz consists of seams and veins of argentiferous galena and some sphalerite.

On the Edinburgh, Elizabeth or Scotia claims, a tunnel was driven 48 metres to intersect the vein at depth. There is about 9 tonnes of ore ready for shipping, assays for which have yielded 5442 to 9952 grams silver and 80 per cent lead (Minister of Mines Annual Report 1896, pages 539, 540). The tunnel location description is vague and may occur on either of the three claims mentioned.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1053
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1896-539,540; 1898-1189; 1899-677
EMPR ASS RPT 13813, *17582
EMPR FIELDWORK 2000, pp. 231-252
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976; *Claim location maps)
GSC ANN RPT 1892-93 Volume VI, p. 56R
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 030**

NATIONAL MINERAL INVENTORY: 082N4 Ag7

NAME(S): **ELIZABETH (L.2785)**, RYCKMAN CREEK, SILVER

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:
LATITUDE: 51 05 33 N
LONGITUDE: 117 34 59 W
ELEVATION: 1173 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Lot 2785, in Glacier National Park about 750 metres east of the Incomappleux River, 48 kilometres east-northeast of Revelstoke (Assessment Report 17582).

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)
NORTHING: 5660273
EASTING: 459169

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz Carbonate
ALTERATION: Manganite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic Cretaceous	Lardeau	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Meta Argillite
Silty Argillite
Biotite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP: Plutonic Rocks
GRADE:

CAPSULE GEOLOGY

A number of showings are aligned north-south for 3 kilometres, starting from just inside Glacier National Park (Edinburgh, 082N 029; Elizabeth, 082N 030; Scotia, 082N 031) parallel to the Incomappleux River, about 750 metres east of the river, approximately 48 kilometres east of Revelstoke. These showings were previously covered by claims staked in the early 1890s and comprise the Edinburgh (082N 029), Elizabeth, Scotia (082N 031), Annie (082N 032), Agnes (082N 033), Heronback (082N 034) and Salmon (082N 035), aligned north-south starting from the north.

The area is underlain by a steeply dipping package of rusty weathering, thinly bedded, black, metamorphosed argillite and silty argillite of the Lower Cambrian and younger Lardeau Group, intruded by an Early and/or mid-Cretaceous biotite granite intrusion. The argillites have been extensively hydrothermally altered resulting in considerable deposition of manganese.

Quartz and quartz-carbonate zones from 3 to 4 metres wide occur in a north striking, vertical shear zone in argillite. Up to 6 metres of manganese alteration occurs on either side of the shear zone along with seams of manganite. Mineralization in the quartz-carbonate and quartz consists of seams and veins of argentiferous galena and some sphalerite.

On the Edinburgh, Elizabeth or Scotia claims, a tunnel was driven 48 metres to intersect the vein at depth. There is about 9 tonnes of ore ready for shipping, assays for which have yielded 5442 to 9952 grams silver and 80 per cent lead (Minister of Mines Annual Report 1896, pages 539, 540). The tunnel location description is vague and may occur on either of the three claims mentioned.

BIBLIOGRAPHY

EMPR AR 1893-1050,1084; *1896-539,540; 1898-1189; 1899-600,677;

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1055
REPORT: RGEN0100

BIBLIOGRAPHY

1927-C293
EMPR ASS RPT 13813, *17582
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976; see Edinburgh, 082N 029 -
Claim location maps)
GSC ANN RPT 1890-91 Volume V, pp. 67A,70A; 1892-93 Volume VI,
p. 57R; 1894, p. 167S
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 031**

NATIONAL MINERAL INVENTORY: 082N4 Ag7

NAME(S): **SCOTIA**, SCOTIA (L.2784), RYCKMAN CREEK,
SILVER

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:
LATITUDE: 51 05 15 N
LONGITUDE: 117 34 57 W
ELEVATION: 1143 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of claim (Lot 2784, survey cancelled), in Glacier National Park about 750 metres east of the Incomappleux River, 48 kilometres east-northeast of Revelstoke (see Edinburgh, 082N 029 - Claim location maps).

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)
NORTHING: 5659717
EASTING: 459203

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz Carbonate
ALTERATION: Manganite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Undefined Formation	Unnamed/Unknown Informal
Cretaceous			

LITHOLOGY: Meta Argillite
Silty Argillite
Biotite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP: Plutonic Rocks
GRADE:

CAPSULE GEOLOGY

A number of showings are aligned north-south for 3 kilometres, starting from just inside Glacier National Park (Edinburgh, 082N 029; Elizabeth, 082N 030; Scotia) parallel to the Incomappleux River, about 750 metres east of the river, approximately 48 kilometres east of Revelstoke. These showings were previously covered by claims staked in the early 1890s and comprise the Edinburgh (082N 029), Elizabeth (082N 030), Scotia, Annie (082N 032), Agnes (082N 033), Heronback (082N 034) and Salmon (082N 035), aligned north-south starting from the north.

The area is underlain by a steeply dipping package of rusty weathering, thinly bedded, black, metamorphosed argillite and silty argillite of the Lower Cambrian and younger Lardeau Group, intruded by an Early and/or mid-Cretaceous biotite granite intrusion. The argillites have been extensively hydrothermally altered resulting in considerable deposition of manganese.

Quartz and quartz-carbonate zones from 3 to 4 metres wide occur in a north striking, vertical shear zone in argillite. Up to 6 metres of manganese alteration occurs on either side of the shear zone along with seams of manganite. Mineralization in the quartz-carbonate and quartz consists of seams and veins of argentiferous galena and some sphalerite.

On the Edinburgh, Elizabeth or Scotia claims, a tunnel was driven 48 metres to intersect the vein at depth. There is about 9 tonnes of ore ready for shipping, assays for which have yielded 5442 to 9952 grams silver and 80 per cent lead (Minister of Mines Annual Report 1896, pages 539, 540). The tunnel location description is vague and may occur on either of the three claims mentioned.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1057
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR *1896-539,540; 1898-1193; 1899-677
EMPR ASS RPT 13813, *17582
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976; see Edinburgh, 082N 029 -
Claim location maps)
GSC ANN RPT 1892-93 Volume VI, p. 57R
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 032**

NATIONAL MINERAL INVENTORY: 082N4 Ag7

NAME(S): **ANNIE, RYCKMAN CREEK, SILVER,
CELTIC QUEEN, SILVER RIDGE**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:

Underground

MINING DIVISION: Revelstoke

LATITUDE: 51 05 02 N
LONGITUDE: 117 34 54 W

UTM ZONE: 11 (NAD 83)

ELEVATION: 1158 Metres

NORTHING: 5659315
EASTING: 459258

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, close to or straddling the boundary of Glacier National Park, about 750 metres east of the Incomappleux River, 48 kilometres east-northeast of Revelstoke (see Edinburgh, 082N 029 - Claim location maps).

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz Carbonate
ALTERATION: Manganite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Undefined Formation	Unnamed/Unknown Informal
Cretaceous			

LITHOLOGY: Meta Argillite
Silty Argillite
Biotite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains
Plutonic Rocks
RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: DUMP REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1896
SAMPLE TYPE: Grab
COMMODITY

Silver	GRADE	Grams per tonne
Lead	2742.0000	Per cent
	72.0000	

COMMENTS: A dump of shipping ore.
REFERENCE: Minister of Mines Annual Report 1896, page 540.

CAPSULE GEOLOGY

A number of showings are aligned north-south for 3 kilometres, starting from just inside Glacier National Park (Edinburgh, 082N 029; Elizabeth, 082N 030; Scotia, 082N 031) parallel to the Incomappleux River, about 750 metres east of the river, approximately 48 kilometres east of Revelstoke. These showings were previously covered by claims staked in the early 1890s and comprise the Edinburgh (082N 029), Elizabeth (082N 030), Scotia (082N 031), Annie, Agnes (082N 033), Heronback (082N 034) and Salmon (082N 035), aligned north-south starting from the north.

The area is underlain by a steeply dipping package of rusty weathering, thinly bedded, black, metamorphosed argillite and silty argillite of the Lower Cambrian and younger Lardeau Group, intruded by an Early and/or mid-Cretaceous biotite granite intrusion. The argillites have been extensively hydrothermally altered resulting in considerable deposition of manganese.

Quartz and quartz-carbonate zones from 3 to 4 metres wide occur in a north striking, vertical shear zone in argillite. Up to 6

CAPSULE GEOLOGY

metres of manganese alteration occurs on either side of the shear zone along with seams of manganite. Mineralization in the quartz-carbonate and quartz consists of seams and veins of argentiferous galena and some sphalerite.

At the Annie occurrence, an adit has been driven 45 metres along the vein and a dump of shipping ore assayed 2742 grams per tonne silver and 72 per cent lead (Minister of Mines Annual Report 1896, page 540).

BIBLIOGRAPHY

EMPR AR 1893-1050,1084; *1896-540; 1897-569; 1899-677
EMPR ASS RPT 13813, *17582
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976; see Edinburgh, 082N 029 -
Claim location maps)
GSC ANN RPT 1894, p. 167S
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 033**

NATIONAL MINERAL INVENTORY: 082N4 Ag7

NAME(S): **AGNES**, RYCKMAN CREEK, SILVER

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:
LATTITUDE: 51 04 44 N
LONGITUDE: 117 43 27 W
ELEVATION: 1158 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Adit, 500 metres south of the boundary of Glacier National Park, about 750 metres east of the Incomappleux River, 48 kilometres east-northeast of Revelstoke (Assessment Report 17582).

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

NORTHING: 5658847
EASTING: 449272

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
ASSOCIATED: Quartz Carbonate
ALTERATION: Manganite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic Cretaceous	Lardeau	Undefined Formation	Unnamed/Unknown Informal

LITHOLOGY: Meta Argillite
Silty Argillite
Biotite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Selkirk Mountains
GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
YEAR: 1987

CATEGORY: Assay/analysis	GRADE	
SAMPLE TYPE: Grab		
COMMODITY		
Silver	363.3000	Grams per tonne
Lead	31.3000	Per cent
Zinc	13.1000	Per cent

COMMENTS: Sample of massive galena.
REFERENCE: Assessment Report 17582.

CAPSULE GEOLOGY

A number of showings are aligned north-south for 3 kilometres, starting from just inside Glacier National Park (Edinburgh, 082N 029; Elizabeth, 082N 030; Scotia, 082N 031) parallel to the Incomappleux River, about 750 metres east of the river, approximately 48 kilometres east of Revelstoke. These showings were previously covered by claims staked in the early 1890s and comprise the Edinburgh (082N 029), Elizabeth (082N 030), Scotia (082N 031), Annie (082N 032), Agnes, Heronback (082N 034) and Salmon (082N 035), aligned north-south starting from the north.

The area is underlain by a steeply dipping package of rusty weathering, thinly bedded, black, metamorphosed argillite and silty argillite of the Lower Cambrian and younger Lardeau Group, intruded by an Early and/or mid-Cretaceous biotite granite intrusion. The argillites have been extensively hydrothermally altered resulting in considerable deposition of manganese.

Quartz and quartz-carbonate zones from 3 to 4 metres wide occur in a north striking, vertical shear zone in argillite. Up to 6 metres of manganese alteration occurs on either side of the shear

CAPSULE GEOLOGY

zone along with seams of manganite. Mineralization in the quartz-carbonate and quartz consists of seams and veins of argentiferous galena and some sphalerite.

At the Agnes occurrence, an adit has been driven for 24 metres along the vein. In 1987, a sample of massive galena in a surface showing yielded 31.3 per cent lead, 13.1 per cent zinc and 363.3 grams per tonne silver (Assessment Report 17582).

BIBLIOGRAPHY

EMPR AR 1896-540; 1899-677
EMPR ASS RPT 13813, *17582
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976; see Edinburgh, 082N 029 -
Claim location maps)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1063
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976; see Edinburgh, 082N 029 -
Claim location maps)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 035**

NATIONAL MINERAL INVENTORY: 082N4 Ag7

NAME(S): **SALMON**, KING SOLOMON, SOLOMON,
 RYCKMAN CREEK, SILVER, SILVER RIDGE

STATUS: Prospect	Underground	MINING DIVISION: Revelstoke
REGIONS: British Columbia		
NTS MAP: 082N04E		UTM ZONE: 11 (NAD 83)
BC MAP:		
LATITUDE: 51 04 15 N		NORTHING: 5657863
LONGITUDE: 117 34 55 W		EASTING: 459228
ELEVATION: 1097 Metres		
LOCATION ACCURACY: Within 500M		
COMMENTS: Centre of claim, 1.5 kilometres south of the boundary of Glacier National Park, about 750 metres east of the Incomappleux River, 48 kilometres east-northeast of Revelstoke (Assessment Report 17582).		

COMMODITIES: Lead Silver Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
 ASSOCIATED: Quartz Carbonate
 ALTERATION: Manganite
 ALTERATION TYPE: Oxidation
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Lardeau	Undefined Formation	Unnamed/Unknown Informal
Cretaceous			

LITHOLOGY: Meta Argillite
 Silty Argillite
 Biotite Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PLUTONIC BELT: Kootenay	PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay	RELATIONSHIP: Plutonic Rocks	
METAMORPHIC TYPE: Regional		GRADE:

CAPSULE GEOLOGY

A number of showings are aligned north-south for 3 kilometres, starting from just inside Glacier National Park (Edinburgh, 082N 029; Elizabeth, 082N 030; Scotia, 082N 031) parallel to the Incomappleux River, about 750 metres east of the river, approximately 48 kilometres east of Revelstoke. These showings were previously covered by claims staked in the early 1890s and comprise the Edinburgh (082N 029), Elizabeth (082N 030), Scotia (082N 031), Annie (082N 032), Agnes (082N 033), Heronback (082N 034) and Salmon, aligned north-south starting from the north.

The area is underlain by a steeply dipping package of rusty weathering, thinly bedded, black, metamorphosed argillite and silty argillite of the Lower Cambrian and younger Lardeau Group, intruded by an Early and/or mid-Cretaceous biotite granite intrusion. The argillites have been extensively hydrothermally altered resulting in considerable deposition of manganese.

Quartz and quartz-carbonate zones from 3 to 4 metres wide occur in a north striking, vertical shear zone in argillite. Up to 6 metres of manganese alteration occurs on either side of the shear zone along with seams of manganite. Mineralization in the quartz-carbonate and quartz consists of seams and veins of argentiferous galena and some sphalerite.

At the Salmon occurrence, a good surface showing of mineralization analysed 2742 grams per tonne silver and 72 per cent lead. About 91 metres of tunnelling was performed (Minister of Mines Annual Report 1896, page 540).

Riverdance Resources Corp. and Achieva Development Corp. optioned the Silver Ridge property in 1998. Sampling in 1997 assayed up to 104 grams per tonne silver, 12.32 per cent lead and 4.67 per cent zinc over 2 metres (GCNL #89(May8), #115(June 16), 1998).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1065
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1896-540; 1899-677; 1917-F153; 1929-C334
EMPR ASS RPT 13813, *17582
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976; see Edinburgh, 082N 029 -
Claim location maps)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GCNL #89(May 8), #115(June 16), 1998

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/17

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **ICE, CASS**

MINING DIVISION: Revelstoke

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 05 N
LONGITUDE: 117 43 19 W
ELEVATION: 2339 Metres

NORTHING: 5653934
EASTING: 449380

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of the main showing situated near the headwaters of Albert Creek, between Justice Glacier and Primrose Icefield, about 36 kilometres east of Revelstoke (Assessment Report 3725).

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite Wolframite
ASSOCIATED: Quartz Pyrite Muscovite Pyrrhotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Vein Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: K05 W skarn
DIMENSION: 426 x 12 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralized zone in quartzite; widths range from 4.5 to 12.1 metres.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Undefined Formation	Unnamed/Unknown Informal
Cretaceous			

LITHOLOGY: Quartzite
Quartz Biotite Schist
Quartz Muscovite Schist
Biotite Schist
Limestone
Siliceous Marble
Biotite Quartz Diorite
Granodiorite
Quartz Diorite
Biotite Granodiorite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
Plutonic Rocks
RELATIONSHIP: PHYSIOGRAPHIC AREA: Selkirk Mountains
GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1985
SAMPLE TYPE: Rock
COMMODITY: GRADE: Per cent
Tungsten 0.2000
COMMENTS: Average of seven rock grab samples; grade given for WO3.
REFERENCE: Assessment Report 14749.

CAPSULE GEOLOGY

The main showing is situated near the headwaters of Albert Creek, between Justice Glacier and Primrose Icefield, about 36 kilometres east of Revelstoke.
The Ice occurrence area is underlain by a highly siliceous and complexly interlayered sequence of Lower Cambrian and younger Lardeau Group metasediments consisting of quartzites, quartz biotite schists, quartz muscovite schists, biotite schists and minor thin lenses of impure siliceous marble. Early and/or mid-Cretaceous intrusive stocks are poorly exposed on the eastern and western extremities of the occurrence area. The western stock has an outer rim phase of coarse grained, felsic biotite quartz diorite but is dominantly composed of granodiorite. The eastern intrusion is a very coarse grained, felsic quartz diorite or biotite granodiorite.

CAPSULE GEOLOGY

Narrow limestone bands close to the western intrusive contact are locally converted to coarse grained epidote-garnet skarns with minor diopside. Weak hornfelsing is present close to both intrusive contacts and many irregular granitic dikes and sills are present within the metasedimentary sequence.

The metasediments have undergone intense deformation and show evidence of at least two periods of folding. The first, most intense period of folding produced the pronounced major north-south foliation evident throughout the property.

Mineralization occurs in the form of low-grade scheelite and minor wolframite on fracture planes primarily hosted in quartzite. The scheelite occurs as coarse platy masses up to 1.2 centimetres in diameter and is extremely friable and is relatively abundant on fractures striking north and dipping approximately 30 degrees west. Scheelite-bearing fractures, on average, are approximately 0.3 to 0.6 metres apart. Traces are disseminated through the hostrock which is a pale grey to yellowish coloured quartzite with minor biotite, interlayered with muscovite quartzites. Night lamping has outlined a scheelite-bearing zone in quartzite that is approximately 4.5 to 12.1 metres wide extending 426 metres in a north-south direction. Seven rock grab samples assayed from 0.03 to 0.64 per cent WO₃ and averaged 0.2 per cent WO₃ (Assessment Report 14749).

A few quartz-pyrite-muscovite veins mineralized with abundant, finely disseminated scheelite occur to the south of the main mineralized zone. The veins are 2.5 to 5 centimetres wide, strike east and are almost vertical. Several other small scheelite showings with minor disseminated sulphides, including pyrrhotite, are evident.

BIBLIOGRAPHY

EMPR ASS RPT *3725, *14749
EMPR FIELDWORK 2000, pp. 231-252
EMPR GEM 1971-444, 1972-95
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GCNL #168(Sept.1), 1993

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/21

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **EX 90**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 38 N
LONGITUDE: 117 45 58 W
ELEVATION: 2347 Metres

NORTHING: 5656838
EASTING: 446313

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized outcrop, 2.5 kilometres south of Albert Creek, about 36 kilometres east of Revelstoke (Assessment Report 3940).

COMMODITIES: Tungsten Molybdenum

MINERALS

SIGNIFICANT: Scheelite
ASSOCIATED: Garnet Diopside Epidote Quartz Calcite
Actinolite Vesuvianite Molybdenite
COMMENTS: Very minor molybdenite in aplite dikes and pegmatitic rock about 1000 metres north of the occurrence.
ALTERATION: Garnet Diopside Epidote Quartz Calcite
Actinolite Vesuvianite

ALTERATION TYPE: Skarn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn
TYPE: K05 W skarn I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Hamill	Undefined Formation	
Paleozoic	Lardeau	Undefined Formation	
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Limestone
Quartzite
Schist
Granitic Dike
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PLUTONIC ROCKS RELATIONSHIP: Plutonic Rocks
PHYSIOGRAPHIC AREA: Selkirk Mountains
GRADE:

CAPSULE GEOLOGY

The rocks of the area consist of a series of Hadrynian to Lower Cambrian and younger schists and gneisses which have been intruded by a variety of plutonic rocks (age unknown). The schists and gneisses have been folded into a large anticline which plunges moderately to the northeast. Albert Creek follows approximately the axial trace of this anticline so that equivalent rocks are found on both sides of Albert Canyon.

The metamorphosed rocks belong to the Lower Cambrian and younger Lardeau Group and Hadrynian to Lower Cambrian Hamill Group. The younger Lardeau Group consists of a succession of phyllites and gneisses with minor limestone bands. The underlying Hamill Group rocks consist of quartzites, quartz mica schists and several limestone bands. Underlying the Hamill Group is hornblende-biotite-quartz-plagioclase gneiss which may represent basement rock thrust up into the overlying metasediments.

Three separate intrusions occur and comprise hornblende biotite diorite, biotite hornblende granodiorite and biotite granite.

At the EX 90 occurrence, very minor amounts of very fine grained disseminated scheelite occurs in skarn which has developed near the contact where a granitic dike cuts beds of limestone, quartzite and schist. Skarn minerals consist of garnet and diopside with minor amounts of epidote, quartz, calcite, actinolite and vesuvianite. About 1000 metres north, very minor molybdenite is evident in aplite dikes and pegmatitic rock.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1069
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *3940
EMPR FIELDWORK 2000, pp. 231-252
EMPR GEM 1972-95
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/22

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **AC**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 56 N
LONGITUDE: 117 49 13 W
ELEVATION: 1112 Metres

NORTHING: 5661142
EASTING: 442564

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized outcrop, 250 metres north of Albert Creek, about 32 kilometres east of Revelstoke (Assessment Report 3940).

COMMODITIES: Tungsten Zinc

MINERALS

SIGNIFICANT: Scheelite Sphalerite
ASSOCIATED: Quartz Pyrrhotite Pyrite Tourmaline
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: K05 W skarn I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

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

LITHOLOGY: Quartz Mica Schist
Calcareous Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Selkirk Mountains
GRADE:

CAPSULE GEOLOGY

The rocks of the area consist of a series of Hadrynian to Lower Cambrian and younger schists and gneisses which have been intruded by a variety of plutonic rocks (age unknown). The schists and gneisses have been folded into a large anticline which plunges moderately to the northeast. Albert Creek follows approximately the axial trace of this anticline so that equivalent rocks are found on both side of Albert Canyon.

The metamorphosed rocks belong to the Lower Cambrian and younger Lardeau Group and Hadrynian to Lower Cambrian Hamill Group. The younger Lardeau Group consists of a succession of phyllites and gneisses with minor limestone bands. The underlying Hamill Group rocks consist of quartzites, quartz mica schists and several limestone bands. Underlying the Hamill Group is hornblende-biotite-quartz-plagioclase gneiss which may represent basement rock thrust up into the overlying metasediments.

Three separate intrusions occur and comprise hornblende biotite diorite, biotite hornblende granodiorite and biotite granite.

Small lenses of skarn are developed in some limestone bands and consist of garnet, diopside and lesser amounts of epidote, quartz, calcite, actinolite and vesuvianite.

At the AC occurrence, scheelite-bearing quartz veins are found cutting through quartz mica schists and calcareous schists of the Hamill Group. The scheelite occurs as discrete grains or aggregations up to 2 centimetres in diameter at the edge of the vein. The veins also contain sphalerite, minor pyrrhotite, pyrite and tourmaline.

BIBLIOGRAPHY

EMPR ASS RPT *3940
EMPR GEM 1972-95
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1071
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/22

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **EX 26**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 26 N
LONGITUDE: 117 50 05 W
ELEVATION: 2088 Metres

NORTHING: 5658373
EASTING: 441521

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized outcrop, 3 kilometres south of Albert Creek, about 31 kilometres east of Revelstoke (Assessment Report 3940).

COMMODITIES: Tungsten

MINERALS

SIGNIFICANT: Scheelite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Shear
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I12 W veins

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Proterozoic-Paleoz.	Hamill	Undefined Formation	
Paleozoic	Lardeau	Undefined Formation	
Unknown			Unnamed/Unknown Informal

LITHOLOGY: Schist
Limestone
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

Plutonic Rocks
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Selkirk Mountains

GRADE:

CAPSULE GEOLOGY

The rocks of the area consist of a series of Hadrynian to Lower Cambrian and younger schists and gneisses which have been intruded by a variety of plutonic rocks (age unknown). The schists and gneisses have been folded into a large anticline which plunges moderately to the northeast. Albert Creek follows approximately the axial trace of this anticline so that equivalent rocks are found on both side of Albert Canyon.

The metamorphosed rocks belong to the Lower Cambrian and younger Lardeau Group and Hadrynian to Lower Cambrian Hamill Group. The younger Lardeau Group consists of a succession of phyllites and gneisses with minor limestone bands. The underlying Hamill Group rocks consist of quartzites, quartz mica schists and several limestone bands. Underlying the Hamill Group is hornblende-biotite-quartz-plagioclase gneiss which may represent basement rock thrust up into the overlying metasediments.

Three separate intrusions occur and comprise hornblende biotite diorite, biotite hornblende granodiorite and biotite granite.

Small lenses of skarn are developed in some limestone bands and consist of garnet, diopside with lesser amounts of epidote, quartz, calcite, actinolite and vesuvianite.

At the EX 26 occurrence, a discontinuous and shattered 3-metre wide quartz vein is located along a shear which cuts through schists, limestone and granite. Scheelite occurs as large grains within the fractures of the vein and as large pods up to 10 centimetres in diameter. Similar veins are found 609 metres northeast.

BIBLIOGRAPHY

EMPR ASS RPT *3940
EMPR GEM 1972-95
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1073
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/22

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **EX 11**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 43 N
LONGITUDE: 117 50 44 W

NORTHING: 5658907
EASTING: 440768

ELEVATION: 2164 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized outcrop, 3 kilometres south of Albert Creek, about 30 kilometres east of Revelstoke (Assessment Report 3940).

COMMODITIES: Tungsten

Copper

Molybdenum

MINERALS

SIGNIFICANT:	Scheelite	Chalcopyrite	Molybdenite		
ASSOCIATED:	Garnet	Diopside	Epidote	Quartz	Calcite
	Actinolite	Vesuvianite	Pyrite		
COMMENTS:	Also pyrrhotite.				
ALTERATION:	Garnet	Diopside	Epidote	Quartz	Calcite
	Actinolite	Vesuvianite			
ALTERATION TYPE:	Skarn				
MINERALIZATION AGE:	Unknown				

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Skarn
TYPE: K05 W skarn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Proterozoic-Paleoz.
Paleozoic

GROUP

Hamill
Lardeau

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Schist
Quartzite
Granite
Gneiss
Skarn

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

Plutonic Rocks
RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The rocks of the area consist of a series of Hadrynian to Lower Cambrian and younger schists and gneisses which have been intruded by a variety of plutonic rocks (age unknown). The schists and gneisses have been folded into a large anticline which plunges moderately to the northeast. Albert Creek follows approximately the axial trace of this anticline so that equivalent rocks are found on both side of Albert Canyon.

The metamorphosed rocks belong to the Lower Cambrian and younger Lardeau Group and Hadrynian to Lower Cambrian Hamill Group. The younger Lardeau Group consists of a succession of phyllites and gneisses with minor limestone bands. The underlying Hamill Group rocks consist of quartzites, quartz mica schists and several limestone bands. Underlying the Hamill Group is hornblende-biotite-quartz-plagioclase gneiss which may represent basement rock thrust up into the overlying metasediments.

Three separate intrusions occur and comprise hornblende biotite diorite, biotite hornblende granodiorite and biotite granite.

Small lenses of skarn are developed in some limestone bands and consist of garnet, diopside with variable amounts of epidote, quartz, calcite, actinolite and vesuvianite.

At the EX 11 occurrence, a continuous band of skarn, averaging 0.9 metre wide, occurs over a distance of 762 metres at the base of a limestone unit that is interlayered with schist and quartzite in the core of an overturned anticline, near the contact with granite and hornblende-biotite-quartz-plagioclase gneiss. The skarn is vaguely banded and consists of garnet, diopside and lesser epidote, quartz,

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1075
REPORT: RGEN0100

CAPSULE GEOLOGY

calcite, actinolite and vesuvianite. Minor disseminated pyrite, pyrrhotite, chalcopyrite, molybdenite and scheelite occur in the skarn. Small patches of scheelite are occasionally found in the gneiss and granite, and also on fracture surfaces.

BIBLIOGRAPHY

EMPR ASS RPT *3940
EMPR GEM 1972-95
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/22

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **ROSE AND DAISY**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 01 48 N
LONGITUDE: 116 41 16 W
ELEVATION: 1386 Metres

NORTHING: 5653207
EASTING: 521894

LOCATION ACCURACY: Within 5 KM

COMMENTS: The showing is located on the ridge between the Columbia and Spillimacheen rivers at a point almost opposite Castledale, and about 6 kilometres southwest of Parson (Minister of Mines Annual Report 1920, page N108).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Galena
COMMENTS: Inferred from commodity.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Shale
Silty Shale
Quartz Siltstone
Sandstone
Limestone
Dolomite
Quartz Pebble Conglomerate
Quartz Sandstone
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Purcell Mountains

CAPSULE GEOLOGY

The Rose and Daisy occurrence is situated on the ridge between the Columbia and Spillimacheen rivers at a point almost opposite Castledale. About 30 metres of tunnelling was done in an effort to develop some small surface showings, but the results did not come up to expectations and the work was abandoned. Elsewhere on the property there is a strong surface showing of low-grade lead ore reported to have given excellent results (Minister of Mines Annual Report 1920, pages N108, N109).

The geology of the area is inferred from Geological Survey of Canada Map 1501A. In the occurrence area, Hadrynian Horsethief Creek Group sedimentary rocks are indicated. The group consists of shales and silty shales with thin interbeds of quartz siltstone and sandstone, limestone and dolomite, sandstone and quartz pebble conglomerate, and interbedded quartz sandstone and slate. Nearby is the contact with the Hadrynian to Lower Cambrian Hamill Group.

BIBLIOGRAPHY

EMPR AR *1920-N108,N109
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 1501A
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **SAPHIRE**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 21 53 N
LONGITUDE: 117 58 20 W
ELEVATION: 2286 Metres

NORTHING: 5690833
EASTING: 432317

LOCATION ACCURACY: Within 1 KM

COMMENTS: The centre of the claim group is located about 400 metres north of Downie Lake, between mounts Anstey and Moloch, approximately 40 kilometres northeast of Revelstoke (Geology, Exploration and Mining in British Columbia 1973, page 118).

COMMODITIES: Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
COMMENTS: Minerals are inferred from description.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Replacement
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
COMMENTS: Character and classification are inferred from description.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Undefined Group	Badshot	

LITHOLOGY: Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

The centre of the claim group is located about 400 metres north of Downie Lake, between mounts Anstey and Moloch, approximately 40 kilometres northeast of Revelstoke.

The Sapphire occurrence is underlain by Lower Cambrian Badshot Formation limestone. Disseminated galena and sphalerite occurs in limestone (inferred from Ministry of Mines property description form).

BIBLIOGRAPHY

EMPR GEM *1973-118,119
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 043**

NATIONAL MINERAL INVENTORY:

NAME(S): **HORSE CREEK, NICHOLSON, HUNT,**
HORSE RIVER, HORSE CREEK SILICA

STATUS: Past Producer Open Pit

MINING DIVISION: Golden

REGIONS: British Columbia

NTS MAP: 082N02W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 51 12 40 N

LONGITUDE: 116 51 37 W

ELEVATION: 1219 Metres

NORTHING: 5673311

EASTING: 509760

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry, 3 kilometres east of the Columbia River and south of Horse Creek, about 12 kilometres south-southeast of Golden (Property File - Bullis, 1980).

COMMODITIES: Silica Aggregate

MINERALS

SIGNIFICANT: Quartz

MINERALIZATION AGE: Ordovician

DEPOSIT

CHARACTER: Massive

CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R07 Silica sandstone

SHAPE: Regular

MODIFIER: Faulted

DIMENSION: Metres

STRIKE/DIP: 220/32N

TREND/PLUNGE:

COMMENTS: Attitude of local dolomite outcrop.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Ordovician

Ordovician-Silurian

GROUP

Undefined Group

Undefined Group

FORMATION

Mount Wilson

Beaverfoot

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite

Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: HUNT

REPORT ON: Y

CATEGORY: Probable

YEAR: 1985

QUANTITY: 3000000 Tonnes

COMMODITY

GRADE

Silica

99.5000

Per cent

COMMENTS: Estimated open pit reserves; grade from personal communication with Z.D. Hora, 1991.

REFERENCE: Open File 1987-15.

CAPSULE GEOLOGY

The Nicholson deposit is located about 12 kilometres south-southeast of Golden, about 3 kilometres east of the Columbia River and south of Horse Creek.

Quarrying operations take place on quartzite of the Middle and/or Upper Ordovician Mount Wilson Formation. Quartzites in the area are exposed in faulted segments and are massive, hard, firmly cemented, pale grey or bluish to white, or light buff coloured. The quartz grains are 0.12 to 0.85 millimetre in diameter with most in the 0.25 to 0.50 millimetre range. A northeast trending transverse fault has the effect of repeating the uppermost bed of high quality silica. Thinly bedded, fine-grained dolomite of the Middle Ordovician-Silurian Beaverfoot Formation outcrops locally and strikes between 220 to 280 degrees and dips 32 to 35 degrees northwest.

Shipments began in 1980 and production has been approximately 30,000 tonnes per year (Open File 1987-15). The silica is used for silicon and ferrosilicon production. In 1984, some the finer grained waste was reportedly used in cement manufacturing.

Open-pittable reserves were estimated in 1985 to be 3 million

CAPSULE GEOLOGY

tonnes grading 99.5 per cent (Z.D. Hora, personal communication 1991; Open File 1987-15). Two samples taken in 1985 from the stockpile of processed material analysed 99.85 and 99.90 weight per cent silica (Open File 1987-15).

Bert Miller Trucking and Contracting Ltd. is producing approximately 60,000 tonnes annually and has started to process the undersize product, accumulating at a rate of 10,000 tonnes annually, into a variety of fine to coarse aggregate products (Information Circular 1996-1, page 9).

Nugget Contracting Ltd. was producing 70,000 tonnes annually, of which 50,000 tonnes is shipped to Wenatchee, Washington (Information Circular 1997-1, page 12).

BIBLIOGRAPHY

- EMPR ASS RPT 5235
- EMPR ENG INSP Annual Report 1989
- EMPR EXPL 1975-203; 1978-239; 1979-336; 1980-543; 1985-A49;
1996-A13; 1997-51
- EMPR GEM 1970-511; 1973-565; 1974-399
- EMPR INF CIRC 1995-1, p. 9; 1996-1, p. 9; 1997-1, p. 12; 1998-1,
p. 13
- EMPR MAP 65 (1989)
- EMPR MINING 1975-1980 Vol.I, p. 48; 1981-1985, p. 70; 1986-1987, pp.
94,95; 1988, pp. 93,94
- EMPR OF *1987-15, pp. 10, 11; 1992-1; 1992-9; 1994-1
- EMPR PF (*Bullis, A.R. (1980): Hunt Silica Quarry; 82N General File -
Prospector's map, 1937)
- GSC MAP 295A; 1502A
- GSC MEM 55
- GSC OF 481
- GSC SUM RPT 1932 Part A

DATE CODED: 1985/07/24
DATE REVISED: 1996/11/13

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **KING DAVID**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 10 N
LONGITUDE: 116 53 14 W
ELEVATION: 1036 Metres

NORTHING: 5683502
EASTING: 507862

LOCATION ACCURACY: Within 500M

COMMENTS: Located along the Kicking Horse River, about 6.4 kilometres east of Golden on Highway 1 (Assessment Report 184).

COMMODITIES: Germanium Uranium Zirconium Platinum

MINERALS

SIGNIFICANT: Pyrite Marcasite Graphite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Disseminated
CLASSIFICATION: Sedimentary Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Ordoevician
Cambrian-Ordovician

GROUP

Undefined Group
McKay

FORMATION

Glenogle
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Carbonaceous Shale
Argillaceous Sandstone
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1957

COMMODITY

COMMODITY	GRADE	
Germanium	0.0200	Per cent
Platinum	0.4000	Grams per tonne
Uranium	0.0250	Per cent
Zirconium	0.1200	Per cent

REFERENCE: Assessment Report 184.

CAPSULE GEOLOGY

Carbonaceous shales with pyrite, marcasite and graphite contain minor germanium, zirconium, uranium and trace platinum. A sample assayed 0.02 per cent germanium, 0.12 per cent zirconium, 0.025 per cent uranium and 0.4 gram per tonne platinum (Assessment Report 184). The black shales belong to the Ordovician Glenogle Formation and nearby argillaceous sandstone and dark grey limestone belong to the Upper Cambrian to Middle Ordovician McKay Group.

BIBLIOGRAPHY

EM GEOFILE 2000-2; 2000-5
EMPR AR 1958-72
EMPR ASS RPT *184
EMPR MAP 22
EMPR PF (Notes by G. Addie, 1979; 82N General File - Prospector's map, 1937)
GSC MAP 295A; 1497A
GSC OF 481; 551

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/26

CODED BY: GSB
REVISED BY: LDJ

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1081
REPORT: RGEN0100

MINFILE NUMBER: **082N 045**

NATIONAL MINERAL INVENTORY: 082N4 Sn1

NAME(S): **MCDUGAL CREEK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 51 N
LONGITUDE: 117 39 42 W
ELEVATION: 2438 Metres

NORTHING: 5657169
EASTING: 453635

LOCATION ACCURACY: Within 5 KM

COMMENTS: Located about 8 or 9 kilometres up from the mouth of McDougal Creek, near the headwaters of an east tributary close to the summit of Charity Peak, about 38 kilometres east-northeast of Revelstoke (Minister of Mines Annual Report 1914, page K272).

COMMODITIES: Tin

MINERALS

SIGNIFICANT: Cassiterite
ASSOCIATED: Mica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite
TYPE: O03 Muscovite pegmatite

J01 Polymetallic manto Ag-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Pegmatite Dike
Pegmatite
Porphyritic Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks

PHYSIOGRAPHIC AREA: Selkirk Mountains

CAPSULE GEOLOGY

The McDougal Creek showing is located up near the headwaters of an east tributary to the creek, where pegmatite dikes, 1.2 to 3 metres wide, strike east across the creek and dip almost vertical. The lower dike contains a few scattered crystals of cassiterite and minor light-coloured pearly mica. The dikes crosscut Early and/or mid-Cretaceous coarse grained porphyritic granite.

BIBLIOGRAPHY

EMPR AR *1914-K271-K273
EMPR FIELDWORK 2000, pp. 231-252
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/23

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 045**

MINFILE NUMBER: **082N 046**

NATIONAL MINERAL INVENTORY:

NAME(S): **HCJ**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 16 04 N
LONGITUDE: 116 54 00 W
ELEVATION: 1219 Metres

NORTHING: 5679608
EASTING: 506976

LOCATION ACCURACY: Within 500M

COMMENTS: Located along Stacey Creek east of the Columbia River, about 5 kilometres south-southeast of Golden (Assessment Report 3685).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R07 Silica sandstone
DIMENSION: 30 Metres STRIKE/DIP: 130/67N
COMMENTS: Quartzite beds strike 120 to 140 degrees and dip 60 to 75 degrees northeast.

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Ordovician	Undefined Group	Mount Wilson	

LITHOLOGY: Quartzite
Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Quartzite beds of the Middle and/or Upper Ordovician Mount Wilson Formation strike 120 to 140 degrees and dip 60 to 75 degrees northeast. On the HCJ property the quartzite forms a continuous northwesterly trending cliff. Thicknesses up to 30 metres may be sufficiently free of impurities to constitute high-grade silica. The unit varies from a quartzite with well-cemented glassy quartz grains to a less well-cemented white sandstone.

BIBLIOGRAPHY

EMPR ASS RPT *3685
EMPR GEM 1972-616,617
EMPR OF 1987-15
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 1497A
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/26

CODED BY: GSB
REVISED BY: GRF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 047**

NATIONAL MINERAL INVENTORY: 082N4 Ag1

NAME(S): **SANQUHAR**, SUMMIT LODGE, ELKHORN

STATUS: Prospect

Underground

MINING DIVISION: Revelstoke

REGIONS: British Columbia

NTS MAP: 082N04W

BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 12 43 N

LONGITUDE: 117 46 16 W

ELEVATION: 2042 Metres

NORTHING: 5673677

EASTING: 446139

LOCATION ACCURACY: Within 500M

COMMENTS: Shaft and adits on a ridge top, located 1.75 kilometres north-northeast of Corbin Pass about 3 kilometres north of Illecillewaet Station of the Canadian Pacific Railway, 40 kilometres east-northeast of Revelstoke (Assessment Report 14219).

COMMODITIES: Lead

Silver

Zinc

Copper

Gold

MINERALS

SIGNIFICANT: Galena

Chalcopyrite

Tetrahedrite

Pyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic

Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Lardeau

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver

699.9000

Grams per tonne

Lead

1.8800

Per cent

Zinc

0.1800

Per cent

COMMENTS: A 0.3-metre chip sample from an upper adit.

REFERENCE: Assessment Report 14219.

CAPSULE GEOLOGY

The Sanquhar occurrence is located 1.75 kilometres north-northeast of Corbin Pass about 3 kilometres north of Illecillewaet Station of the Canadian Pacific Railway, 40 kilometres east-northeast of Revelstoke. The Jumbo occurrence (082N 048) is 500 metres to the north and 426 metres lower in elevation, on the Tangier River valley side.

Bedrock in the vicinity of the Sanquhar adits and shaft consist of northwest striking, flat lying to steeply dipping black to dark greenish slates of the Lower Cambrian and younger Lardeau Group. Near-vertical quartz veins, lenses and veinlets are mineralized with argentiferous galena, chalcopyrite, tetrahedrite and pyrite.

A 0.3-metre chip sample from an upper adit analysed 699.9 grams per tonne silver, 1.88 per cent lead and 0.18 per cent zinc (Assessment Report 14219).

BIBLIOGRAPHY

EMPR AR 1896-540; 1898-1062; 1899-678

EMPR ASS RPT *12488, *14219

EMPR PF (82N General File - Canadian Superior Exploration

geochemistry maps, 82N/4E,4W, 1976)

GSC ANN RPT 1892-93 Volume VI, pp. 59R,60R

GSC MAP 4-1961; 43-1962

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1084
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 048**

NATIONAL MINERAL INVENTORY: 082N4 Ag3

NAME(S): **JUMBO**, GLADSTONE

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 13 00 N
LONGITUDE: 117 46 37 W
ELEVATION: 1615 Metres

NORTHING: 5674206
EASTING: 445737

LOCATION ACCURACY: Within 500M

COMMENTS: Adits, located about 500 metres north and 426 metres lower in elevation than the Sanquhar occurrence (082N 047) on the Tangier River valley side, 4.5 kilometres north of the Trans-Canada Highway and Illecillewaet Station of the Canadian Pacific Railway, 40 kilometres east-northeast of Revelstoke (Assessment Report 14219).

COMMODITIES: Lead Silver Zinc Gold

MINERALS

SIGNIFICANT: Galena Pyrite Sphalerite

COMMENTS: Sphalerite is inferred from assay results.

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

DIMENSION: 2 Metres

COMMENTS: Quartz vein.

I01 Au-quartz veins

STRIKE/DIP: 140/

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Paleozoic
GROUP: Lardeau

FORMATION: Undefined Formation

IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Selkirk Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1984

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

1149.7000

Grams per tonne

Lead

5.3000

Per cent

Zinc

6.1500

Per cent

COMMENTS: A grab sample from an adit.

REFERENCE: Assessment Report 14219.

CAPSULE GEOLOGY

The Jumbo adits are located about 500 metres north and 426 metres lower in elevation than the Sanquhar occurrence (082N 047) on the Tangier River valley side, 4.5 kilometres north of the Trans-Canada Highway and Illecillewaet Station of the Canadian Pacific Railway, 40 kilometres east-northeast of Revelstoke.

Bedrock in the vicinity of the adits consist of northwest striking, flat lying to steeply dipping black to dark greenish slates of the Lower Cambrian and younger Lardeau Group. Mineralization consisting of argentiferous galena and pyrite occurs primarily within a massive, vertical quartz vein ranging from 0.9 to 2.7 metres in width. The vein strikes 140 degrees, nearly parallel to the hostrock.

A grab sample from an adit analysed 1149.7 grams per tonne silver, 5.3 per cent lead and 6.15 per cent zinc (sphalerite is inferred from the assay results) (Assessment Report 14219).

BIBLIOGRAPHY

EMPR AR 1888-304,324; 1889-279; 1890-364; 1893-1050; 1896-540; 1899-

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1086
REPORT: RGEN0100

BIBLIOGRAPHY

677,678; 1900-811
EMPR ASS RPT *12488, *14219
EMPR BC METAL MM00605
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC ANN RPT 1892-93 Volume VI, pp. 58R,59R
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1087
REPORT: RGEN0100

MINFILE NUMBER: **082N 049**

NATIONAL MINERAL INVENTORY: 082N4 Ag3

NAME(S): **NORTH STAR**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 12 12 N
LONGITUDE: 117 45 46 W
ELEVATION: 1630 Metres

NORTHING: 5672713
EASTING: 446711

LOCATION ACCURACY: Within 5 KM

COMMENTS: Adit, about 1.6 kilometres from the Jumbo workings (082N 048) and 40 kilometres east-northeast of Golden (Minister of Mines Annual Report 1896, page 540). Location is uncertain based on available descriptions.

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
COMMENTS: Vein inferred.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Paleozoic	Lardeau	Undefined Formation	

LITHOLOGY: Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The North Star showing is located about 1.6 kilometres from the Jumbo occurrence (082N 048). It was reported that an adit, 42 metres long, was driven to intersect a vein with argentiferous galena (Minister of Mines Annual Report 1899, page 678).

The hostrock at the showing is inferred from the nearby Jumbo and Sanquhar (082N 047) occurrences and consists of northwest striking Lower Cambrian and younger Lardeau Group slates. A quartz vein (inferred) vein hosts argentiferous galena.

BIBLIOGRAPHY

EMPR AR *1896-540; 1899-678
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 049**

MINFILE NUMBER: **082N 050**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOOD LUCK**, TOUGH NUT, CINNAMON,
COPPER CLIFF, BIG FOUR, BIG GOAT,
HIGH EAGLE, HIGH HAWK

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 082N03E
BC MAP:
LATITUDE: 51 11 25 N
LONGITUDE: 117 01 35 W
ELEVATION: 2377 Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS: Centre of a series of old Crown grants on NTS Map 82N/3E, Edition 1 that may be the claims mentioned in Minister of Mines Annual Report 1903, page H106, at the headwaters of McLean Creek, a tributary to Spillimacheen River, about 10 kilometres southwest of Golden.

Underground
MINING DIVISION: Golden
UTM ZONE: 11 (NAD 83)
NORTHING: 5670985
EASTING: 498156

COMMODITIES: Copper Gold

MINERALS

SIGNIFICANT: Chalcopyrite
COMMENTS: Inferred from "copper ore".
ASSOCIATED: Quartz
COMMENTS: Inferred from "vein".
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Quartzite
Limestone
Phyllite
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Purcell Mountains
RELATIONSHIP:
GRADE:

CAPSULE GEOLOGY

The Good Luck property is situated at the headwaters of McLean Creek, a tributary to Spillimacheen River, about 10 kilometres southwest of Golden. The location of the centre of old Crown grants is inferred from the description given in Minister of Mines Annual Report 1903, page H106 and NTS Map 82N/3E, Edition 1. Underground development by the Labourers' Co-operative Gold, Silver and Copper Mining Co. Ltd. consisted of a total of 519 metres of drifts, crosscuts and shafts.

The geology of the area is inferred from Geological Survey of Canada Open File 481 which indicates Lower Cambrian quartzite, limestone, phyllite and argillite. Quartz veins (inferred) from 0.9 to 4.5 metres wide host up to 45 centimetres of copper ore (chalcopyrite is inferred) with values from \$4 to \$8 in gold (Minister of Mines Annual Report 1903, page H106).

BIBLIOGRAPHY

EMPR AR 1900-803; 1902-H133; *1903-H106; 1904-G112; 1905-J143
EMPR BC METAL MM00558
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/25

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 051**

NATIONAL MINERAL INVENTORY: 082N3 Cu1

NAME(S): **TENNESSEE**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N03E
BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 03 04 N
LONGITUDE: 117 01 35 W

NORTHING: 5655509
EASTING: 498150

ELEVATION: 1866 Metres

LOCATION ACCURACY: Within 5 KM

COMMENTS: The property is located on the north side of Bobbie Burns Creek on what was locally known as "Spruce Tree Creek", which apparently joins Bobbie Burns Creek, about 29 kilometres south-southwest of Golden (Minister of Mines Annual Report 1917, page F143).

COMMODITIES: Copper Gold Silver

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Horsethief Creek	Undefined Formation	

LITHOLOGY: Slate
Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Purcell Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Tennessee property is located on the north side of Bobbie Burns Creek about 29 kilometres south-southwest of Golden. The claims were located on what was known locally as "Spruce Tree Creek", which apparently joins Bobbie Burns Creek at about 1524 metres elevation. The property adjoined the lower claims of the Tarheel property (082N 055). During the period 1916-1917, a 5-metre drift adit was driven. A small amount (unknown tonnage) of ore was extracted from near the portal of the adit and shipped to Trail (Minister of Mines Annual Report 1917, page F143).

The property is underlain by slates and schists of the Hadrynian Horsethief Creek Group. A quartz vein varying from 0.9 to 3 metres in width strikes northwesterly and dips 50 degrees, approximately conformable with the enclosing hostrocks. The vein contains narrow seams of chalcopyrite occurring at infrequent intervals. "The vein carries values in gold and silver" (Minister of Mines Annual Report 1916, page K188). Mineralization near the portal of the adit occurred over a width of 45 centimetres.

BIBLIOGRAPHY

EMPR AR 1916-K188; *1917-F143,F144
EMPR BC METAL MM00584
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 052**

NATIONAL MINERAL INVENTORY:

NAME(S): **PORPHYRY AND IRON HILL (L.268)**, PORPHYRY AND IRON HILL, EASTERN TOWNSHIP FR (L.269),
EAGLE CLIFF (L.307)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N06E
BC MAP:

Underground

MINING DIVISION: Golden

LATITUDE: 51 15 56 N
LONGITUDE: 117 06 57 W
ELEVATION: 1768 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5679363
EASTING: 491919

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of Lot 268, 1 kilometre northwest of the confluence of Canyon
and South Canyon creeks, about 8 kilometres west-southwest of Golden
(Minister of Mines Annual Report 1899, page 665).

COMMODITIES: Copper Silver

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Lower Cambrian

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Quartzite
Slate
Felsite Dike

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Purcell Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Porphyry and Iron Hill property is located 1 kilometre northwest of the confluence of Canyon and South Canyon creeks, about 8 kilometres west-southwest of Golden. Early work comprised adits and crosscuts totalling about 90 metres.

Bedrock geology consists of Lower Cambrian quartzite and slate cut by felsite dikes (the age is inferred from Geological Survey of Canada Open File 481). A flat-lying quartz vein (10 to 30 degree dips) from 0.7 to 1.8 metres wide is hosted in quartzite and is mineralized with chalcopyrite which attains widths of 10 centimetres to 1 metre.

BIBLIOGRAPHY

EMPR AR 1898-1053; *1899-594,664,665; 1900-802
EMPR BC METAL MM00574
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/26

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 053**

NATIONAL MINERAL INVENTORY: 082N7 Pb2

NAME(S): **SUNDAY**, MONDAY FR., SUNDAY (L.211)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N07E
BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 19 48 N
LONGITUDE: 116 32 35 W
ELEVATION: 1188 Metres

NORTHING: 5686622
EASTING: 531836

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, on the steep bank of the Ottertail River near its confluence with Haygarth Creek, just east of the Canadian Pacific Railway and Highway 1, in Yoho National Park, about 10 kilometres south of Field (Geological Survey of Canada Memoir 55, Map 142A).

COMMODITIES: Lead Silver Copper Zinc

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrite Chalcopyrite Tetrahedrite
ASSOCIATED: Fluorite Calcite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Podiform
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Middle Cambrian

GROUP

Chancellor

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Calcareous Slate
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SHAFT

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1921

COMMODITY

	<u>GRADE</u>	
Silver	178.2000	Grams per tonne
Lead	25.7000	Per cent
Zinc	17.8000	Per cent

COMMENTS: Galena and sphalerite in a calcite gangue.
REFERENCE: Minister of Mines Annual Report 1921, page G123.

CAPSULE GEOLOGY

The Sunday occurrence is situated along the confluence of Haygarth Creek and Ottertail River, just east of the Canadian Pacific Railway, in Yoho National Park about 28 kilometres east of Golden.

Highly cleaved, soft, greenish calcareous slates and argillites of the Middle Cambrian Chancellor Group are host to fluorite-calcite veins which occur along and across the bedding of the slate, and as pockets along fractures or small faults. The veins contain sphalerite, galena, pyrite, chalcopyrite and minor tetrahedrite.

In 1921, a sample of a little ore which had been left near the top of the shaft, consisting of galena and sphalerite in a calcite gangue, assayed 17.8 per cent zinc, 25.7 per cent lead, 178.2 grams per tonne silver and 0.34 gram per tonne gold (Minister of Mines Annual Report 1921, page G123).

Workings prior to 1911 included a 22-metre adit in the upper part of the river bank and a 30-metre shaft sunk near river level. In 1901, six tonnes of ore, reportedly extracted from the bottom of the shaft, was shipped to a smelter. In 1921, an adit was driven in talus or clay-like material for 38 metres.

BIBLIOGRAPHY

EMPR AR 1898-1054; 1899-594; 1907-L217; *1921-G123,G124
EMPR BC METAL MM00583

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1092
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC EC GEOL No. 6, p. 30
GSC MAP 1496A
GSC MEM *55, pp. 224-225
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 054**

NATIONAL MINERAL INVENTORY: 082N4 Ag6

NAME(S): **CRYSTAL AND WONDERFUL**, CRYSTAL (L.203), WONDERFUL

STATUS: Prospect

Underground

MINING DIVISION: Revelstoke

REGIONS: British Columbia

NTS MAP: 082N04E

BC MAP:

LATITUDE: 51 13 20 N

LONGITUDE: 117 44 21 W

ELEVATION: 1920 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Opencut on the Crystal claim (Lot 203) which adjoins the Lanark mine (082N 012) property to the east, located on the southerly slopes of Fidelity Peak 2 kilometres north of the Trans-Canada Highway, about 58 kilometres west of Golden (Minister of Mines Annual Report 1923, page A233).

UTM ZONE: 11 (NAD 83)

NORTHING: 5674797

EASTING: 448381

COMMODITIES: Lead

Silver

Zinc

Gold

MINERALS

SIGNIFICANT: Galena

Sphalerite

ASSOCIATED: Quartz

Calcite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

Disseminated

CLASSIFICATION: Replacement

Epigenetic

Hydrothermal

DIMENSION: 4

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Mineralized band on the original Wonderful claims.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Lardeau

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Carbonaceous Schist

Slate

Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Selkirk Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: ADIT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1923

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

2588.1000

Grams per tonne

Gold

0.6800

Grams per tonne

Lead

60.0000

Per cent

Zinc

6.0000

Per cent

COMMENTS: Sample across 38 centimetres of galena.

REFERENCE: Minister of Mines Annual Report 1923, page A233.

CAPSULE GEOLOGY

The Crystal and Wonderful property adjoins the Lanark mine (082N 012) to the east, and is located on the southerly slopes of Fidelity Peak 2 kilometres north of the Trans-Canada Highway, about 58 kilometres west of Golden.

The property is underlain by Lower Cambrian and younger Lardeau Group carbonaceous schist, slate and limestone which strike northwest and dip steeply northeast. There are numerous showings of galena on the Crystal claim; the main Lanark vein is reported to strike across the claim. An opencut exposes about 45 centimetres of disseminated galena in a quartz vein hosted in slates and carbonaceous schist. The vein is conformable to the strike and dip of the hostrocks. A short tunnel in the eastern part of the claim near the Lanark property has been driven on the inferred extension of the Lanark vein; 15 centimetres of galena in a small quartz vein was intersected.

On the original Wonderful claims, to the west and adjoining the Crystal claim, a mineralized band of shattered limestone with

CAPSULE GEOLOGY

quartz-calcite veins are conformable with the enclosing schist hangingwall and limestone footwall. The band strikes almost parallel to the Lanark vein which is 804 metres to the east. The band dips 50 degrees northeast and is 3.6 to 4.5 metres wide. Mineralization consists of bunches, stringers and lenses of galena and lesser sphalerite. Two short adits and a shallow shaft explored this mineralized band. In the lower adit, a sample across 38 centimetres of galena yielded 60 per cent lead, 6 per cent zinc, 2588.1 grams per tonne silver and 0.68 gram per tonne gold (Minister of Mines Annual Report 1923, page A233).

BIBLIOGRAPHY

EMPR AR 1899-279; 1890-364; 1896-557; 1920-N127; *1923-A233
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT 1928 Part A, p. 188

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/14

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 055**

NATIONAL MINERAL INVENTORY: 082N3 Cu2

NAME(S): **TARHEEL**, RAINBOW

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N03E
BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 18 N
LONGITUDE: 117 03 08 W
ELEVATION: 1889 Metres

NORTHING: 5654089
EASTING: 496339

LOCATION ACCURACY: Within 5 KM

COMMENTS: The lower showings are located on the north side of Bobbie Burns Creek about 29 kilometres south-southwest of Golden (Minister of Mines Annual Report 1917, page F143).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Pyrite Chalcopyrite

ASSOCIATED: Quartz

ALTERATION: Malachite Limonite

COMMENTS: Minerals are inferred from "copper and iron oxide staining".

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic

Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Slate
Schist
Argillite
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Purcell Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Tarheel property is located on the north side of Bobbie Burns Creek about 29 kilometres south-southwest of Golden. The lower claims were reportedly located at the 1889-metre elevation, 365 metres above what was known locally as "Spruce Tree Camp" on Bobbie Burns Creek. The upper showing, staked as the Rainbow claim, is located on top of a narrow ridge at the 2377-metre elevation. Past work included a 36-metre drift adit driven on a strong, well-defined quartz vein at the 1889-metre elevation (lower showing), and a 30-metre drift adit driven along a quartz vein at the 2377-metre elevation (upper showing) (Minister of Mines Annual Report 1917, page F143).

The property is underlain by Hadrynian Horsethief Creek Group metasediments. The lower showing comprises a well-defined quartz vein within northwest striking slates and schists. The vein is locally mineralized with pyrite and chalcopyrite, and its strike and dip is almost identical to the hostrocks. For a short distance above the adit that follows this vein, intercalated bands of quartz and schist are copper stained (malachite?) for over a 4.8 metre width.

At the upper showing, which contains similar mineralization, a quartz vein is locally well mineralized above an adit, over a width of 30 centimetres. The hostrocks in this vicinity are contorted and consist of broken argillite and some limestone, which are stained with iron oxides (limonite?).

BIBLIOGRAPHY

EMPR AR *1917-F143,F176; 1918-K153; 1919-N113
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 4-1961; 43-1962
GSC OF 481

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1096
REPORT: RGEN0100

BIBLIOGRAPHY

GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 056**

NATIONAL MINERAL INVENTORY:

NAME(S): **SEWARD**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N06E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 27 50 N
LONGITUDE: 117 01 05 W
ELEVATION: 1219 Metres

NORTHING: 5701413
EASTING: 498746

LOCATION ACCURACY: Within 1 KM

COMMENTS: Several showings on the southerly slope of Willowbank Mountain, at Polecabin Creek and on a ridge separating Goat Mountain and Polecabin creeks, east of the Columbia River and about 20 kilometres north of Golden (Minister of Mines Annual Report 1935, page E25).

COMMODITIES: Silver Lead Copper

MINERALS

SIGNIFICANT: Galena Tetrahedrite
ASSOCIATED: Quartz Calcite

ALTERATION: Malachite

COMMENTS: Inferred from "copper stain".

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement Epigenetic Hydrothermal
TYPE: J01 Polymetallic manto Ag-Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Limestone
Shale

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

INVENTORY

ORE ZONE: SHOWING

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1935

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver	342.8000	Grams per tonne
Copper	1.5000	Per cent
Lead	1.5000	Per cent

REFERENCE: Minister of Mines Annual Report 1935, page E25.

CAPSULE GEOLOGY

The Seward property is on the southerly slope of Willowbank Mountain, 6 kilometres east of the Columbia River and about 20 kilometres north of Golden. Several mineralized showings occur in the vicinity of Polecabin Creek: the first at creek level, the second at a point about 2.8 kilometres northwest of the creek level showing on a ridge on the southwest side of Polecabin Creek, and a third location at a point opposite the second showing on the northeast side of Polecabin creek.

The area is underlain by Cambrian to Devonian massive blue limestone which overlie thin-bedded shales. The showings comprise intersecting veins and veinlets of quartz-calcite hosted in limestone. Veins vary from 5 centimetres to 1.2 metres wide, are occasionally "copper stained" (malachite?) and are mineralized with galena and minor amounts of tetrahedrite. A sample of quartz with copper stain and some tetrahedrite analysed 342.8 grams per tonne silver, 1.5 per cent lead and 1.5 per cent copper (Minister of Mines Annual Report 1935, page E25).

BIBLIOGRAPHY

EMPR AR *1935-E25, E26

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1098
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 057**

NATIONAL MINERAL INVENTORY: 082N5 Cu1

NAME(S): **SILVER BOW**, COPPER CROWN, COPPER HILL

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N05E
BC MAP:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 06 N
LONGITUDE: 117 39 57 W
ELEVATION: 1981 Metres

NORTHING: 5681729
EASTING: 453566

LOCATION ACCURACY: Within 5 KM

COMMENTS: The occurrence is situated in Glacier National Park near Copper Peaks, about 6 kilometres north of the Flat Creek Station of the Canadian Pacific Railway, 56 kilometres west of Golden (Geological Survey of Canada Annual Report 1892-93 Volume VI, pages 60S,61S).

COMMODITIES: Copper Silver Gold

MINERALS

SIGNIFICANT: Chalcopyrite Bornite
ASSOCIATED: Quartz Carbonate Hematite Malachite
ALTERATION: Hematite Malachite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Talcose Schist
Chloritic Schist

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

Ancestral North America
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Selkirk Mountains

GRADE:

CAPSULE GEOLOGY

The Silver Bow occurrence is situated in Glacier National Park near Copper Peaks, about 6 kilometres north of the Flat Creek Station of the Canadian Pacific Railway, 56 kilometres west of Golden.

A quartz-carbonate vein, 0.3 to 0.9 metre wide, is mineralized with chalcopyrite and bornite; hematite and malachite are also evident. The vein dips 45 degrees to the west. Hostrocks are Lower Paleozoic talcose and chloritic schists which strike northwest and dip northeast.

In 1896, workings consisted of 2 adits, 27 and 21 metres long respectively. In 1894, 16 tonnes of ore was shipped and yielded assays of 66 per cent lead, \$25 in gold and 274.2 grams per tonne silver (Geological Survey of Canada Annual Report 1894, page 167S).

BIBLIOGRAPHY

EMPR AR 1896-540; 1898-1189; 1899-674,677,847
GSC ANN RPT *1892-93 Volume VI, pp. 60R,60S,61S; 1894, p. 167S
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 058**

NATIONAL MINERAL INVENTORY: 082N4 Pb1

NAME(S): **KLONDYKE**, SILVER GRIZZLY

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 14 06 N
LONGITUDE: 117 47 51 W
ELEVATION: 884 Metres

NORTHING: 5676260
EASTING: 444323

LOCATION ACCURACY: Within 500M

COMMENTS: An adit is situated on the west bank of the Tangier River a few metres above water level, 1.5 kilometres south of the rivers confluence with Fang Creek, about 12 kilometres north of Albert Canyon Station of the Canadian Pacific Railway, approximately 60 kilometres west of Golden (Assessment Report 9993).

COMMODITIES: Lead Zinc Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

Ancestral North America
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Selkirk Mountains

GRADE:

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1981

SAMPLE TYPE: Channel

COMMODITY

Lead 0.0800 Per cent

Zinc 0.1900 Per cent

COMMENTS: Sample across 24 centimetres of a sparsely mineralized quartz vein.

REFERENCE: Assessment Report 9993.

CAPSULE GEOLOGY

An adit at the Klondyke occurrence is situated on the west bank of the Tangier River a few metres above water level, 1.5 kilometres south of the rivers confluence with Fang Creek, about 12 kilometres north of Albert Canyon Station of the Canadian Pacific Railway, approximately 60 kilometres west of Golden.

The adit explores quartz veins and lenses from 10 to 50 centimetres wide hosted in Lower Paleozoic slate. Sparse mineralization in the veins consists of pyrite, galena, sphalerite and chalcopyrite. A 24-centimetre channel sample across a vein in the adit yielded 0.08 per cent lead and 0.19 per cent zinc (Assessment Report 9993). Approximately 35 metres directly above the adit, a heavily oxidized quartz outcropping contains pyrite and limonite.

Historical work comprised 3 adits totalling 61 metres.

BIBLIOGRAPHY

EMPR AR 1929-C333; 1930-A260
EMPR ASS RPT *9993
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1101
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 059**

NATIONAL MINERAL INVENTORY: 082N4 Ag4

NAME(S): **BLUE BELL**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 10 32 N
LONGITUDE: 117 44 06 W
ELEVATION: 1371 Metres

NORTHING: 5669604
EASTING: 448621

LOCATION ACCURACY: Within 1 KM

COMMENTS: Shaft and adit, 1.6 kilometres southeast of Illecillewaet Station of the Canadian Pacific Railway, about 42 kilometres east-northeast of Revelstoke (Minister of Mines Annual Report 1899, page 677).

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Paleozoic

GROUP

Lardeau

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Carbonaceous Limy Slate
Limestone
Siltstone
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Blue Bell showing is located 1.6 kilometres southeast of Illecillewaet Station of the Canadian Pacific Railway, about 42 kilometres east-northeast of Revelstoke.

The showing is underlain by carbonaceous limy slate, limestone, siltstone and quartzite of the Lower Cambrian and younger Lardeau Group. A shaft and tunnel explore a quartz vein 0.9 metre wide mineralized with argentiferous galena.

A 4.5-tonne shipment of ore was made to England in 1899.

BIBLIOGRAPHY

EMPR AR 1893-1050; 1896-540; *1899-677
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 060**

NATIONAL MINERAL INVENTORY: 082N1 Pb1

NAME(S): **TOKUMM CREEK**, PHOEBE, VERMILION,
MARGARET

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N01E
BC MAP:

MINING DIVISION: Golden

LATITUDE: 51 11 35 N
LONGITUDE: 116 08 04 W
ELEVATION: 1524 Metres

UTM ZONE: 11 (NAD 83)

LOCATION ACCURACY: Within 1 KM

NORTHING: 5671650
EASTING: 560483

COMMENTS: The showing is in Kootenay National Park and lies along the south side of Tokumm Creek, nears its confluence with the Vermilion River, about 58 kilometres east-southeast of Golden (National Mineral Inventory 82N/1 Pb 1).

COMMODITIES: Lead

MINERALS

SIGNIFICANT: Ochre
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Industrial Min.
COMMENTS: "Lead ochre".

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

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

LITHOLOGY: Sandstone
Shale
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Tokumm Creek showing was staked in 1912 and limited exploration work, mainly for assessment requirements, had been reported. The work included trenching and driving a short adit. In 1915, about 9 tonnes of "lead ochre" ore were reported shipped to Trail from the Vermilion and Margaret claims.

Geological Survey of Canada Open File 481 indicates the area to be underlain by Cambrian to Devonian sandstone, shale and limestone.

BIBLIOGRAPHY

EMPR AR 1913-K117; 1921-G165
EMR MP CORPFILE (Zenith Mines Ltd.)
GSC MAP 1476A
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/23

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 061**

NATIONAL MINERAL INVENTORY: 082N4 Ag2

NAME(S): **SILVER BELL**, LAURIER

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N04E
BC MAP:

Underground

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 11 31 N
LONGITUDE: 117 44 03 W
ELEVATION: 1280 Metres

NORTHING: 5671426
EASTING: 448697

LOCATION ACCURACY: Within 500M

COMMENTS: Main adit, located 750 metres east of Illecillewaet River and the Trans-Canada Highway, about 1.5 kilometres northeast of Illecillewaet Station of the Canadian Pacific Railway, 42 kilometres east-northeast of Revelstoke (Assessment Report 12951).

COMMODITIES: Lead Silver Zinc

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: Quartz vein.

STRIKE/DIP: 255/63N

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP
Paleozoic Lardeau

FORMATION
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Carbonaceous Slaty Shale

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1983

SAMPLE TYPE: Chip

COMMODITY

GRADE

Silver	257.1000	Grams per tonne
Lead	7.5000	Per cent
Zinc	14.2500	Per cent

COMMENTS: Sample from adit dump material.

REFERENCE: Assessment Report 12951.

CAPSULE GEOLOGY

The Silver Bell workings are situated 750 metres east of Illecillewaet River and the Trans-Canada Highway, about 1.5 kilometres northeast of Illecillewaet Station of the Canadian Pacific Railway, 42 kilometres east-northeast of Revelstoke.

In the vicinity of the adits, a series of parallel quartz veins striking east and dipping from 50 to 75 degrees north, are hosted in carbonaceous slaty shales of the Lower Cambrian and younger Lardeau Group. The veins appear to conform to the bedding of the shale.

The main adit follows a quartz vein 20 to 45 centimetres wide, striking 255 degrees and dipping 50 to 75 degrees north. Mineralization in the vein comprises galena, sphalerite and pyrite. A chip sample taken from dump material at the adit yielded 7.5 per cent lead, 14.25 per cent zinc and 257.1 grams per tonne silver (Assessment Report 12951).

A trial shipment of ore was made in 1901.

BIBLIOGRAPHY

EMPR AR 1898-1062; 1900-811; 1901-1016; 1915-K450; 1931-A148
EMPR ASS RPT *12951
EMPR PF (82N General File - Canadian Superior Exploration

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1105
REPORT: RGEN0100

BIBLIOGRAPHY

geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/15

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 062**

NATIONAL MINERAL INVENTORY: 082N7 Pb2

NAME(S): **EMPIRE**, EMPIRE (L.506)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N07E
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 19 47 N
LONGITUDE: 116 32 43 W
ELEVATION: 1219 Metres

NORTHING: 5686590
EASTING: 531681

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, 100 metres south of the confluence of Ottertail River and Haygarth Creek and across from the Sunday occurrence (082N 053), east of the Canadian Pacific Railway and Highway 1 in Yoho National Park, 10 kilometres south of Field (Geological Survey of Canada Memoir 55, Map 142A).

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Chalcopyrite Tetrahedrite Galena Bornite

ASSOCIATED: Quartz Calcite Sericite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein

CLASSIFICATION: Epigenetic Hydrothermal

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>
Middle Cambrian	Chancellor	Undefined Formation	

LITHOLOGY: Calcareous Slate
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

An old tunnel and prospect holes at the Empire occurrence reveal fractured, greenish, soft argillites and calcareous slates of the Middle Cambrian Chancellor Group. The fractures are filled with quartz, calcite and sericite mineralized with chalcopyrite, tetrahedrite, galena and bornite. The sulphides sometimes occur in small pockets along fractures or between the veins and the highly cleaved slates.

BIBLIOGRAPHY

EMPR AR 1899-594; 1921-G123
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 1496A
GSC MEM *55, p. 224
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 063**

NATIONAL MINERAL INVENTORY:

NAME(S): **ILLECILLEWAET**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 11 12 N
LONGITUDE: 117 45 57 W
ELEVATION: 1189 Metres

NORTHING: 5670862
EASTING: 446478

LOCATION ACCURACY: Within 500M

COMMENTS: A pit, located 1000 metres west of Illecillewaet Station of the Canadian Pacific Railway, about 40 kilometres east-northeast of Revelstoke (Open File 1988-19, page 79).

COMMODITIES: Talc Asbestos

MINERALS

SIGNIFICANT: Talc Actinolite
ALTERATION: Talc Actinolite
ALTERATION TYPE: Talc Serpentin'zn
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Shear
CLASSIFICATION: Replacement Hydrothermal Industrial Min.
TYPE: E08 Carbonate-hosted talc

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Undefined Formation	

LITHOLOGY: Dolomite
Limestone
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP:
GRADE:

CAPSULE GEOLOGY

At the Illecillewaet showing, a pit 1 by 5 metres long exposes a shear zone in Lower Cambrian and younger Lardeau Group slates and limestone (dolomite?). Talc is found in the shear, and in outcrops extending for 600 metres. The talc is greenish grey to white, translucent and mixed with pale green actinolite (fibrous actinolite is referred to as amphibole asbestos in old reports).

An occurrence of steatite in dolomite is also reported about 10 kilometres west of the Illecillewaet showing, on Ross Peak.

BIBLIOGRAPHY

EMPR AR 1921-G153; 1960-133
EMPR OF *1988-19, pp. 77,79; 1995-25
EMPR PF (82N General File - Canadian Superior Exploration geochemistry maps, 82N/4E,4W, 1976)
GSC EC GEOL No. 2, p. 50
GSC MAP 237A; 4-1961; 43-1962
GSC OF 481
GSC P 62-32
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/15

CODED BY: GSB
REVISED BY: MM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 064**

NATIONAL MINERAL INVENTORY:

NAME(S): **CASTLEDALE**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N02W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 30 N
LONGITUDE: 116 47 40 W
ELEVATION: 1630 Metres

NORTHING: 5658185
EASTING: 514400

LOCATION ACCURACY: Within 5 KM

COMMENTS: The occurrence is situated on the ridge between the Columbia and Spillimacheen rivers at a point 11 kilometres due west of the community of Parson (Minister of Mines Annual Report 1920, page N109).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
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

Hadrynian

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY:

Shale
Silty Shale
Quartz Siltstone
Sandstone
Limestone
Dolomite
Quartz Pebble Conglomerate
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Purcell Mountains

CAPSULE GEOLOGY

The Castledale occurrence is situated on the ridge between the Columbia and Spillimacheen rivers at a point 11 kilometres due west of the community of Parson. Considerable tunnelling was done on this property. In these workings the quartz vein does not show continuity and only a few small pockets of quartz mineralized with chalcopyrite were intersected (Minister of Mines Annual Report 1920, page N109).

The geology of the area is inferred from Geological Survey of Canada Map 1502A. In the Castledale occurrence area, Hadrynian Horsethief Creek Group sedimentary rocks are indicated. The group consists of shales and silty shales with thin interbeds of quartz siltstone and sandstone, limestone and dolomite, sandstone and quartz pebble conglomerate, and interbedded quartz sandstone and slate.

BIBLIOGRAPHY

EMPR AR *1920-N109
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 1502A
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/16

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 065**

NATIONAL MINERAL INVENTORY:

NAME(S): **I.X.L.**, CONDOR

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 01 36 N
LONGITUDE: 116 36 22 W
ELEVATION: 975 Metres

NORTHING: 5652864
EASTING: 527623

LOCATION ACCURACY: Within 5 KM

COMMENTS: The showing is located about 5 kilometres south of the village of Parson, about 1 kilometre west of the Columbia River (Minister of Mines Annual Report 1917, page F144).

COMMODITIES: Lead Zinc Silver

MINERALS

SIGNIFICANT: Galena Sphalerite
COMMENTS: Inferred from assay results.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unknown
CLASSIFICATION: Unknown

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Upper Cambrian	Undefined Group	Canyon Creek	

LITHOLOGY: Slate
 Calcareous Slate
 Limestone

HOSTROCK COMMENTS: Hostrocks are inferred from Geological Survey of Canada Map 1501A.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Purcell Mountains
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1917
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 17.0000 Grams per tonne
Lead 4.0000 Per cent
Zinc 3.0000 Per cent

COMMENTS: Values range from 17 to 34 grams per tonne silver, 4 to 6 per cent lead and 3 to 37 per cent zinc.

REFERENCE: Minister of Mines Annual Report 1917, page F144.

CAPSULE GEOLOGY

The I.X.L. and Condor claims were located near Castledale; very little work had been done, but according to reports there is a strong surface showing of low-grade ore (Minister of Mines Annual Report 1917, page F144).

The geology of the area is inferred from Geological Survey of Canada Map 1501A and consists of grey, finely laminated, partly calcareous slate with thin interbeds of limestone locally, of the Upper Cambrian Canyon Creek Formation. Galena and sphalerite are inferred from the assays of a sample of the ore which analysed from 17 to 34 grams per tonne silver, 4 to 6 per cent lead and 3 to 37 per cent zinc (Minister of Mines Annual Report 1917, page F144).

BIBLIOGRAPHY

EMPR AR *1917-F144
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 1501A
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 066**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARIE**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 14 00 N
LONGITUDE: 116 43 52 W
ELEVATION: 1798 Metres

NORTHING: 5675807
EASTING: 518773

LOCATION ACCURACY: Within 5 KM

COMMENTS: The showing is situated between the Kicking Horse and Columbia rivers, about 10 kilometres east-southeast of Golden (Minister of Mines Annual Report 1920, page N109).

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Galena
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Cambrian-Ordovician

GROUP

McKay

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Slate
Shale
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: OPENCUT

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1920

COMMODITY

Silver

GRADE

82.2000

Grams per tonne

Lead

66.0000

Per cent

COMMENTS: Sorted ore.

REFERENCE: Minister of Mines Annual Report 1920, page N109.

CAPSULE GEOLOGY

The Marie showing is situated between the Kicking Horse and Columbia rivers, about 10 kilometres east-southeast of Golden.

Several quartz stringers mineralized with galena have been exposed by an opencut. Some of the sorted ore assayed 66 per cent lead and 82.2 grams per tonne silver (Minister of Mines Annual Report 1920, page N109). Hostrocks are inferred from Geological Survey of Canada Map 1501A which indicate Upper Cambrian to Middle Ordovician McKay Group slate, shale and limestone.

BIBLIOGRAPHY

EMPR AR *1920-N109
GSC MAP 295A; 1501A
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/25

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1111
REPORT: RGEN0100

MINFILE NUMBER: **082N 067**

NATIONAL MINERAL INVENTORY: 082N4 Pb5

NAME(S): **SILVER GLANCE**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

MINING DIVISION: Golden
Revelstoke
UTM ZONE: 11 (NAD 83)

LATITUDE: 51 14 52 N
LONGITUDE: 117 46 23 W
ELEVATION: 2133 Metres

NORTHING: 5677663
EASTING: 446045

LOCATION ACCURACY: Within 5 KM

COMMENTS: Old claims situated above timber-line at the headwaters of "9-Mile Creek", a tributary of Tangier River, about 28 kilometres north of Albert Canyon Station on the Canadian Pacific Railway, 44 kilometres northeast of Revelstoke (Minister of Mines Annual Report 1929, page C333).

COMMODITIES: Lead Silver Tin

MINERALS

SIGNIFICANT: Galena Stannite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Replacement
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Paleozoic	Lardeau	Undefined Formation	

LITHOLOGY: Limestone
Slate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Silver Glance showing is located northwest of the Lanark occurrence (082N 012), above timber-line at the headwaters of "9-Mile Creek", a tributary of Tangier River, about 28 kilometres north of Albert Canyon Station on the Canadian Pacific Railway, 44 kilometres northeast of Revelstoke.

The geology is similar to that at Lanark and consists of limestone and slate of the Lower Cambrian and younger Lardeau Group. Stannite is reported to occur with argentiferous galena in limestone.

BIBLIOGRAPHY

EMPR AR *1929-C333
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/23

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 067**

MINFILE NUMBER: **082N 068**

NATIONAL MINERAL INVENTORY: 082N4 Fsp1

NAME(S): **SILVER CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 07 31 N
LONGITUDE: 117 54 19 W
ELEVATION: 792 Metres

NORTHING: 5664146
EASTING: 436649

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrop in Woolsey (Silver) Creek about 2.4 kilometres south of its confluence with West Woolsey Creek, near the boundary of Mount Revelstoke National Park, 30 kilometres northeast of Revelstoke (Geological Survey of Canada Summary Report 1928 Part A, page 149).

COMMODITIES: Fluorite

MINERALS

SIGNIFICANT: Fluorite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Epigenetic Industrial Min.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic
Devonian

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Lamprophyre Dike
Gneiss
Granite
Gneissic Granitic Rock
Quartzite
Mica Schist
Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

Kootenay
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Selkirk Mountains

GRADE:

CAPSULE GEOLOGY

The Silver Creek occurrence area is underlain by Lower Paleozoic mica schists, quartzites and small bands of fine grained crystalline limestones cut by numerous dikes, sills and irregular bodies of Devonian gneissic granitic rocks.

In Woolsey (Silver) Creek, about 2.4 kilometres below its confluence with West Woolsey Creek, a highly altered, dark grey, fine-grained "lamprophyre dike" consists of biotite, quartz and calcite. Fluorite and quartz fill amygdules (Geological Survey of Canada Summary Report 1928 Part A, page 149).

BIBLIOGRAPHY

EMPR OF 1992-16
EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GSC SUM RPT *1928 Part A, pp. 148,149

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/23

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1113
REPORT: RGEN0100

MINFILE NUMBER: **082N 069**

NATIONAL MINERAL INVENTORY: 082N7 Pb3

NAME(S): **PORCUPINE CREEK**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N07E
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 43 N
LONGITUDE: 116 39 19 W
ELEVATION: 1310 Metres

NORTHING: 5682718
EASTING: 524035

LOCATION ACCURACY: Within 1 KM

COMMENTS: The showing is located about 4.8 kilometres up the Porcupine Creek valley in Yoho National Park, approximately 16 kilometres southwest of Field (Geological Survey of Canada Memoir 55, page 234).

COMMODITIES: Lead Silver

MINERALS

SIGNIFICANT: Pyrite Galena
ASSOCIATED: Fluorite Ankerite Muscovite Lepidomelane
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: E11 Carbonate-hosted fluorspar

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Middle Cambrian

GROUP

Chancellor

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Slate
Calcareous Slate

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

Considerable prospecting had been done in the Porcupine Creek area prior to 1910. About 4.8 kilometres up the valley, small fractures in slate and calcareous slate of the Middle Cambrian Chancellor Group contain vein material, 2 to 15 centimetres wide, consisting of pyrite and argentiferous galena in a gangue of fluorite, ankerite, muscovite and lepidomelane.

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 1496A
GSC MEM *55, pp. 234-235
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 069**

MINFILE NUMBER: **082N 070**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLDEN**

MINING DIVISION: Golden

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082N07W
 BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 18 46 N
 LONGITUDE: 116 59 12 W
 ELEVATION: 782 Metres

NORTHING: 5684608
 EASTING: 500929

LOCATION ACCURACY: Within 5 KM

COMMENTS: Columbia River flats, about 2 kilometres north of Golden. Location description is vague (Geological Survey of Canada Memoir 25, page 69).

COMMODITIES: Clay

MINERALS

SIGNIFICANT: Clay
 MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
 CLASSIFICATION: Residual Industrial Min.
 TYPE: B06 Fireclay E07 Sedimentary kaolin

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Calcareous Silty Clay

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
 TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

CAPSULE GEOLOGY

Golden lies in the Columbia River valley, and along the Canadian Pacific Railway. The river is bordered by flat lands and locally underlying them is considerable silty clay of flood-plain origin. Some of it is very plastic, sticky material, while at other times it is very sandy.

Results of laboratory tests on this clay is as follows. It is a highly calcareous, yellowish silty clay, which worked up with 32 per cent of water to a mass of only moderately plastic character, and hardly coherent enough to work in any but a soft-mud brick machine. The average tensile strength was 50 pounds per square inch and the average air shrinkage 4.5 per cent. The results obtained on firing are given below:

Cone	Fire Shrinkage (%)	Absorption (%)	Colour
010	Slightly swelled	42.6	Buff
05	Slightly swelled	42.6	Cream
03	Slightly swelled	45.2	Cream
1	Past vitrification		
2	Fused		

This clay burns to an exceedingly porous body, and softens rapidly as its point of fusion is approached. It could be used for cheap majolica and common brick (Geological Survey of Canada Memoir 25, pages 69, 70).

BIBLIOGRAPHY

EMPR BULL 30, p. 53
 EMPR PF (82N General File - Prospector's map, 1937)
 GSC MAP 295A; 1497A
 GSC MEM *25, pp. 69,70
 GSC OF 481

DATE CODED: 1985/07/24
 DATE REVISED: 1993/08/26

CODED BY: GSB
 REVISED BY: GO

FIELD CHECK: N
 FIELD CHECK: N

MINFILE NUMBER: **082N 071**

NATIONAL MINERAL INVENTORY:

NAME(S): **SILVER MOON**, SILVER MOON (L.11708), MOUNT WHYMPER

STATUS: Prospect

Underground

MINING DIVISION: Golden

REGIONS: British Columbia

NTS MAP: 082N01E

BC MAP:

LATITUDE: 51 12 57 N

LONGITUDE: 116 04 54 W

ELEVATION: 1890 Metres

LOCATION ACCURACY: Within 500M

COMMENTS:

Three talc bodies are located on the southeast slope of Mount Whympfer, 2.5 kilometres southwest of the Alberta border and 840 metres northwest of Highway 93, in Kootenay National Park, about 60 kilometres east of Golden (Fieldwork 1992, page 373).

UTM ZONE: 11 (NAD 83)

NORTHING: 5674228

EASTING: 564139

COMMODITIES: Talc

MINERALS

SIGNIFICANT: Talc

ASSOCIATED: Quartz

Dolomite

Pyrite

Limonite

ALTERATION: Talc

ALTERATION TYPE: Talc

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive

Stratabound

CLASSIFICATION: Replacement

Industrial Min.

TYPE: E08 Carbonate-hosted talc

DIMENSION: 30 x 10

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Southwest talc body.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

GROUP

FORMATION

IGNEOUS/METAMORPHIC/OTHER

Middle Cambrian

Undefined Group

Cathedral

Lower Cambrian

Gog

Undefined Formation

LITHOLOGY: Dolomite

Quartz Arenite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Silver Moon talc bodies are on the southeast slope of Mount Whympfer, 20.2 kilometres northwest of the Red Mountain talc occurrence (0820 002). They are 2.5 kilometres southwest of the Alberta border, and 840 metres northwest of, and 270 metres above Highway 93. The occurrences were originally staked by the Banff Talc Company in about 1915 and later Crown-granted (Lot 11708). Several cuts and two short adits were driven into the talc bodies.

The irregular bodies of white talc are 10 to 20 metres high and contain irregularly distributed, sheared lenses, pods and veins of high variable proportions of quartz and dolomite. In addition, bedded dolomite forms lenses and intervals in the talc bodies. The talc bodies are at nearly the same elevation along 150 metres of the slope, near the base of horizontally bedded dolomites of the Middle Cambrian Cathedral Formation. The base of the talc is about 15 metres above quartz arenites of the Lower Cambrian Gog Group. The bodies coincide with, and perhaps are localized along zones of well developed northwest striking fracture cleavage.

The "southwest" talc body is 10 metres high (vertical) and 30 to 37 metres wide. An adit 7 metres from the southwest end of the body was driven northwesterly 9 metres. The "middle" body is 8 metres high and 23 to 29 metres northeast of the "southwest" body. The "northeast" body is 40 metres northeast of the "middle" body and up to 16 metres wide and 23 metres high; an adit was driven northwesterly 6 metres into the talc.

The "southwest" body appears to contain the highest proportion of talc, with about 10 per cent bedded dolomite lenses and locally to 10 per cent quartz pods and lenses. The talc is generally weakly translucent, frosty white with a pale greenish grey tinge on fresh surfaces. Locally, it is limonite stained and light to medium rusty orange in zones 1 metre or more wide. The talc is very strongly

CAPSULE GEOLOGY

fractured; slickensided shears also commonly cut the talc. Pyritic lenses are surrounded by talc at both the "southwest" and "northeast" talc bodies, 1 to 3 metres above the basal contact. The lenses are up to 13 centimetres thick and 1 metre long, and dip horizontally to 25 degrees southwest. The "southwest" talc body contains 10 per cent very fine to fine anhedral pyrite irregularly scattered along stringers and within patches. The "northeast" talc body consists of gossanous talc with patches of clear grey dolomite with 8 per cent disseminated pyrite.

BIBLIOGRAPHY

EMPR FIELDWORK *1992, pp. 361-379
EMPR OF 1988-19, pp. 80-81
GSC ECON GEOL No. 2, pp. 51-52
GSC MAP 1476A
GSC OF 481
CANMET RPT 803, pp. 57-59
Richmond, A.M. (1935): "B.C.'s Industrial and Nonmetallic Minerals"
paper presented at the Annual General Meeting of the Canadian
Institute of Mining and Metallurgy, Winnipeg, p. 24

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/12

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082N 072**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALBERT CANYON**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

Open Pit

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 09 05 N
LONGITUDE: 117 49 46 W
ELEVATION: 823 Metres

NORTHING: 5666987
EASTING: 441988

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on outcrop on the south side of the Illecillewaet River, 10 kilometres southwest of Glacier National Park, about 34 kilometres east-northeast of Revelstoke (Geological Survey of Canada Map 43-1962).

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Sphalerite Calcite
MINERALIZATION AGE: Lower Cambrian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R04 Dimension stone - marble
DIMENSION: 1500 x 15 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Limestone strikes northwest for 1500 metres and dips 40 degrees northeast.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Lower Cambrian GROUP: Undefined Group FORMATION: Badshot IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Limestone
Marble
Dolomite
Mica Schist
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1944
SAMPLE TYPE: Chip
COMMODITY: Limestone GRADE: 46.4800 Per cent
COMMENTS: Taken across a 15 metre thick bed. Grade given for calcium oxide.
REFERENCE: CANMET Report 811, page 191, sample 52.

CAPSULE GEOLOGY

A 15 metre thick bed of limestone correlated to the Lower Cambrian Badshot Formation outcrops on either side of the Illecillewaet River in Albert Canyon, 10 kilometres southwest of Glacier National Park, about 34 kilometres east-northeast of Revelstoke. The bed strikes northwest for 1500 metres and dips 40 degrees northeast. The unit is overlain by mica schist and underlain by quartzite.

The bed generally consists of fine to medium grained, bluish grey limestone interbedded with some light grey limestone. Some of these carbonate beds consist almost entirely of dolomite. The deposit is cut by thin, white calcite veinlets. Occasional crystals of sphalerite are also present. A sample taken across the carbonate bed analysed 46.48 per cent CaO, 6.74 per cent MgO, 2.44 per cent SiO₂, 0.61 per cent Al₂O₃, 0.44 per cent Fe₂O₃ and 0.01 per cent sulphur (CANMET Report 811, page 191, Sample 52).

The limestone was once used to produce lime in a pot kiln on the south side of the Canadian Pacific Railway track. The deposit was

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1118
REPORT: RGEN0100

CAPSULE GEOLOGY

then investigated as a source of marble sometime in the early 1940s.

BIBLIOGRAPHY

EMPR PF (82N General File - Canadian Superior Exploration
geochemistry maps, 82N/4E,4W, 1976)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32, pp. 6-7
CANMET RPT *811, Part 5, pp. 187-188, 191

DATE CODED: 1989/10/04
DATE REVISED: 1993/09/22

CODED BY: PSF
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 073**

NATIONAL MINERAL INVENTORY: 082N7 Pb2

NAME(S): **ONTARIO**, ONTARIO (L.507)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N07E
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 19 35 N
LONGITUDE: 116 31 32 W
ELEVATION: 1280 Metres

NORTHING: 5686228
EASTING: 533057

LOCATION ACCURACY: Within 500M

COMMENTS: Adit, on the north side of Ottertail River about 1.5 kilometres east of its confluence with Haygarth Creek and the Sunday occurrence (082N 053), in Yoho National Park, about 10 kilometres south of Field (National Mineral Inventory 82N/7 PB2).

COMMODITIES: Copper Lead

MINERALS

SIGNIFICANT: Chalcopyrite Galena
COMMENTS: Chalcopyrite is inferred from copper-galena ore sample.
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal
TYPE: I14 Five-element veins Ni-Co-As-Ag±(Bi, U)
COMMENTS: Character and classification is inferred from nearby occurrences (Sunday, 082N 053 and Empire, 082N 062).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Cambrian	Chancellor	Undefined Formation	

LITHOLOGY: Slate
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland	PHYSIOGRAPHIC AREA: Continental Ranges	
TERRANE: Ancestral North America		
METAMORPHIC TYPE: Regional	RELATIONSHIP:	GRADE: Greenschist

CAPSULE GEOLOGY

At the Ontario showing, an adit of unknown length was driven into soft, greenish slates and argillites of the Middle Cambrian Chancellor Group, but has since been covered by talus. The showing is upstream from the Sunday (082N 053) and Empire (082N 062) occurrences, and is inferred to be a quartz vein mineralized with chalcopyrite and galena.

A copper-galena ore sample was sent to the Paris Exhibition (Minister of Mines Annual Report 1899, page 594).

BIBLIOGRAPHY

EMPR AR 1899-594
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 1496A
GSC MEM *55, p. 224
GSC OF 481

DATE CODED: 1993/06/30
DATE REVISED: 1993/06/30

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1120
REPORT: RGEN0100

MINFILE NUMBER: **082N 074**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT STEPHEN**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 23 08 N
LONGITUDE: 116 26 52 W
ELEVATION: 2194 Metres

NORTHING: 5692846
EASTING: 538427

LOCATION ACCURACY: Within 5 KM

COMMENTS: The showing is located on the south slope of Mount Stephen in Yoho National Park, 3 kilometres east of Field (Geological Survey of Canada Memoir 55, page 235).

COMMODITIES: Copper

MINERALS

SIGNIFICANT: Chalcopyrite
ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: N01 Carbonatite-hosted deposits

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Cambrian	Undefined Group	Eldon	

LITHOLOGY: Dolomitic Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

On the south slope of Mount Stephen, about 3 kilometres east of Field, chalcopyrite-bearing quartz veins occur in fissures within dolomitic limestone of the Middle Cambrian Eldon Formation.

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 1483A
GSC MEM *55, p. 235
GSC OF 481

DATE CODED: / /
DATE REVISED: 1993/08/06

CODED BY:
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 074**

MINFILE NUMBER: **082N 075**

NATIONAL MINERAL INVENTORY:

NAME(S): **BARMAC**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 00 16 N
LONGITUDE: 116 35 29 W
ELEVATION: 1097 Metres

NORTHING: 5650399
EASTING: 528669

LOCATION ACCURACY: Within 500M

COMMENTS: Located approximately 1 kilometre north of Lead Mountain on the west side of the Columbia River, about 8 kilometres south of Parson (Assessment Report 22484).

COMMODITIES: Barite

Copper

MINERALS

SIGNIFICANT: Barite Tetrahedrite Malachite Azurite
ASSOCIATED: Quartz
ALTERATION: Malachite Azurite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
CLASSIFICATION: Epigenetic Hydrothermal Industrial Min.
DIMENSION: 3 Metres STRIKE/DIP:
COMMENTS: Barite veins vary from 0.1 to 3.1 metres wide. TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Cambrian	Undefined Group	Eager	

LITHOLOGY: Shale
Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Purcell Mountains

CAPSULE GEOLOGY

Vein-type barite occurrences on the Barmac property are hosted by shale and dolomite of the Lower to (?)Middle Cambrian Eager Formation. The barite is white to cream coloured and contains minor amounts of tetrahedrite, malachite and azurite. These barite veins vary from 0.1 to 3.1 metres wide. Some quartz is also associated with the barite.

BIBLIOGRAPHY

EMPR ASS RPT *22484
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 1501A
GSC OF 481

DATE CODED: 1993/08/09
DATE REVISED: / /

CODED BY: GO
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 076**

NATIONAL MINERAL INVENTORY:

NAME(S): **GLENOGLE** KICKING HORSE RIVER

STATUS: Past Producer Open Pit

MINING DIVISION: Golden

REGIONS: British Columbia

NTS MAP: 082N07W

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 51 17 23 N

LONGITUDE: 116 50 24 W

ELEVATION: 975 Metres

NORTHING: 5682056

EASTING: 511157

LOCATION ACCURACY: Within 500M

COMMENTS: Quarry, south of the Kicking Horse River about 9 kilometres east of Golden (CANMET Report 811, page 188).

COMMODITIES: Dolomite Railroad Ballast Aggregate

MINERALS

SIGNIFICANT: Dolomite

ASSOCIATED: Silica

COMMENTS: Silica as chert.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
 CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R09 Limestone R15 Crushed rock

SHAPE: Irregular

MODIFIER: Folded Faulted

COMMENTS: Dolomite belt trends northwest.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Ordovician-Silurian	Undefined Group	Beaverfoot	
<u>DATING METHOD:</u>			
Cambrian-Ordovician	Fossil McKay	Undefined Formation	

LITHOLOGY: Dolomite
 Limestone
 Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

PHYSIOGRAPHIC AREA: Continental Ranges

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N

CATEGORY: Assay/analysis YEAR: 1944

SAMPLE TYPE: Grab

<u>COMMODITY</u>	<u>GRADE</u>
Dolomite	21.0200 Per cent

COMMENTS: Grade given for MgO.

REFERENCE: CANMET Report 811, page 191, Sample 53.

CAPSULE GEOLOGY

A northwest-trending belt of dolomite of the Middle Ordovician to Silurian Beaverfoot Formation is well exposed along the Trans-Canada Highway (Highway 1), 1.5 to 3 kilometres west of Glenogle Station of the Canadian Pacific Railway and about 9 kilometres east of Golden, in the canyon of the Kicking Horse River. South of the river, the dolomite is thrust faulted against limestone of the Upper Cambrian to Middle Ordovician McKay Group to the west and flanked by quartzite of the Middle to Upper Ordovician Mount Wilson Formation to the east. The strata are overturned and dip moderately to steeply eastward. The belt continues northwest of the Kicking Horse River for 12 kilometres where it becomes complicated by recumbent folding and thrust faulting.

The dolomite exposed along the highway is massive to thin bedded, light to dark grey and fine grained. Chert is abundant in places. Two grab samples analysed as follows (in per cent) (CANMET Report 811, page 191, Samples 53, 53B):

Sample	CaO	MgO	SiO2	Al2O3	Fe2O3	Sulphur
--------	-----	-----	------	-------	-------	---------

CAPSULE GEOLOGY

53	31.21	21.02	1.28	0.41	0.28	0.01
53B	31.09	20.71	1.10	0.29	0.46	0.01

Sample 53 is of very fine grained, light grey dolomite and Sample 53B is of faintly mottled, light grey dolomite.
The Glenogle quarry was operated by the Canadian Pacific Railway, 1.6 kilometres west of Glenogle Station, to supply dolomite for use as railroad ballast, sometime during the early 1940s.

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; 1497A
GSC OF 481
CANMET RPT *811, Part 5, pp. 188,191

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/26

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 077**

NATIONAL MINERAL INVENTORY:

NAME(S): **FIELD**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 23 45 N
LONGITUDE: 116 29 33 W
ELEVATION: 1234 Metres

NORTHING: 5693967
EASTING: 535307

LOCATION ACCURACY: Within 5 KM

COMMENTS: Native mercury is reported to have been found in the gravels of the Kicking Horse River valley in the vicinity of Field, in Yoho National Park (Geological Survey of Canada Memoir 55, page 235).

COMMODITIES: Mercury

MINERALS

SIGNIFICANT: Mercury
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Placer
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Quaternary	Undefined Group	Undefined Formation	

LITHOLOGY: Gravel

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE: Greenschist

CAPSULE GEOLOGY

Native mercury is reported to have been found in the gravels of the Kicking Horse River valley in the vicinity of Field. Five samples of gravel were collected from the flood gravels within 3 kilometres of Field, and when panned, a trace of mercury was found in three out of the five samples. Native mercury was also found in panned gravels "from the edge of the river a few hundred feet below the bridge, opposite Field Station, from a depth of about 60 centimetres below the surface, where the high water had cut down to about that depth". A considerable amount of work was done in an attempt to locate the source of the mercury, but without results (Geological Survey of Canada Memoir 55, pages 235, 236).

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 1483A
GSC MEM *55, pp. 235, 236
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/06

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 078**

NATIONAL MINERAL INVENTORY:

NAME(S): **WOOLSEY CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N04W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 07 10 N
LONGITUDE: 117 53 34 W
ELEVATION: 762 Metres

NORTHING: 5663487
EASTING: 437516

LOCATION ACCURACY: Within 5 KM

COMMENTS: Pegmatites exposed on a trail a short distance from the Canadian Pacific Railway, close to the boundary of Mount Revelstoke National Park, about 30 kilometres northeast of Revelstoke. The trail (apparently obliterated by a logging road) follows Woolsey (Silver) Creek to the Snowflake occurrence (082N 003) (Geological Survey of Canada Economic Geology No. 23, page 61).

COMMODITIES: Beryl

MINERALS

SIGNIFICANT: Beryl
ASSOCIATED: Tourmaline
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Paleozoic
Devonian

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY:

Pegmatite
Quartzite
Quartz Mica Schist
Ortho Gneiss
Granite Gneiss
Granite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Plutonic Rocks
METAMORPHIC TYPE: Regional

Kootenay
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Selkirk Mountains

GRADE:

CAPSULE GEOLOGY

Pegmatites were exposed on a trail a short distance from the Canadian Pacific Railway. The trail (apparently obliterated by a logging road) follows Woolsey (Silver) Creek and leads to the Snowflake occurrence (082N 003).

The Woolsey Creek showing area is underlain by Lower Paleozoic quartzites, orthogneiss and quartz mica schists cut by Devonian granite-gneiss, granite and pegmatite. "Gunning found beryl in some of the pegmatites". Little or no tourmaline was evident (Geological Survey of Canada Economic Geology No. 23, page 61).

BIBLIOGRAPHY

GSC ECON GEOL *23, p. 61
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 60-21, p. 10; 62-32
GSC SUM RPT *1928 Part A, p. 156
PERS COMM McCammon, J.

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/23

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1126
REPORT: RGEN0100

MINFILE NUMBER: **082N 079**

NATIONAL MINERAL INVENTORY:

NAME(S): **INCOMAPPLEUX RIVER**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N03W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 10 57 N
LONGITUDE: 117 27 08 W
ELEVATION: 1500 Metres

NORTHING: 5670217
EASTING: 468392

LOCATION ACCURACY: Within 5 KM

COMMENTS: Near the headwaters of Incomappleux River, in Glacier National Park, 38 kilometres west of Golden (Industrial Mineral File - J. McCammon, personal communication).

COMMODITIES: Beryl

MINERALS

SIGNIFICANT: Beryl
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: 001 Rare element pegmatite - LCT family

HOST ROCK

DOMINANT HOSTROCK: Plutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Lower Cambrian	Unnamed/Unknown Group	Unnamed/Unknown Formation	

LITHOLOGY: Pegmatite
Quartzite
Limestone
Phyllite
Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

Beryl crystals have been reported from pegmatite near the headwaters of Incomappleux River, in Glacier National Park, about 38 kilometres west of Golden.

Geological Survey of Canada Open File 481 indicates the area to be underlain by Lower Cambrian quartzite, limestone, phyllite and argillite.

BIBLIOGRAPHY

GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32
PERS COMM McCammon, J.

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/30

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 079**

MINFILE NUMBER: **082N 080**

NATIONAL MINERAL INVENTORY:

NAME(S): **SULLIVAN RIVER**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 54 39 N
LONGITUDE: 117 56 56 W
ELEVATION: 676 Metres

NORTHING: 5751546
EASTING: 434730

LOCATION ACCURACY: Within 500M

COMMENTS: Location from Geological Survey of Canada Map 4-1961, along a roadcut of the old Big Bend Highway which is now under the water of Columbia Reach, about 2 kilometres southeast of Sullivan River and approximately 100 kilometres north-northwest of Golden.

COMMODITIES: Nepheline Syenite

MINERALS

SIGNIFICANT: Plagioclase K-Feldspar Feldspathoid Nepheline
ASSOCIATED: Amphibole Biotite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R13 Nepheline syenite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

STRATIGRAPHIC AGE

Unknown
Paleozoic

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Nepheline Syenite
Mica Schist

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

A small mass of nepheline syenite is exposed along the old Big Bend Highway about 2 kilometres southeast of the Sullivan River. The original road has been flooded and is now under the water of Columbia Reach, about 100 kilometres north-northwest of Golden.

The nepheline syenite body is located from Geological Survey of Canada Map 4-1961, and is mid-Paleozoic (?). The rock is mainly medium grained, light grey with a vague gneissic banding. Feldspar and small amounts of amphibole and locally biotite can be recognized. Thin sections show a high proportion of plagioclase, lesser microcline-microperthite, and scattered grains of feldspathoid. Where exposed in roadcuts, the contact of the nepheline syenite with wallrocks is concordant and gradational. Wallrocks are mainly mica schists which locally have calcareous interbeds. The northwestern part of the nepheline syenite and its western contact are beneath the river flats (Minister of Mines Annual Report 1959, page 103).

BIBLIOGRAPHY

EMPR AR *1959-103,104
EMPR OF 1991-10
GSC MAP *4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/01

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 081**

NATIONAL MINERAL INVENTORY:

NAME(S): **SOLITUDE MOUNTAIN**, CARIBOU CREEK

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N13W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 52 21 N
LONGITUDE: 117 46 12 W
ELEVATION: 1828 Metres

NORTHING: 5747138
EASTING: 446989

LOCATION ACCURACY: Within 500M

COMMENTS: A nepheline syenite body cutting across the valley of Caribou Creek, located from Geological Survey of Canada Map 4-1961, east of Columbia Reach, about 87 kilometres north-northwest of Golden.

COMMODITIES: Nepheline Syenite

MINERALS

SIGNIFICANT: K-Feldspar Nepheline
ASSOCIATED: Biotite Amphibole Epidote Garnet Carbonate
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R13 Nepheline syenite
DIMENSION: 1600 x 304 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Nepheline syenite body.

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Nepheline Syenite
Limestone
Limy Argillite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Ancestral North America

CAPSULE GEOLOGY

A dike-like body of nepheline syenite, identified from Geological Survey of Canada Map 4-1961, is situated 11 kilometres southeast of the Sullivan River and crosses the valley of Caribou Creek, about 87 kilometres north-northwest of Golden.

The Solitude Mountain nepheline syenite forms an irregular dike-like body a little more than 1.6 kilometres long and less than 304 metres wide, with its long axis trending about 290 degrees. The mid-Paleozoic (?) body cuts irregularly across part of the "Kinbasket limestone". The texture of the nepheline syenite varies from the west to east. In the west, it is coarse grained with closely packed, moderately well-formed crystals of potash feldspar and minor interstitial biotite. Towards the east it becomes fine to medium grained and near the east end is quite variable in texture and composition. Many dike-like tongues extend into the limestone and limy argillite around the eastern end of the mass, and inclusions of limestone within the syenite are common. Most of the syenite is composed of microcline-micropertthite, nepheline, biotite and locally carbonate. Amphibole, epidote and garnet are present in coarse-grained lenses near the eastern end of the mass.

Contacts of the syenite with the enclosing limestone are generally well defined but in detail are highly irregular and are gradational over a couple of metres. On the southwest side of Caribou Creek, limestone forming inclusions in or lying along the margins of the syenite is altered to a fine grained greenish rock composed mainly of calcite with interstitial feldspar, clinozoisite and chlorite.

BIBLIOGRAPHY

EMPR AR *1959-103,104
EMPR OF 1991-10
GSC MAP *4-1961; 43-1962

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1129
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481
GSC P 32-62

DATE CODED: 1985/07/24
DATE REVISED: 1993/09/01

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 082**

NATIONAL MINERAL INVENTORY:

NAME(S): **BUSH RIVER**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N13E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 54 06 N
LONGITUDE: 117 36 53 W
ELEVATION: 2438 Metres

NORTHING: 5750280
EASTING: 457707

LOCATION ACCURACY: Within 500M

COMMENTS: Two nepheline syenite bodies are located at the 2133 and 2438-metre elevations respectively, at the headwaters of a north tributary of Chatter Creek, just north of a small unnamed lake, about 84 kilometres north-northwest of Golden (Geological Survey of Canada Map 43-1962).

COMMODITIES: Nepheline Syenite

MINERALS

SIGNIFICANT: Nepheline
MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R13 Nepheline syenite

HOST ROCK

DOMINANT HOSTROCK: Plutonic

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

LITHOLOGY: Nepheline Syenite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

At the Bush River occurrence, two mid to Late Paleozoic nepheline syenite bodies are located at the 2133 and 2438-metre elevations respectively, at the headwaters of a north tributary of Chatter Creek, just north of a small unnamed lake, about 84 kilometres north-northwest of Golden (Geological Survey of Canada Map 43-1962).

BIBLIOGRAPHY

EMPR AR 1959-103
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32

DATE CODED: 1993/08/09
DATE REVISED: 1993/10/14

CODED BY: GO
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 083**

NATIONAL MINERAL INVENTORY:

NAME(S): **GLENOGLE SLATE**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 082N07W
BC MAP:

Open Pit

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 17 04 N
LONGITUDE: 116 49 12 W
ELEVATION: 1030 Metres

NORTHING: 5681472
EASTING: 512553

LOCATION ACCURACY: Within 1 KM

COMMENTS: Quarry, on the main line of the Canadian Pacific Railway along the Kicking Horse River, about 10.5 kilometres east of Golden. The location description is vague (CANMET Report 452, page 56).

COMMODITIES: Slate Dimension Stone

MINERALS

SIGNIFICANT: Unknown

COMMENTS: Slate.

ASSOCIATED: Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R INDUSTRIAL ROCKS

SHAPE: Regular

MODIFIER: Fractured

DIMENSION: 100 x 5 Metres STRIKE/DIP: 025/60N

TREND/PLUNGE:

COMMENTS: Slate exposure near the river. The slate strikes 010 to 040 degrees and dips 60 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Ordovician	Undefined Group	Glenogle	
Ordovician	Undefined Group	Mount Wilson	

LITHOLOGY: Slate
Shale
Siltstone
Argillaceous Limestone
Sandstone
Quartz Sandstone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE:

CAPSULE GEOLOGY

The Glenogle Slate quarry was worked at around the turn of the century and is located across the Kicking Horse River from Glenogle, on the main line of the Canadian Pacific Railway, about 10.5 kilometres east of Golden. The quarry was reportedly abandoned due to the hardness of the slate and the presence of pyrite.

The Glenogle area is underlain by shale, argillaceous limestone, siltstone and sandstone of the Ordovician Glenogle Formation. To the west is quartz sandstone of the Middle and/or Upper Ordovician Mount Wilson Formation.

The slates, covered with 1 to 1.5 metres of gravel, are exposed near the river for a distance of about 100 metres and a height of 5 metres. The slate strikes 010 to 040 degrees and dips 60 degrees north. The jointing in the slates strike 190 to 210 degrees with a steep, variable dip to the southeast. The pronounced cleavage strike at 020 degrees and the quarry face appears intensely fractured.

A description of severely weathered and water-soaked material from the quarry face follows: "the slate is of dark blue-grey colour, irregular cleavage and dull "ring". The cleavage is not deficient but the planes are rough and irregular for the most part" (CANMET Report 452). No production figures are available.

BIBLIOGRAPHY

EMPR IND MIN FILE (Hora & McCammon, List of Occurrences, Ministry

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1132
REPORT: RGEN0100

BIBLIOGRAPHY

library)
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 295A; *1497A
CANMET RPT *452, p. 56

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/26

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 084**

NATIONAL MINERAL INVENTORY:

NAME(S): **VERMILION PASS**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N01E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 14 00 N
LONGITUDE: 116 04 04 W
ELEVATION: 1798 Metres

NORTHING: 5676186
EASTING: 565084

LOCATION ACCURACY: Within 5 KM

COMMENTS: Located near the British Columbia-Alberta border in Kootenay National Park, 64 kilometres east of Golden at Vermilion Pass (CANMET Report 452, pages 23, 141, 142).

COMMODITIES: Marble Dimension Stone Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Pyrite Magnetite
MINERALIZATION AGE: Cambrian

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R04 Dimension stone - marble

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Cambrian Unnamed/Unknown Group Unnamed/Unknown Formation

LITHOLOGY: Marble

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

At the Vermilion Pass showing, white shattered Cambrian marble occurs in great masses, containing disseminated grains of pyrite and magnetite.

BIBLIOGRAPHY

GSC MAP 142A; 1476A
GSC MEM 55
GSC OF 481
CANMET RPT *452, pp. 23,141,142

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 085**

NATIONAL MINERAL INVENTORY:

NAME(S): **YOHO RIVER**

MINING DIVISION: Golden

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N08W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 27 13 N
LONGITUDE: 116 26 33 W
ELEVATION: 1433 Metres

NORTHING: 5700418
EASTING: 538737

LOCATION ACCURACY: Within 1 KM

COMMENTS: Location is centred on a switchback on the Yoho River road, 2.6 kilometres north of the confluence of Yoho River with Kicking Horse River, 7.5 kilometres north of Field (Geological Survey of Canada Map 1483A).

COMMODITIES: Dolomite

MINERALS

SIGNIFICANT: Dolomite
ASSOCIATED: Calcite Quartz Pyrite
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone
DIMENSION: 122 x 76 Metres STRIKE/DIP: 095/18N TREND/PLUNGE:
COMMENTS: A dolomite bed along a road (Geological Survey of Canada Map 1483A).

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Cambrian Undefined Group Cathedral

LITHOLOGY: Dolomite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Ancestral North America

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1944
SAMPLE TYPE: Chip
COMMODITY GRADE
Dolomite 20.9100 Per cent
COMMENTS: Average of 5 samples taken across 91.4 metres. Grade given is for MgO.
REFERENCE: CANMET Report 811, page 191, samples 55, 55A to 55C.

CAPSULE GEOLOGY

A dolomite bed of the Middle Cambrian Cathedral Formation is exposed on a switchback on the Yoho River road, 2.6 kilometres northwest of the river's confluence with the Kicking Horse River. The bed continues eastward outcropping along the lower slopes of Mount Ogden. The bed at the switchback is 107 to 122 metres thick, strikes 095 degrees and dips 8 to 18 degrees north.

The upper 76 metres of the bed is comprised of coarse grained, variably mottled dolomite commonly containing small vugs partially filled with calcite. The remaining lower portion of the bed is fine grained and pale blue in colour. The dolomite is massive to thinly bedded and weathers to a brownish grey colour. Occasionally narrow veins of milky white quartz cut the dolomite. Sparsely scattered pyrite occurs in some beds.

A series of chip samples taken in succession across a total stratigraphic thickness of 91.4 metres analysed 30.81 per cent CaO, 20.91 per cent MgO, 0.38 per cent SiO₂, 0.33 per cent Al₂O₃, 0.66 per cent Fe₂O₃ and trace sulphur (CANMET Report 811, page 191, samples 55, 55A to 55C).

BIBLIOGRAPHY

EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 142A; 1483A
GSC MEM 55, p. 67

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1135
REPORT: RGEN0100

BIBLIOGRAPHY

GSC OF 481
CANMET RPT 452, Vol.5, pp. 142,143; *811, Part 5, pp. 189-191

DATE CODED: 1985/07/24
DATE REVISED: 1993/06/23

CODED BY: GSB
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 086**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRIZZLY**, LIZA, SHEEP,
 RAM

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 082N11W
 BC MAP:

Underground

MINING DIVISION: Golden

LATITUDE: 51 40 32 N
 LONGITUDE: 117 20 12 W
 ELEVATION: 2194 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5725007
 EASTING: 476721

LOCATION ACCURACY: Within 500M

COMMENTS: Old adit near a ridge top, 2 kilometres southeast of Felucca and Blackwater mountains, about 50 kilometres northwest of Golden (Assessment Report 18053).

COMMODITIES: Copper Lead Silver Gold

MINERALS

SIGNIFICANT: Tetrahedrite Galena Pyrite
 ASSOCIATED: Quartz Carbonate
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein
 CLASSIFICATION: Epigenetic Hydrothermal
 TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Cambrian	Chancellor	Undefined Formation	

LITHOLOGY: Argillaceous Limestone
 Limestone

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
 TERRANE: Ancestral North America
 METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP:

GRADE:

INVENTORY

ORE ZONE: DUMP

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Grab
 COMMODITY

YEAR: 1988

	GRADE	
Silver	315.0000	Grams per tonne
Gold	0.9500	Grams per tonne
Copper	0.7100	Per cent
Lead	0.5400	Per cent

COMMENTS: Picked sample of vein material.

REFERENCE: Assessment Report 18053.

CAPSULE GEOLOGY

The Grizzly occurrence area is underlain by thin bedded, grey and grey-brown limestone and argillaceous limestone correlated with the Middle Cambrian Chancellor Group. The area has apparently undergone intense deformation with the development of overturned isoclinal folds and thrust faults as well as a strong fracture cleavage at approximately 130 degrees.

Mineralization on the property consists of tetrahedrite, galena and pyrite as small blebs and lenses within quartz/carbonate veins. Tetrahedrite appears to be more common within quartz, and galena within carbonate. There are from 3 to 7 veins on the property which have strikes parallel to the regional trend. They range from 0.3 to 1 metre in width. There is very little wallrock alteration associated with the veins. One vein examined in detail appears to be emplaced in a zone of extensional fracturing along the nose of an anticline.

A picked sample of vein material from an adit dump analysed 0.71 per cent copper, 0.54 per cent lead, 315 grams per tonne silver and 0.95 gram per tonne gold (Assessment Report 18053).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1137
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT 9745, 10954, 11908, 12482, *16459, *18053
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 4-1961; 43-1962
GSC OF 481
GSC P 62-32
GCNL #171(Sept.6),#177(Sept.14),#178(Sept.15),#184(Sept.22),
#191(Oct.3),#198(Oct.13), 1983

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/31

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 087**

NATIONAL MINERAL INVENTORY:

NAME(S): **CASTLE MOUNTAIN, CASTLE**

MINING DIVISION: Golden

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 02 08 N
LONGITUDE: 116 26 17 W
ELEVATION: 2400 Metres

NORTHING: 5653929
EASTING: 539401

LOCATION ACCURACY: Within 500M

COMMENTS: Mineralized area B, on Castle Mountain about 6 kilometres north of the village of Harrogate (Assessment Report 11694).

COMMODITIES: Zinc Lead

MINERALS

SIGNIFICANT: Hydrozincite Sphalerite Galena
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Disseminated Massive Breccia Stratiform
CLASSIFICATION: Sedimentary Replacement
TYPE: E12 Mississippi Valley-type Pb-Zn

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Ordovician-Silurian

GROUP

Undefined Group

FORMATION

Beaverfoot

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Dolomite
Dolomite Breccia
Limestone
Shale
Quartzite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Castle Mountain property is located near the village of Harrogate in southeastern British Columbia.

The property is underlain by dolomite, limestone, shale and quartzite which range from Cambrian to Devonian age. A number of zinc-lead showings occur in dolomites of the Middle Ordovician to Silurian Beaverfoot Formation.

The general structure is that of a syncline with steeply dipping or overturned limbs, further complicated in the Castle Mountain area by the presence of several thrust and strike-slip faults.

Zinc-lead mineralization is entirely restricted to the Beaverfoot Formation, and appears to be preferentially concentrated in the upper half of the formation. Fractures resulting from dissolution and re-precipitation of dolomite are closely associated with lead-zinc mineralization. Zinc and lead occur as disseminated to locally massive hydrozincite, sphalerite and galena in dolomite breccias. Two main end member types of breccias are (1) angular dolomite clasts in a sparry dolomite matrix (associated with solution collapse structures and faults), and what has been termed "grapeshot rock"; and (2) stratabound dissolution zones up to several metres thick and laterally continuous for up to several hundred of metres along strike. Lead-zinc showings were noted in three main areas on the property.

BIBLIOGRAPHY

EMPR ASS RPT *11694
EMPR PF (82N General File - Prospector's map, 1937)
GSC MAP 1477A
GSC OF 481

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/09

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **082N 088**

NATIONAL MINERAL INVENTORY:

NAME(S): **JACK**, LENS MOUNTAIN

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082N14E
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 54 14 N
LONGITUDE: 117 07 36 W
ELEVATION: 2804 Metres

NORTHING: 5750356
EASTING: 491286

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of diatreme outcrop on a narrow ridge trending northwest between two permanent snowfields, situated between Lyell Creek and the British Columbia-Alberta border, about 70 kilometres north of Golden (Assessment Report 13597).

COMMODITIES: Diamond Gemstones

MINERALS

SIGNIFICANT: Diamond
ASSOCIATED: Carbonate Calcite Quartz Pyrite Apatite
Sphene Garnet Ilmenite

COMMENTS: Garnet, ilmenite and chromite have been identified from treatment of bulk samples (Assessment Report 13597).

MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Breccia Pipe
CLASSIFICATION: Diatreme Industrial Min.
TYPE: N02 Kimberlite-hosted diamonds

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Ordovician	Undefined Group	Skoki	
Lower Ordovician	Undefined Group	Outram	
Paleozoic			Unnamed/Unknown Informal

LITHOLOGY: Breccia
Tuff Breccia
Lapilli Tuff Breccia
Limestone
Dolomite
Shale

HOSTROCK COMMENTS: Also the Lower Ordovician Survey Peak Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

Alkaline diatremes and dikes of probable Paleozoic age occur in three areas of southeastern British Columbia. The Ospika River diatreme in the north, the central Golden cluster and the Cranbrook-Bull River group in the south. The cluster of diatremes and associated crosscutting dikes northeast of Golden is situated within a Cambro-Ordovician stratigraphic and structural unit and may be coeval. There are five diatremes in the Golden cluster and are named: Bush River (Larry), Lens Mountain (Jack, 082N 088), Mons Creek (Mike), Valenciennes River (Mark, 082N 089) and HP (Exploration in British Columbia 1988, page B39).

Sedimentary rocks in the Jack or Lens Mountain occurrence area consist of an upper dolomite sequence, a middle limestone and shale sequence, and a lower massive limestone unit. These may correlate with the lower part of the Middle Ordovician Skoki Formation, the Lower Ordovician Outram Formation and the uppermost part of the Lower Ordovician Survey Peak Formation. All of these units are characterized by a well defined, moderately to steeply southwest dipping (60 to 80 degrees), northwest striking axial plane (?) cleavage that is essentially parallel to the axis of a nearby anticline.

The Jack multiphase diatreme underlies a narrow ridge trending northwest between two permanent snowfields. From edge to edge, there is a variation in texture and clast size and clast/matrix ratio. To the southeast, the diatreme is foliated with an orange weathered surface and light green fresh surface; it contains 25 per cent

CAPSULE GEOLOGY

sedimentary rock inclusions ranging in size from 0.2 to 2.0 centimetres consisting of limestone clasts and sand grains. In the saddle of the ridge, the rock is light green and aphanitic with disseminated pyrite and an absence of foreign clasts. To the northwest are alternating outcrops of limestone 30 to 40 metres across, and coarse diatreme material containing 20 per cent subangular limestone clasts averaging 5 to 10 centimetres across. The northern diatreme phases weather dark red with a dark grey fresh surface. The diatremes are breccias, tuff breccias and lapilli tuff breccias.

In thin section, the "sand-grain rich" phase consists of 25 per cent rounded quartz grains, 20 per cent fine-grained carbonate clasts, 5 per cent elongated relict lapilli and 3 per cent subhedral to anhedral, altered grains replaced by calcite and rimmed by very fine grained sphene and opaque minerals. The matrix is fine-grained carbonate.

Thin sections from the saddle contain up to 10 per cent disseminated pyrite, and lapilli rimmed with pyrite. Apatite phenocrysts are altered in the core. The matrix consists of fine-grained carbonate and opaque minerals.

The coarse breccia phase consists of subangular clasts of limestone and relict phenocrysts in a carbonate matrix. This porphyritic rock contains 15 per cent phenocrysts now entirely pseudomorphed by fine-grained quartz and/or calcite. Altered crystals possibly of titanamphibole or annealed recrystallized sphenes have been replaced by calcite but retain a rim and inclusions of very fine grained sphene. The groundmass is extremely fine grained grey material with calcite patches.

In 1983, treatment of seven bulk samples from an upper breccia portion of the diatreme produced pyrope garnets, ilmenites and chromites. More significantly, one 29.5-kilogram bulk sample of "sandy marl" (possibly the sand-grain rich phase mentioned previously) from the diatreme breccia produced an excellent quality octahedral microdiamond weighing 0.00037320 carats (Assessment Report 13597). Further sampling and analysis and diamond drilling in 1985 and 1986 failed to confirm the presence of macro or microdiamonds (Assessment Reports 15289 and 16195).

Petrographic examination does not support the designation of these rocks as either kimberlites or lamproites, two rock types which are mined for diamonds (Exploration in British Columbia 1988, page B39).

BIBLIOGRAPHY

- EMPR ASS RPT *13597, 15289, 16195
- EMPR EXPL *1988-B39-B46
- EMPR FIELDWORK 1986, pp. 259-267
- EMPR PF (Report on the Jack Claims, Dia Met Minerals Ltd.; Diamond Exploration Geochemistry in the Cordillera, Dummett, H.T., Fipke, C.E. and Blusson, S.L.)
- GSC MAP 4-1961; 43-1962
- GSC OF 481
- GSC P 62-32
- GCNL #26(Feb.6), 1985; Dec.31, 1986; #41(Feb.27), 1987; #181(Sept.21), 1993
- IPDM Feb./Mar. p.3, 1985
- N MINER Feb.14, 1985; Nov.10, 1986
- V STOCKWATCH Nov.28, 1986
- WWW <http://www.infomine.com/>

DATE CODED: 1985/12/09
DATE REVISED: 1993/09/02

CODED BY: AFW
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082N 089**

NATIONAL MINERAL INVENTORY:

NAME(S): **MARK**, VALENCIENNES RIVER

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N15W
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 46 48 N
LONGITUDE: 116 58 34 W
ELEVATION: 2316 Metres

NORTHING: 5736570
EASTING: 501648

LOCATION ACCURACY: Within 500M

COMMENTS: Sample site from where a microdiamond fragment was identified, 750 metres west of the British Columbia-Alberta border and 1 kilometre east of Valenciennes River, about 56 kilometres north of Golden (Assessment Report 13596).

COMMODITIES: Diamond Corundum Gemstones

MINERALS

SIGNIFICANT: Diamond Corundum
ASSOCIATED: Spinel Olivine Serpentine Calcite Quartz
 Pyrite Ilmenite Chromite

COMMENTS: Ilmenite, chromite and garnet have been identified from sampling (Assessment Report 20580).

MINERALIZATION AGE: Paleozoic

DEPOSIT

CHARACTER: Breccia Pipe
CLASSIFICATION: Diatreme Industrial Min.
TYPE: N02 Kimberlite-hosted diamonds

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Ordovician
Lower Ordovician
Paleozoic

GROUP

Undefined Group
Undefined Group

FORMATION

Skoki
Outram

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Tuff Breccia
Crystal Lithic Ash Tuff
Lithic Ash Lapilli Tuff
Ash Lapilli Tuff
Dike
Breccia Dike
Carbonate
Limestone
Dolomite
Shale

HOSTROCK COMMENTS: Also the Lower Ordovician Survey Peak Formation.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

Alkaline diatremes and dikes of probable Paleozoic age occur in three areas of southeastern British Columbia. The Ospika River diatreme in the north, the central Golden cluster and the Cranbrook-Bull River group in the south. The cluster of diatremes and associated crosscutting dikes northeast of Golden is situated within a Cambro-Ordovician stratigraphic and structural unit and may be coeval. There are five diatremes in the Golden cluster and are named: Bush River (Larry), Lens Mountain (Jack, 082N 088), Mons Creek (Mike), Valenciennes River (Mark, 082N 089) and HP (Exploration in British Columbia 1988, page B39).

Sedimentary rocks in the Mark or Valenciennes River occurrence area consist of an upper dolomite sequence, a middle limestone and shale sequence, and a lower massive limestone unit. These may correlate with the lower part of the Middle Ordovician Skoki Formation, the Lower Ordovician Outram Formation and the uppermost part of the Lower Ordovician Survey Peak Formation. All of these units are characterized by a well defined, moderately to steeply southwest dipping (60 to 80 degrees), northwest striking axial plane (?) cleavage that is essentially parallel to the axis of a nearby anticline (Assessment Report 20580).

Four diatremes and a series of subparallel crosscutting dikes

CAPSULE GEOLOGY

comprise the Mark occurrence. Breccia dikes crop out at the northern end of the area. The diatremes and dikes intrude subhorizontal carbonate country rocks which are strongly foliated, as are the diatremes. The diatremes are identified as tuff breccia, crystal-lithic ash-lapilli tuff and lithic ash-lapilli tuff (Assessment Report 20580).

The two southern diatremes are foliated at the margins and massive in the core. The rock is rusty weathered with a pale green fresh surface. Angular fragments of carbonates, shales and a few quartzites comprise 30 per cent of the rock volume. Altered spinel peridotite xenoliths occupy 1 to 3 per cent of the rock volume. Their modal size is 2 centimetres, though 15-centimetre clasts are present. Altered brown olivines and dark green spinels each make up about 2 per cent of the rock.

The two northern diatremes are narrow and smaller, and do not exhibit the variety of clast types that characterize the larger southern ones. They are well foliated with angular clasts comprising 20 per cent of the rock volume. Dark green spinels are sparsely distributed.

Thin sections show the diatreme phase is tuffaceous with rounded and fractured quartz grains, autolithic fragments and sedimentary fragments. Locally it contains 40 per cent polymorphous inclusions, ranging in size from 0.1 to 60 millimetres consisting of serpentine, serpentine and calcite, or calcite and quartz. Fractured red-brown spinels, round or angular, are present in trace amounts in the groundmass and within the polymorphous inclusions. The groundmass is composed of a dusty carbonate, spinels and pyrite (Exploration in British Columbia 1988, page B43).

A dozen dikes, 1 to 2 metres wide, outcrop in the area. They are generally subparallel, though locally crosscutting and they cut the diatremes. The dikes are also subparallel to foliation in the hostrocks. The dikes differ from the diatremes as they contain very few foreign fragments and are cut by quartz and calcite veins. The dikes are porphyritic in hand sample with characteristic sieve-textured brown olivine pseudomorphs, altered euhedral clinopyroxenes, fine-grained micas and rare spinels.

In 1983, a 30-kilogram portion of a 160-kilogram bulk sample of a diatreme produced one ilmenite and thirteen chromites and one 0.00015820-carat microdiamond fragment (Assessment Report 13596, page 12). Further examination, sampling, processing and analysis in 1986, 1988 and 1990 has identified ilmenite, chromite and garnet but failed to reveal or substantiate the presence of macro or microdiamonds (Assessment Reports 15151, 17753 and 20580). However, scanning electron microscope (SEM) studies identified corundum - several blue sapphires were present in the fused concentrates of three samples of diatreme material (Assessment Report 20580, page 11).

Petrographic examination does not support the designation of these rocks as either kimberlites or lamproites, two rock types which are mined for diamonds (Exploration in British Columbia 1988, page B39).

BIBLIOGRAPHY

EMPR ASS RPT *13596, 15151, 17753, 20580
EMPR EXPL *1988-B39-B46
EMPR FIELDWORK 1986, pp. 259-267
EMPR INF CIRC 1993-13
EMPR OF 1994-1
GSC OF 481
GCNL #26(Feb.6), 1985; #197(Oct.19), 1986
IPDM Feb./Mar. p.3, 1985
N MINER Feb.14, 1985
WWW <http://www.infomine.com/>

DATE CODED: 1985/12/09
DATE REVISED: 1993/09/02

CODED BY: AFW
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **082N 090**

NATIONAL MINERAL INVENTORY:

NAME(S): **MOUNT MATHER CREEK, MATHER CREEK, HOPE,
MT. LAUSSEDAT, MT. MATHER, MATHER MOUNTAIN**

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082N10W
BC MAP:
LATITUDE: 51 33 00 N
LONGITUDE: 116 53 16 W
ELEVATION: Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Located at Mather Mountain, on the Blaeberry River north of Golden.

MINING DIVISION: Golden
UTM ZONE: 11 (NAD 83)
NORTHING: 5710996
EASTING: 5077781

COMMODITIES: Sodalite Lead Zinc

MINERALS

SIGNIFICANT: Sodalite Galena Sphalerite
ASSOCIATED: Albite Calcite Pyrite Magnetite
ALTERATION: Limonite
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Devonian

DEPOSIT

CHARACTER: Vein Breccia Disseminated Stockwork
CLASSIFICATION: Industrial Min.
TYPE: R INDUSTRIAL ROCKS Q GEMS AND SEMI-PRECIOUS STONES (diamonds und
DIMENSION: 80 x 10 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Dimensions of the syenite/carbonate breccia body.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Cambrian Unknown	Chancellor	Unnamed/Unknown Formation	Unnamed/Unknown Informal

LITHOLOGY: Limestone
Syenite Breccia Dike

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: Regional GRADE: Greenschist

CAPSULE GEOLOGY

The Mount Mather Creek sodalite prospect is located 30 kilometres north of Golden. The property is delineated by the Hope group of four claims.

The site can be accessed via the Blaeberry River Forestry Road thence following a trail north at kilometre 39 1/2. Sodalite outcrops in a steep, narrow cayon cut by a small Blaeberry River tributary called Mount Mather Creek.

The property owner discovered this sodalite occurrence in 1957. At that time, there was already an old, short adit blasted into the main sodalite syenite breccia body. In the summer of 1996, the current owner, Dave Lefurgey, started to develop the site and mined about 3 tonnes of low grade sodalite breccia from loose boulders to market the stone for lapidary and ornamental use.

The Mount Mather Creek area is within a syncline of the western "shaly facies" of Middle and Upper Cambrian Chancellor Group carbonate rocks (Price, 1967). Although the broad regional structure is a syncline, the beds exhibit complicated folding at the property scale.

The lower units of the Chancellor Group, which host the sodalite showing, are massive, well-bedded, fine-grained carbonates. One main breccia dike of sodalite syenite with two tributary dikelets cut the carbonate host rock across bedding planes. The syenite dikes weather brown due to the presence of pyrite and the host limestone exhibits a yellow to buff weathering alteration halo in contrast to its otherwise grey weathered surface. The yellow weathering is often more extensive along some bedding planes. Freshly broken rocks, altered and unaltered, have the same dark grey colour and can not be distinguished macroscopically from each other.

The absence of syenite on the eastern side of the valley, an abrupt end of the dike in the Mount Mather Creek bed and a distinct bedding pattern on each side of the canyon makes the authors suspect

CAPSULE GEOLOGY

that a fault with substantial displacement exists under the creek bed.

Sodalite is a major component of the syenite/carbonate breccia body. It is up to 10 metres wide and outcrops over a distance of approximately 80 metres in a vertical rocky cliff on the western side of the creek. It is also present as a minor component in the two thin independent dikes as fine-grained disseminations where albite is the dominant mineral. While the main breccia outcrop is practically inaccessible, large boulders that have fallen off the cliff and accumulated along, and within, the creek channel provided material for thin sections and are the source of most macroscopic observations.

The main body is part breccia and part stockwork. The host rock consists of fine-grained, bedded carbonate made of very fine-grained and possibly very small amounts of feldspar (0-50 per cent) and possibly very small amounts of quartz. Bed thickness varies from about 1 to 10 millimetres and in thin section is poorly defined. It is characterized by slight average grain size differences and is sometimes accented by iron staining either along bedding planes or throughout individual beds. Breccia clasts, from 1 to 10 centimetres long and 1 to 4 centimetres in diameter, are comprised of the same rock. The fragments exhibit features usually observed in plastic flow regimes, such as boudinage, rounded shapes and preferential orientation of clasts.

Sodalite syenite occurs as veins, breccia matrix and disseminations in the host rock.

The veins consist of coarse, blocky albite crystals up to 2 millimetres in width with calcite as a secondary vein filling. Calcite often forms secondary veinlets that branch from a central, albite rich "trunk" vein. The calcite grains typically grow perpendicular to vein walls and are up to 1 millimetre long.

The breccia matrix comprises a highly variable mix of albite, calcite, sodalite and scattered grains of pyrite, galena and magnetite. The albite and calcite grains are often 1 to 2 millimetres across and the calcite grains often have well formed twins.

Sodalite is ubiquitous in most of the syenite. It varies from coarse grain aggregates in breccia matrix to fine disseminations that give a blue hue to both thin sections and rock fragments. Coarse sodalite appears restricted to veinlets and pockets within the breccia matrix. It forms anhedral to subhedral grains and grain aggregates that make up 5 to 15 per cent of the syenite. Occasionally, sodalite forms aggregates up to several centimetres in size. It can also impregnate large host rock blocks along the bedding planes. As disseminated grains, sodalite is characterized by small euhedral grains 0.25 to 0.50 millimetres in size that make up to 10 per cent of the rock.

Pyrite is a common accessory in many samples. It occurs as disseminated crystals up to 2 millimetres in size. A few samples contained galena grains up to 1 millimetre in diameter that, seen under the microscope, were corroded and rimmed by euhedral pyrite. Magnetite occurs as small, approximately 1/4 millimetre in diameter, disseminated euhedral grains. While not mineralogically confirmed, the syenite probably also contains sphalerite. Some old assays provided to the authors by Mr. Lefurgey indicate similar values of zinc and lead.

Sodalite is known at several localities in British Columbia. The Ketchika River area, Wicheeda Lake, Bearpaw Ridge, Paradise Lake, Trident Mountain and Moose Creek on the south edge of the Ice River Complex all have sodalite as a common accessory (Pell, 1994). In none of these sites has it been found in a similar quantity as at Mount Mather Creek.

Currie (Geological Survey of Canada Memoir 239) mentioned, without any site description, Mt. Laussedat as a sodalite locality. It is our opinion, that because of the circumstances of the initial discovery, the Mount Mather Creek is the same occurrence (D. Lefurgey, personal communication, 1996).

One characteristic phenomenon common to a number of alkaline intrusions in the Rocky Mountains is their yellow to brown weathering halo. It is a striking feature of the Aley carbonatite and Rock Canyon Creek Rare Earth element showings, particularly because these two localities are not covered by vegetation. It is also a feature of the Mount Mather Creek sodalite occurrence. Such a colour anomaly is a very clear feature on low level colour air-photos and can be used as a prospecting tool for finding yet unknown alkaline intrusives. While, because of its location, the Mount Mather Creek site cannot be recognized on air-photos, large, unprospected brownish zones to the northwest and east of the sodalite showing are clearly visible.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1145
REPORT: RGEN0100

CAPSULE GEOLOGY

Several thousand pounds of low-grade sodalite rock was produced in 1996.

BIBLIOGRAPHY

EM EXPL 1996-E5
EM INF CIRC 1997-1
EMPR BULL 88
EMPR FIELDWORK *1996, pp. 317-320
GSC MEM 239
GSC P 62-32; 67-1B, pp. 88-91

DATE CODED: 1996/11/25
DATE REVISED: 1996/12/09

CODED BY: DH
REVISED BY: ZDH

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **0820 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **GOLD DOLLAR**, GOLD DOLLAR (NORTH), GOLD DOLLAR (SOUTH)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082004W
BC MAP:

MINING DIVISION: Golden

LATITUDE: 51 04 29 N
LONGITUDE: 115 53 25 W
ELEVATION: 2316 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5658720
EASTING: 577743

LOCATION ACCURACY: Within 500M

COMMENTS: The talc bodies are situated on a spur about 1 kilometre south of Talc Lake, near the British Columbia-Alberta border, in Kootenay National Park, approximately 80 kilometres east of Golden and 20 kilometres west-southwest of Banff, Alberta (Fieldwork 1992, page 365).

COMMODITIES: Talc

MINERALS

SIGNIFICANT: Talc
ASSOCIATED: Pyrite Carbon Chlorite
COMMENTS: Carbonaceous lenses and patches.
ALTERATION: Talc
ALTERATION TYPE: Talc
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Replacement Industrial Min.
TYPE: E08 Carbonate-hosted talc
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 3 Metres
COMMENTS: Gold Dollar (North) talc body.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Cambrian
Middle Cambrian

GROUP

Undefined Group
Undefined Group

FORMATION

Naiset
Cathedral

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Dolomite
Carbonaceous Dolomite
Argillite
Quartz Arenite
Argillaceous Dolomite
Dolomitic Argillite
Carbonaceous Argillaceous Dolomite
Talc

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Gold Dollar talc deposits lie near the British Columbia-Alberta border, in Kootenay National Park, and are situated on a spur 1 kilometre south of Talc Lake. Access to the deposit is 20 kilometres west of Banff, Alberta, where a secondary road leads off Highway 1 following Redearth Creek; from the mouth of Pharoah Creek a trail heads south into Redearth Pass and Talc Lake.

A series of talc bodies are exposed 300 to 1000 metres to the southeast of Talc Lake (Red Mountain, 0820 002 and Gold Dollar respectively), and also 1 kilometre northwest of Talc Lake (Saddle, 0820 003). They may represent erosional remnants of a once continuous and extensive zone. The bodies are in the hangingwall and close to and southwest of the northwest trending informally named Haiduk normal fault (Fieldwork 1992, page 365). The fault cuts through saddles along the spurs, two of which mark the contact between the Lower Cambrian Gog Group and Takakkaw tongue (slope facies of the Middle Cambrian Cathedral Formation). The talc bodies are just southeast and north of the northeast corner of an embayment in the Cathedral escarpment. There is a facies change at the Cathedral escarpment between the platformal Cathedral and Mount Whyte formations in the east, to the basinal Takakkaw tongue and Middle

CAPSULE GEOLOGY

Cambrian Naiset Formation to the west. The Red Mountain and Gold Dollar occurrences are at the base of the Takakkaw tongue (or Naiset Formation), whereas the Saddle occurrences are at the base of the Cathedral Formation.

At the Gold Dollar (North) occurrence, black talc is poorly exposed in several sloughed handcuts on the north side of the spur, 300 metres southeast of the Red Mountain occurrence. The talc body is at the top of an extensive talus apron below a cliff. Fifty metres east of the talc, the Haiduk fault is inferred to cut through the broad saddle between quartz arenites of the Gog Group to the east, and cliff-forming dolomites of the Takakkaw tongue to the west. This near-black, very rubbly weathering talc is at least 3 metres thick. The talc is weakly to strongly sheared and cut by a well developed slaty cleavage. It is very fine grained and moderately to very soft. A thin section reveals relic polygonal grains outlined by carbonaceous material, suggesting a protolith of brecciated carbonaceous dolomite. Analysis (XRF) indicates that the black colour of the talc probably results from extremely fine-grained chlorite as well as a carbonaceous mineral (Fieldwork 1992, pages 369, 370).

The talc grades upward into several metres of black argillite cut by a few per cent white talc veinlets. The argillite grades upward to a few metres of dolomitic argillite with intervals of black argillite and dolomite, into slaty argillaceous dolomite with 0.5 per cent fine to medium grained disseminated pyrite. All are thin to very thin bedded and laminated.

The Gold Dollar (South) occurrence is the second largest body of talc in the Talc Lake area and is exposed in a bluff that is 30 metres wide and 100 metres south and on the opposite side of the spur from the Gold Dollar (North) occurrence. A cut was made several metres into the talc at the base of the bluff. The contacts of the talc body are covered. The sheared body appears to occupy the hangingwall of the Haiduk fault and occurs between the top of the Gog Group to the east, and the Takakkaw tongue to the west. The talc weathers rusty orangish brown and has a very irregular, rough-weathered surface.

The eastern 7 metres of the talc body is medium to light grey with streaks and lenses of black on fresh surfaces. Partly talc-altered, very thin bedded and laminated dolomite interbedded with carbonaceous(?) argillaceous dolomite is locally apparent. The central 19 metres of talc is light grey and white with variable proportions of medium to dark grey and few per cent near-black carbonaceous lenses and patches. The interval is variably pyritic. The pyrite is very fine to medium grained and tends to cluster in irregular patches. The western 5 metres of talc is carbonaceous and near black with a few per cent white spots and a few, thin, sheared lenses of white talc.

BIBLIOGRAPHY

- EMPR FIELDWORK *1992, pp. 361-379
EMPR OF 1988-19, pp. 81-82
GSC MAP 1457A
GSC OF 481
CANMET RPT 803, pp. 57-59
Richards, A.M. (1935): B.C.'s Industrial and Nonmetallic Minerals, paper presented at the Annual General Meeting of the CIM, Winnipeg, p. 24

DATE CODED: 1985/07/24
DATE REVISED: 1993/08/10

CODED BY: GSB
REVISED BY: GO

FIELD CHECK: N
FIELD CHECK: Y

MINFILE NUMBER: **0820 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **RED MOUNTAIN**, NATIONAL TALC

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 082004W
BC MAP:

Underground

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 04 41 N
LONGITUDE: 115 53 35 W
ELEVATION: 2316 Metres

NORTHING: 5659088
EASTING: 577542

LOCATION ACCURACY: Within 500M

COMMENTS: The talc deposit is situated on the north side of an easterly spur about 300 metres south of Talc Lake, near the British Columbia-Alberta border, in Kootenay National Park, approximately 80 kilometres east of Golden and 20 kilometres west-southwest of Banff, Alberta (Fieldwork 1992, page 365).

COMMODITIES: Talc

MINERALS

SIGNIFICANT: Talc
ASSOCIATED: Pyrite Carbon Chlorite
ALTERATION: Talc
ALTERATION TYPE: Talc Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Replacement Industrial Min.
TYPE: E08 Carbonate-hosted talc
SHAPE: Tabular
MODIFIER: Sheared
DIMENSION: 260 x 30 Metres
COMMENTS: Talc deposit.

STRIKE/DIP:

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Cambrian	Undefined Group	Naiset	
Middle Cambrian	Undefined Group	Cathedral	

LITHOLOGY: Dolomite
Argillaceous Dolomite
Dolomitic Carbonaceous Argillite
Quartz Arenite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Red Mountain talc deposit is near the British Columbia-Alberta border, in Kootenay National Park, and is situated on the north side of an easterly spur about 300 metres south of Talc Lake. Access to the deposit is 20 kilometres west of Banff, Alberta, where a secondary road leads off Highway 1 following Redearth Creek; from the mouth of Pharoah Creek a trail heads south into Redearth Pass and Talc Lake.

A series of talc bodies are exposed 300 to 1000 metres to the southeast of Talc Lake (Red Mountain and Gold Dollar, 0820 001 respectively), and also 1 kilometre northwest of Talc Lake (Saddle, 0820 003). They may represent erosional remnants of a once continuous and extensive zone. The bodies are in the hangingwall and close to and southwest of the northwest trending informally named Haiduk normal fault (Fieldwork 1992, page 365). The fault cuts through saddles along the spurs, two of which mark the contact between the Lower Cambrian Gog Group and Takakkaw tongue (slope facies of the Middle Cambrian Cathedral Formation). The talc bodies are just southeast and north of the northeast corner of an embayment in the Cathedral escarpment. There is a facies change at the Cathedral escarpment between the platformal Cathedral and Mount Whyte formations in the east, to the basinal Takakkaw tongue and Middle Cambrian Naiset Formation to the west. The Red Mountain and Gold Dollar occurrences are at the base of the Takakkaw tongue (or Naiset Formation), whereas the Saddle occurrences are at the base of the Cathedral Formation.

CAPSULE GEOLOGY

The talc deposit at Red Mountain is exposed along steep, mostly inaccessible bluffs above an extensive talus slope and below a cliff of the Takakkaw tongue and younger rocks. The cliff exposing the Cathedral escarpment is 550 metres to the north. In 1927, ten years after the occurrence was first staked, two short (10 and 15 metres) adits, 50 metres apart, were driven southerly into it by the National Talc Company. In 1930, Western Talc Holdings drilled five holes totalling 152 metres into the talc. In 1944, Wartime Metals Corporation developed a stope and raise at the end of the western adit.

The Red Mountain talc occurrence has a length of 260 metres and height of up to 30 metres. The gently southwest-dipping body appears stratabound and formed as replacement of dolomite in interbedded and intergradational thin-bedded dolomite, argillaceous dolomite and dolomitic carbonaceous argillites. In general, it is just above the lowermost occurrence of dolomite and is above the unconformity at the top of the Gog Group quartz arenites. The extreme eastern end of the talc body appears to be offset with a minimum dip-slip displacement of 10 metres along the Haiduk fault. The talc is also strongly deformed by steep to gently dipping shears and intersecting sets of non-pervasive subparallel fractures commonly spaced 0.5 to 15 centimetres apart.

The talc body weathers a dark rusty brownish orange resulting from oxidized pyrite shears and fractures. Most of the talc is dark grey to near-black on fresh surfaces, with 2 to 10 per cent dirty white and up to 50 per cent very light grey patches, lenses, spots and specks. Thin sections and x-ray diffraction analyses indicate the near-black colour results from a carbon compound and a few per cent chlorite (Fieldwork 1992, page 366). A distinct 18-metre interval of light grey talc with dirty white patches and lenses forms the hangingwall of the Haiduk fault.

Pyrite is very irregularly disseminated in the lighter coloured talc, commonly forming 0.5 to 1 per cent, to locally 3 per cent. Thin sections indicate that the black talc does not contain pyrite.

The talc is generally moderately to strongly fractured and sheared. Intersecting fractures and fracture cleavages commonly result in a brecciated texture.

BIBLIOGRAPHY

EMPR AR 1928-C275
EMPR FIELDWORK *1992, pp. 361-379
GSC MAP 1457A
GSC OF 481

DATE CODED: 1993/08/10
DATE REVISED: 1993/08/11

CODED BY: GO
REVISED BY: GO

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **0820 003**

NATIONAL MINERAL INVENTORY:

NAME(S): **SADDLE** SADDLE (EAST), SADDLE (WEST)

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 082004W
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 51 05 23 N
LONGITUDE: 115 54 17 W
ELEVATION: 2362 Metres

NORTHING: 5660373
EASTING: 576706

LOCATION ACCURACY: Within 500M

COMMENTS: Two small exposures of talc are located 1.4 kilometres northwest of the Red Mountain occurrence (0820 002) and are on the west and east sides of a ridge. One exposure (the west) is in Alberta while the second is 230 metres east, in British Columbia. They are 1 kilometre northwest of Talc Lake, on the British Columbia-Alberta border, in Kootenay National Park, about 80 kilometres east of Golden and 20 kilometres west-southwest of Banff, Alberta (Fieldwork 1992, page 371).

COMMODITIES: Talc

MINERALS

SIGNIFICANT: Talc
ASSOCIATED: Quartz Pyrite
ALTERATION: Talc
ALTERATION TYPE: Talc
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive Stratabound
CLASSIFICATION: Replacement Industrial Min.
TYPE: E08 Carbonate-hosted talc

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Middle Cambrian
Lower Cambrian

GROUP

Undefined Group
Gog

FORMATION

Cathedral
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Dolomite
Quartz Arenite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

Two small exposures of white talc are located 1.4 kilometres northwest of the Red Mountain occurrence (0820 002). They are 230 metres apart and on the east and west sides of a steep ridge. The west occurrence is in Alberta and the east occurrence is in British Columbia. The exposures are just above talus aprons, at a narrow break in slope between a lower cliff of rusty weathering quartz arenites of the Lower Cambrian Gog Group to the north, and a cliff of bedded dolomites of the Middle Cambrian Cathedral Formation to the south. They are 750 metres north of the Cathedral escarpment and 130 and 300 metres southwest, respectively, of the Haiduk fault that cuts through the prominent saddle between the Talc Lake and Mummy Lake basins. See Red Mountain (0820 002) for detailed regional geology.

At the Saddle (East) occurrence, an interval of white talc 2.5 metres thick, is stratabound in thin-bedded dolomite of the basal Cathedral Formation, 2.5 metres above pyritic, possibly weakly talc-altered quartz arenite of the Gog Group.

The talc is sub-opaque, pale orangish white to limonitic and rusty orange on fresh surfaces, and contains very minor quartz and pyrite. Shear and fracture surfaces cutting the talc weather medium to dark, rusty orange-brown. Very strong fracturing yields a rough and rubbly weathering surface.

The Saddle (West) occurrence, 230 metres west of the Saddle (East) occurrence and in Alberta, comprises white talc that appears to be stratabound in a faulted interval, 7 metres wide and more than 20 metres long, between dolomite and argillite at the base of the Cathedral Formation. The talc resembles that of the east occurrence.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1151
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR FIELDWORK *1992, pp. 361-379
GSC MAP 1457A
GSC OF 481

DATE CODED: 1993/08/12
DATE REVISED: 1993/08/12

CODED BY: GO
REVISED BY: GO

FIELD CHECK: Y
FIELD CHECK: Y

MINFILE NUMBER: **083C 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **LARRY**, LARRY 1, LARRY 2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083C03W
BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 04 06 N
LONGITUDE: 117 23 55 W
ELEVATION: 2255 Metres

NORTHING: 5768713
EASTING: 472677

LOCATION ACCURACY: Within 500M

COMMENTS: A complex of diatreme pipes and dykes, continuous over 1200 metres length and 120 metres width and intruding Lower Cambrian to Silurian sediments, is centered on the Larry 1 claim (Assessment Report 17752).

COMMODITIES: Diamond

MINERALS

SIGNIFICANT: Diopside Chromite Garnet
COMMENTS: Diamond has not been found to date in the diatreme pipes and dykes on the Larry showing but has been found in two other diatreme pipes in a belt along the British Columbia-Alberta border between 50 to 90 kilometres north of Golden (Open File 1987-17).

ASSOCIATED: Magnetite Garnet Forsterite Clinopyroxene Phlogopite
Carbonate Quartz Spinel

COMMENTS: Cr-diopside, chromite and G5 almandine garnet are diamond indicator minerals (Assessment Report 17752).

ALTERATION: Carbonate Quartz Silica
COMMENTS: Carbonate and quartz sand grains form the majority of the matrix in type 1 and chlorite > calcite > quartz >> trace apatite for type 2 diatreme breccia types (Open File 1987-17). Significant supergene alteration inhibits primary or matrix features (Ass. Rpt. 17752).

ALTERATION TYPE: Serpentin'zn Oxidation

MINERALIZATION AGE: Devonian-Mississipp.

ISOTOPIC AGE: 334+/-7 & 348+/-7Ma

DATING METHOD: Rubidium/Strontium

MATERIAL DATED: Phlogopite

DEPOSIT

CHARACTER: Pipe Breccia
CLASSIFICATION: Diatreme Industrial Min.
TYPE: N03 Lamproite-hosted diamonds

SHAPE: Cylindrical

MODIFIER: Fractured

DIMENSION: 1200 x 120

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: A system of diatreme pipes and dykes is continuous for at least 1200 metres in length and up to 120 metres wide on the Larry 1 claim (Assessment Report 17752).

HOST ROCK

DOMINANT HOSTROCK: Volcanic

STRATIGRAPHIC AGE

Cambrian-Ordovician

Ordovician-Silurian

Devonian-Mississipp.

GROUP

McKay

Undefined Group

FORMATION

Undefined Formation

Beaverfoot

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

ISOTOPIC AGE: 334+/-7 & 348+/-7 Ma

DATING METHOD: Rubidium/Strontium

MATERIAL DATED: Phlogopite

LITHOLOGY: Lamprophyre

Siltstone

Shale

Limestone

Dolomite

Ortho Quartzite

Brecciated Pipe

HOSTROCK COMMENTS: Diatremes are hosted in Upper Cambrian to Lower Ordovician McKay Group through to Ordovician &/or Silurian Beaverfoot Formation (OF 1978-17).

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

CAPSULE GEOLOGY

The Larry showing is located 90 kilometres north-northwest of Golden, immediately west of the British Columbia-Alberta border. Access to the area is gained via the northern end of the Bush River

CAPSULE GEOLOGY

logging road.

Numerous diatremes are located along the British Columbia-Alberta border between 50 to 90 kilometres north of Golden. Most of the diatremes are hosted in Upper Cambrian carbonate rocks and in most cases, comagmatic dykes are also present. Micro diamonds are reportedly recovered from heavy mineral separates taken from two breccia pipes in this swarm. Preliminary investigation of these rocks suggests that they are neither kimberlites nor lamproites (Open File 1987-17).

Three petrologically, geographically and temporally distinct suites of ultrabasic diatremes can be recognized in British Columbia. The first suite, examples of which are located in the area north of Golden, including the Larry showing, and in the Ospika area, is characterized by macrocryst-rich breccias and dykes. The macrocrysts consist of titaniferous augite, phlogopite, green diopside, spinel and olivine with either augite or phlogopite in most abundance. In some cases, microphenocrystic melilite is present in small amounts. These rocks are tentatively classified as ultramafic lamprophyres; those with melilite are alnoites; those without are aillikites (Open File 1987-17). Breccia pipes commonly contain multiple phases of intrusion characterized by variable proportions of xenoliths, macrocrysts, and accretionary or pelletal lapilli (Open File 1987-17).

Rubidium/strontium age dates of 334 ± 7 and 348 ± 7 Ma have been obtained from phlogopite separates from two of these pipes. They indicate emplacement in Devonian-Mississippian time (Open File 1987-17).

At the Larry showing a diatreme dyke pipe swarm containing diamond indicator minerals intrudes gently folded Upper Cambrian to Lower Ordovician McKay Group and Upper Ordovician to Lower Silurian Beaverfoot Formation marine sediments. Lithologies include siltstone, shale, limestone and dolomite. These sediments have been intruded by a complex, north trending system of diatreme pipes and dykes continuous over at least 1200 metres length and up to 120 metres width on the Larry 1 claim. An additional diatreme breccia pipe, 300 metres long by 509 metres wide, is located on the Larry 2 claim (Assessment Report 17752).

Three diatremes were examined by J. Pell in 1986 revealing two breccia types. The first is a rusty weathering, clast-dominated megabreccia. The clast to matrix ratio is about 3 to 2. Over 99 per cent of the clasts are subrounded to subangular fragments of the hosting carbonate lithologies. The average size is 10 to 40 centimetres. Altered granitoids and less commonly, gabbroic rocks comprise the remainder of the xenolith population. The matrix is predominantly carbonate and quartz sand grains (Open File 1987-17).

The second breccia type is a clast dominated breccia; also massive, but is rusty to dark green weathering. The clast to matrix ratio is greater than the first breccia type. Clast population is more varied with approximately 50 per cent of the clasts being subangular sedimentary rock fragments of carbonate, shale and orthoquartzites. Two to 5 per cent contain angular to rounded, granitic material 5 to 15 centimetres across. Rounded, 8 to 25 centimetre-sized clasts comprise 10 to 20 per cent of the xenoliths. These clasts consist of coarse, randomly oriented carbonate grains, chrome mica and opaque oxides. An additional 5 to 10 per cent of the clast population is made up of accretionary or pelletal lapilli fragments ranging from a few millimetres to 3 centimetres across. The matrix of the breccia consists of chlorite > calcite > quartz >> trace apatite. Silvery mica macrocrysts, up to 3 centimetres across, are abundant (Open File 1987-17).

Both homogeneous and zoned dykes are common throughout the area.

A total of four bulk samples of diatreme material have been collected from the showing and analyzed for diamonds and diamond indicator minerals. Microdiamonds were not found in the samples analyzed. The mineralogy of the diatremes was determined to be chromium diopside, chromite, G5 (eclogite and/or primitive mantle source) magnesium almandine garnet, magnetite, grossular garnet, forsterite and clinopyroxene. The presence of G5 garnets, in particular, is consistent with a diamond paragenesis. But the compositions of the other indicator minerals are known to occur in either diamondiferous or nondiamondiferous lamproite or nondiamondiferous kimberlite. G5 garnets are in some instances found as inclusions in diamond, therefore can form at the same pressure and temperature conditions as diamonds (Assessment Report 17752).

Microscopic examination of sample 36 from the Larry 1 claim concluded that the sample consisted of juvenile lapilli in which some areas appear to be welded. Xenoliths of probable country rock are also present. Numerous phenocrysts of phlogopite comprise the only discernible primary material (Assessment Report 17752).

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1154
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR ASS RPT *13659, *17752
EMPR FIELDWORK 1986, pp. *259-267; pp. 273-282
EMPR OF *1987-17, pp. 67-70
GSC MAP 1339A

DATE CODED: 1991/12/05
DATE REVISED: 1991/12/05

CODED BY: KJM
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083C 002**

NATIONAL MINERAL INVENTORY:

NAME(S): **PTC**, PTC 1-8

STATUS: Prospect
 REGIONS: British Columbia
 NTS MAP: 083C04E 083D13E
 BC MAP:

MINING DIVISION: Golden

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 01 37 N
 LONGITUDE: 117 32 59 W
 ELEVATION: 1890 Metres

NORTHING: 5764178
 EASTING: 462284

LOCATION ACCURACY: Within 500M

COMMENTS: Center of the PTC 5 to 8 claims with carbonate hosted lead-zinc-silver and quartz vein-hosted copper (Assessment Report 21524).

COMMODITIES: Lead Zinc Silver Copper

MINERALS

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

DEPOSIT

CHARACTER: Vein Stratiform Podiform Disseminated
 CLASSIFICATION: Replacement Hydrothermal Epigenetic
 TYPE: E14 Sedimentary exhalative Zn-Pb-Ag I05 Polymetallic veins Ag-Pb-Zn±Au
 SHAPE: Irregular STRIKE/DIP: 310/60W TREND/PLUNGE:
 COMMENTS: Axial plane of megascopic fold within which the showing strikes 310 degrees. Dip of Chetang and Beaverfoot formations at the showing is 60 degrees west (Assessment Report 21524).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Middle Cambrian	Undefined Group	Snake Indian	
Ordovician-Silurian	Undefined Group	Beaverfoot	

LITHOLOGY: Dolomitic Carbonate
 Limestone
 Dolomite
 Shale
 Siltstone

HOSTROCK COMMENTS: Beaverfoot Formation is of Upper Ordovician to Lower Silurian age.

GEOLOGICAL SETTING

TECTONIC BELT:
 TERRANE:

INVENTORY

ORE ZONE: SAMPLE	REPORT ON: N
CATEGORY: Assay/analysis	YEAR: 1991
SAMPLE TYPE: Chip	
COMMODITY	GRADE
Silver	3.0000 Grams per tonne
Copper	0.0137 Per cent
Lead	0.4426 Per cent
Zinc	1.0000 Per cent

COMMENTS: One sample (P9-9) from a continuous 9 metre long by 0.5-metre wide chip from a hand trench. Zinc value is greater than 1 per cent.
 REFERENCE: Assessment Report 21524.

CAPSULE GEOLOGY

The PTC showing is located 85 kilometres north of Golden and is situated on the Prattle Creek drainage.
 Helicopter reconnaissance in the Prattle Creek drainage in 1989 revealed a 400 by 100 metre gossanous hydrozincite showing in black shale. Follow-up ground prospecting revealed three gossanous hydrozincite outcrops in strongly silicified gossan; lead-zinc-silver mineralization was discovered in dolomitic carbonate rocks to the east of the gossans. Further prospecting along strike to the regional folding revealed mineralization in dolomitic carbonates for 4.1 kilometres in scattered outcrop and float. This trend of

CAPSULE GEOLOGY

mineralization is on strike with the local axial plane of a megascopic fold with a 400-metre wavelength.

The PTC showing lies in a deformed northeasterly tapering wedge of supracrustal rocks overlying the crystalline basement complex. A 60 kilometre wide belt surrounding the claims are comprised of Lower Cambrian to Devonian marine terrigenous sediments and carbonates.

The Chetang Formation (Snake Indian Formation) of the Middle Cambrian Chancellor Group to the Upper Ordovician Beaverfoot Formation carbonates and shales are overthrust by Upper Cambrian Lynx Group carbonates to the west. A 2-kilometre long, northwest belt of Upper Devonian Fairholme Group carbonates and shales occur to the east of the PTC showing. Folding in the area is complex, with folds isoclinally folded and plunging in northeast and southwest directions.

Lithologies underlying the showing are tightly folded limestone, dolomite and shales of the Middle Cambrian Chetang Formation, Chancellor Group and the Upper Ordovician to Lower Silurian Beaverfoot Formation, within a tightly folded recumbent syncline with a 400-metre wavelength. Individual beds dip 60 degrees to the west. The axial plane of this fold strikes 310 degrees and is parallel to the regional foliation.

Mineralization is confined to grey oolitic dolomitic limestone as fractures, blebs and closely spaced individual crystals. Mineralization consists of carbonate hosted lead-zinc-silver and quartz vein hosted copper and minor zinc. Carbonate hosted lead-zinc-silver mineralization consists of reddish brown sphalerite, cubic crystalline galena, pyrite and marcasite. The dolomitic limestone host is silicified with closely spaced sphalerite grains, appearing to be connected, as reddish brown pods and blebs with minor disseminated galena.

One outcrop of mineralized dolomitic carbonate assayed 0.25 per cent zinc over one metre in grab samples (Assessment Report 21524). Numerous other outcrops display sweats of sphalerite, galena and pyrite of less than one metre width and variable grade (0.25 to 2.7 per cent lead plus zinc over 0.3 to 1.0 metre length) (Assessment Report 21524). A continuous chip sample over a total of 9.0 metres length was taken from a hand trench on the PTC 3 claim. Partial assay results of this continuous chip sample are as follows. Precious metal values are given in grams per tonne and base metals in per cent (Assessment Report 21524).

Sample No.	Width	Pb	Zn	Cu	Ag
P9-9	0.5 metres	0.4426	>1	0.137	3.0
P9-10	0.5 metres	0.2003	>1	0.086	2.0

Sampling from a soil geochemical grid outlined an area 400 by 75 metres of greater than 0.010 per cent lead with three samples in the area greater than 0.020 per cent zinc (Assessment Report 21524).

BIBLIOGRAPHY

- EMPR ASS RPT 19814, *21524
- GSC P 91-A, pp. 163-169
- BCPC Vol. 26, pp. 343-361
- GAC Special Paper No. 6, 1970
- EMPR OF 2000-22

DATE CODED: 1991/12/10
DATE REVISED: 1991/12/10

CODED BY: KJM
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 001**

NATIONAL MINERAL INVENTORY: 083D1 Zn1

NAME(S): **BEND 1 CANYON ZONE**, BEN 1-45, BEND,
CANYON, BEND 1, MGM

STATUS: Developed Prospect

MINING DIVISION: Golden

REGIONS: British Columbia

NTS MAP: 083D01E

UTM ZONE: 11 (NAD 83)

BC MAP:

LATITUDE: 52 03 00 N

LONGITUDE: 118 13 31 W

ELEVATION: 762 Metres

NORTHING: 5767308

EASTING: 415979

LOCATION ACCURACY: Within 500M

COMMENTS: One hundred metre exposure of massive sulphide is partially submerged by the flooding of McNaughton Lake (Fieldwork 1986, Assessment Report 16544).

COMMODITIES: Zinc Lead Silver Copper

MINERALS

SIGNIFICANT: Sphalerite Galena Arsenopyrite Chalcopyrite Magnetite

Pyrrhotite Pyrite

ASSOCIATED: Quartz Sericite

ALTERATION: Silica Sericite

ALTERATION TYPE: Silicific'n

MINERALIZATION AGE: Proterozoic-Cambrian

ISOTOPIC AGE:

DATING METHOD: Lead/Lead

MATERIAL DATED: Galena

DEPOSIT

CHARACTER: Stratiform Massive Disseminated

CLASSIFICATION: Sedimentary Exhalative Syngenetic

TYPE: E14 Sedimentary exhalative Zn-Pb-Ag

SHAPE: Tabular

DIMENSION: 400 x 200 x 7 Metres STRIKE/DIP: 135/67S

TREND/PLUNGE:

COMMENTS: Massive sulphide zone strikes SE and dips 65 to 70 degrees south. Regional folds plunge towards the north at 10 degrees. Lead isotope age from galena is Hadrynian-Cambrian (Fieldwork 1986).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Middle Cambrian

GROUP

Chancellor

FORMATION

Tsar Creek

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Manganiferous Dolomite
Siliceous Dolomite
Siliceous Quartzite
Quartzite
Garnet Muscovite Schist
Garnet Biotite Schist

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

COMMENTS: Biotite-sillimanite zone.

PHYSIOGRAPHIC AREA: Continental Ranges

RELATIONSHIP: Post-mineralization

GRADE: Amphibolite

INVENTORY

ORE ZONE: TOTAL

REPORT ON: Y

CATEGORY: Indicated
QUANTITY: 5000000 Tonnes

YEAR: 1985

COMMODITY

GRADE

Silver	7.0000	Grams per tonne
Lead	0.6000	Per cent
Zinc	2.3000	Per cent

COMMENTS: Average grades based on a strike length of 250 metres, dip length of greater than 200 metres and an average thickness of 7.3 metres.

REFERENCE: Assessment Report 16544.

CAPSULE GEOLOGY

The Bend 1 Canyon Zone is located in the Cummins River canyon near the confluence of the Cummins River with the Columbia Reach on the east side of McNaughton Lake. The occurrence is a few kilometres from the now defunct Big Bend Highway and approximately 107.5 kilometres southeast of Valemount.

In 1949, mineralization was discovered during the construction

CAPSULE GEOLOGY

of the Big Bend Highway and subsequently staked. In 1966 Cominco restaked 45 unit claims comprising the Ben 1 to 45 claim group. The following year Cominco drilled 240 metres in 13 short holes. In 1971 Laura Mines conducted further drilling with a total of 490 metres drilled in 4 holes. Between 1971 and 1987 the Bend claim group was reduced to a 12 unit claim group covering the Canyon Zone.

The area is underlain by a sequence of quartzites, carbonates and pelites from the Hadrynian Miette Group through the Lower Cambrian Gog Group to the Middle Cambrian Chancellor Group. The Gog Group is subdivided into three formations. From oldest to youngest these are: the McNaughton Formation, 500 metres of basal quartzite; the Mural Formation, 100 metres of marble, sandy carbonate, and shale and the Mahto Formation, 10 to 200 metres of quartzite with minor pelite. The overlying Chancellor Group has two subdivisions; the Tsar Creek and Kinbasket formations. The Tsar Creek Formation consists of mainly pelite, up to 100 metres thick, with irregular lenses of sandy carbonate and quartzite up to 100 metres thick. The Kinbasket Formation consists of over 800 metres of sandy carbonate with lenses of grey marble, up to 200 metres thick.

Two phases of folding and metamorphism are recognized with metamorphism reaching amphibolite grade (biotite to sillimanite zone) resulting in a Barrovian sequence of isograds related to the first and major phase of metamorphism. Metamorphic temperatures in the area were determined to have reached up to 480 degrees celcius at a pressure of approximately 5 kilobars.

The Porcupine Creek anticlinorium, a major regional structure trending northwest-southeast lies to the east of the prospect. The units strike southeast and dip steeply southwest. Thrusting is common in the area and to the west, the Purcell fault separates the Middle Cambrian Chancellor Group from Proterozoic Windermere Super Group rocks west of McNaughton Lake.

Stratiform mineralization of the Bend 1 Canyon Zone showing is exposed over approximately 100 metres in the canyon walls of Cummins Creek within the Tsar Creek Formation. Mineralization strikes southeast and dips 65 to 70 degrees south. Many layers in the Tsar Creek Formation are tightly folded with axial planes striking southeast and dipping steeply southwest. The main mineralized zone is 7 metres thick containing disseminated and massive sulphides. Exploration to date indicates a dip length in excess of 200 metres and a partially exposed strike length in excess of 400 metres (Assessment Report 16544). In decreasing order of abundance these are pyrite, pyrhotite, sphalerite and galena with lesser arsenopyrite, chalcopyrite and magnetite in a siliceous matrix. The main zone is overlain by 6 metres of chocolate weathering, manganiferous dolomite with disseminations of pyrite, sphalerite and galena. Quartz filled tension cracks are common. Mineralization is underlain by greater than 13 metres of intensely silicified, garnet-biotite and garnet-muscovite schist with minor pink quartzite. Quartz and sericite comprise this intense silicification.

The Bend prospect is a stratiform, synsedimentary, exhalative massive sulphide lense that was deposited within the unstable cratonic margin of Ancestral North America in the Hadrynian-Cambrian. Protoliths of the host rock include shale, chert, pelitic chert, and manganiferous carbonate units consistent with deposition in a starved basin. The metalliferous-rich sediments were probably deposited from dense, metal-rich brines derived from compaction of the sedimentary pile (Fieldwork 1986). Upon reaching the seafloor, brines denser than the sea water pooled in a major depression. Other chemical sediments, such as iron and manganese-rich metacherts above the Bend occurrence, are commonly associated with the end of sulphide deposition (Fieldwork 1986).

Exploration and drilling to date have defined indicated reserves of 5 million metric tonnes with an average grade of 7 grams per tonne silver, 0.6 per cent lead and 2.3 per cent zinc (Assessment Report 16544). The highest grades were obtained from the south and uppermost exposure at 750 metres (high flood level of McNaughton Lake) with 2.1 metres of 142 grams per tonne silver, 8.4 per cent lead and 2.0 per cent zinc (Assessment Report 16544). Some of the bands included at this location are 7 centimetres thick and returned assay values of 130 to 615 grams per tonne silver, 3.5 to 5.0 per cent lead and 0.1 to 15.0 per cent zinc (Assessment Report 16544).

BIBLIOGRAPHY

- EMPR AR 1959-90,104; 1967-264
- EMPR ASS RPT *9994, 11565, 12155, *15251, *16544
- EMPR FIELDWORK *1986, pp. 47-52
- EMPR GEM 1970-466
- EMPR PF (Claim, trenching, diamond drilling and geology maps, The Consolidated Mining and Smelting Company (1967); Field Notes, J.T.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1159
REPORT: RGEN0100

BIBLIOGRAPHY

Fyles (1970))
GSC MAP 15-1967, 1339A
GSC OF 2324
GSC P 66-1, pp. 51-52
CJES 15, pp. 86-98
GSA Memoir 153, pp. 445-461
EMPR OF 1998-10
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/06

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 002**

NATIONAL MINERAL INVENTORY: 083D1 Zn2

NAME(S): **BEND NORTH ROAD ZONE**, BEND, BEND 17-26,
MGM

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 083D01W
BC MAP:

MINING DIVISION: Golden

LATITUDE: 52 03 43 N
LONGITUDE: 118 15 44 W
ELEVATION: 1067 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5768680
EASTING: 413469

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrop exposure of sulphides in manganiferous dolomite occur at the upper zone of the "Road Zone" (Assessment Report 16544).

COMMODITIES: Zinc Lead Silver

MINERALS

SIGNIFICANT: Sphalerite Galena Pyrrhotite Pyrite
ASSOCIATED: Quartz Dolomite
ALTERATION: Silica Chlorite
ALTERATION TYPE: Silicific'n Chloritic
MINERALIZATION AGE: Proterozoic-Cambrian
ISOTOPIC AGE: DATING METHOD: Lead/Lead MATERIAL DATED: Galena

DEPOSIT

CHARACTER: Stratiform Massive Disseminated
CLASSIFICATION: Sedimentary Exhalative Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
SHAPE: Tabular
DIMENSION: 300 x 150 x 2 Metres STRIKE/DIP: 135/67S TREND/PLUNGE:
COMMENTS: The upper zone of the Bend North Road Zone is 300 by 150 by 2 metres in size. Mineralization strikes southeast and dips 65 to 70 south. Lead isotope age from galena is Hadrynian-Cambrian (Fieldwork 1986).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Middle Cambrian	Chancellor	Tsar Creek	

LITHOLOGY: Manganiferous Dolomite
Quartzite
Garnet Micaceous Schist

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Biotite-sillimanite zone.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1979
SAMPLE TYPE: Rock
COMMODITY GRADE
Silver 27.0000 Grams per tonne
Lead 2.0000 Per cent
Zinc 6.0000 Per cent

COMMENTS: Sample type and analytical technique are unknown. Sample is from lower zone.

REFERENCE: Assessment Report 9994.

CAPSULE GEOLOGY

The Bend North Road Zone is 2.85 kilometres northwest of the Bend 1 Canyon Zone prospect (083D 001). It is one of several stratiform exhalative massive sulphide showings occurring along a west-northwest-trending zone, almost 330 metres long and approximately 60 metres wide. Valemount is 107.5 kilometres to the north-northwest.

A sequence of quartzites, carbonates and pelites from the Hadrynian Miette Group through the Lower Cambrian Gog Group through to the Middle Cambrian Chancellor Group comprises the rocks of the Southern Park Ranges in this area. For a more comprehensive description of the regional geology refer to the Bend 1 Canyon Zone prospect (083D 001).

CAPSULE GEOLOGY

Stratiform mineralization at the Bend North Road Zone consists of a lower zone, and an upper zone on a west-facing dip slope (Assessment Report 9994). Both zones occur in the Tsar Creek Formation of the Middle Cambrian Chancellor Group. Many layers are tightly folded with axial planes striking southeast and dipping steeply southwest.

Fine grained sphalerite, galena pyrite and pyrrhotite, in manganiferous chocolate weathering dolomite, comprise mineralization at the upper zone. Massive chlorite is developed at the base and massive sulphide blebs are associated with silicification in tension cracks. Material sampled from this zone assayed 3 per cent zinc and 1 per cent lead (Assessment Report 9994). Surface exposure outlines a tabular body 300 by 150 by 2 metres. This mineralization may be correlative with that of the Bend 1 Canyon Zone.

The lower zone mineralization consists of disseminated sphalerite, galena, pyrite and pyrrhotite in silicified manganiferous dolomite, 6 metres thick. Sampled rock from this zone returned assay values of 6 per cent zinc, 2 per cent lead and 27 grams per tonne silver (Assessment Report 9994). Mineralization is overlain by a garnet-mica schist and underlain by a thin silicified quartzite.

In 1985, two holes were drilled immediately southwest of the Bend North Road Zone, totalling 211.85 metres. Drill hole MGM-1 encountered impure quartzite with occasional high silica intervals with secondary interstitial carbonate and infrequent thin chocolate brown dolomitic horizons. The hole was essentially barren except for trace amounts of galena in fracture fillings. A sample taken at 35.08 metres assayed 0.27 grams per tonne gold, 2.0 grams per tonne silver, 0.0158 per cent lead and 0.15 per cent zinc (Assessment Report 15251). Drill hole MGM-2 encountered predominantly garnet-muscovite pelite, increasing in coarseness and staurolite content with depth. Trace amounts of galena were noted in a white quartzite layer and within a dolomitic breccia (Assessment Report 15251).

BIBLIOGRAPHY

- EMPR AR 1959-90, 104; 1967-264
EMPR ASS RPT *9994, 11565, 12155, *15251, 16544
EMPR FIELDWORK *1986, pp. 47-52
EMPR GEM 1970-446
EMPR PF (Claim, trench, diamond drilling and geology maps, The Consolidated Mining and Smelting Company, 1967; Fyles, J.T. Fyles (1970): Field Notes)
GSC OF 2324
GSC P 66-1, pp. 51-62
CJES 15, pp. 86-98
GSA MEM 153, pp. 445-461
WWW <http://www.infomine.com/>
EMPR OF 2000-22

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/06

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 003**

NATIONAL MINERAL INVENTORY: 083D12 Au1

NAME(S): **BLUE ICE (SE ZONE)**, BLUE ICE, BLUE LEAD,
BLUE ICE (W ZONE), BLUE ICE (E ZONE), WELLS,
GLACIER

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 083D12W
BC MAP:
LATITUDE: 52 40 22 N
LONGITUDE: 119 53 58 W
ELEVATION: 2027 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Quartz vein exposed over 183 metres (figure 1 and 3, Minister of
Mines Annual Report 1938).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5839816
EASTING: 303971

COMMODITIES: Silver Gold Zinc Copper Lead

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Pyrite
ASSOCIATED: Quartz Siderite
COMMENTS: Dark siderite patches and blebs are common in mineralized quartz veins
(Minister of Mines Annual Report 1938).
ALTERATION: Sericite
COMMENTS: Sericite was not reported in veins from this occurrence but was
reported from others in the immediate vicinity.
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Shear Discordant
CLASSIFICATION: Hydrothermal Epigenetic Replacement
TYPE: E03 Carbonate-hosted disseminated Au-Ag
SHAPE: Irregular
DIMENSION: 230 x 137 x 4 Metres STRIKE/DIP: 305/80N TREND/PLUNGE:
COMMENTS: Mineralized, lenticular quartz bodies strike 305 degrees and dip 80
degrees northeast. The main vein is exposed over 230 metres length,
137 metres vertical depth and up to 3.6 metres width.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Cariboo	Isaac	
Hadrynian	Kaza	Undefined Formation	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartz Pebble Conglomerate
Massive Quartzite
Quartz Vein
Phyllite
Quartz Sericite Schist
Argillite
Limestone
Slate
Grit
Psammite

HOSTROCK COMMENTS: Late Proterozoic (Hadrynian) strata were deposited at some time during
the interval 850 to 570 Ma (CJES Vol. 24, No. 2, pp 302-313).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Mountains
TERRANE: Cariboo Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP:
COMMENTS: Located near contact between upper Kaza Group and Isaac Formation.
GRADE: Greenschist
Amphibolite

INVENTORY

ORE ZONE: VEIN

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Chip
 COMMODITY

YEAR: 1929

COMMODITY	GRADE	
Silver	120.0000	Grams per tonne
Gold	2.0600	Grams per tonne
Copper	1.2000	Per cent
Zinc	3.4000	Per cent

COMMENTS: Chip sample taken from exposed quartz vein in open cuts over 22.8 metres.

REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

The area around the headwaters of Azure River has claimed attention for several years on account of the discovery of large bodies of auriferous quartz in metasedimentary rocks of the Shuswap Metamorphic Complex. Mineralization of the Blue Ice (SE Zone) prospect is located at the headwaters of Hobson (Fred Wells) Creek. At the time of original staking, this ground was not part Wells Gray Provincial Park. Presently it lies within the northeast corner of the park and exploration activity is prohibited.

Mineral occurrences at the head of Hobson Creek are found in zones of fracturing, crosscutting host rocks at an oblique angle. Lenticular quartz bodies consisting of white quartz host pyrite, galena and chalcopyrite, sphalerite and arsenopyrite, at points where these bodies intersect cross fracturing striking 300 degrees. Quartz veins hosted in fractures are also mineralized. Most are narrow, irregular stockworks or sets of short quartz-filled cracks and tension gashes approximately perpendicular to bedding. Siderite is a common accessory in quartz veins. Mineralization locally extends into interbedded limestone bands, forming massive sulphide replacement.

The Blue Ice (SE Zone) prospect lies near the contact between the Hadrynian Upper Kaza Group and the stratigraphically overlying Isaac Formation of the Hadrynian Cariboo Group. The ground covering mineralization of the Blue Ice prospect is on the crest and northeast limb of a major anticline which plunges at a low angle to the northwest. The country rocks consist of quartz pebble conglomerate, massive quartzite, phyllite, quartz-sericite schist, argillite and limestone, of the Isaac Formation, which strike 305 degrees and dip 80 degrees to the northeast. Lithologies of the Hadrynian upper Kaza Group consist of quartzofeldspathic psammite, phyllite, slate and minor grit.

The Blue Ice (SE Zone) prospect lies about 1.5 kilometres southeast of the Blue Ice (W Zone) showing (083D 025). Quartz veins, hosted in fractures, contain abundant pyrite and lesser chalcopyrite, galena and sphalerite. Dark siderite patches and blebs are common. The main vein is traceable over 230 metres along the surface over 137 metres vertical relief and is 1.5 to 3.6 metres wide. The majority of the vein is barren and the sulphides are concentrated toward the upper end. This vein-fracture system is hosted in a pebble conglomerate.

Assay results from several samples taken from mineralized quartz vein material in this area, with precious metals expressed in grams per tonne and base metals in per cent (Minister of Mines Annual Report 1929) are as follows:

SAMPLE	TYPE	LOCATION	AU	AG	CU	ZN
1	chip	over 22.8 metres of open cut	2.06	120.0	1.2	3.4
2	chip	SE end across 1.22 metres	5.49	157.7		
3	chip	NW end across 1.07 metres	1.37	267.4	2.1	

Two claims were staked on the showings in 1923 by Fred Wells but the claims subsequently lapsed. In 1929, the showings were restaked as the Blue Ice and Blue Lead groups and optioned to Joseph Errington. Open cutting on the southeast showing (SE zone), Blue Lead group, was reported. The option was given up in 1931. The property in 1933 comprised the Blue Ice Group of 27 claims owned by Albreda Holdings Company Limited. Apparently little work was done and the claims lapsed. The property was restaked in 1938 as the Blue Ice group (22 claims) by W.R. Johnson and associates. Anlgo-Huronian Limited optioned the property and in 1939 carried out limited drilling in two areas (apparently drilling 10 holes). This work indicated that the mineralized outcrop did not extend to depth and the option was abandoned. Silver Standard Mines Limited and Wilson Mining Corporation Limited acquired a 65/35 per cent interest, respectively, in the 4 claim property in about 1956.

CAPSULE GEOLOGY

In 1988, better intersections of gold mineralization from drill core were obtained and assays were 51.4 grams per tonne gold across 4.57 metres, 24.0 grams per tonne gold over 1.52 metres and 7.2 grams per tonne gold over 2.13 metres (Consolidated Silver Standard Mines Limited Annual Report 1988).

In 1988 the Ministry of Environment and Ministry of Energy, Mines and Petroleum Resources announced that exploration in Wells Gray Provincial Park would be prohibited.

BIBLIOGRAPHY

EMPR AR 1919-N179; 1920-N168; 1923-A157; 1925-A171; 1926-A189;
1927-C192; *1929-C219-221; 1930-A193; 1931-A107; *1933-A194;
*1938-D3-D17; 1939-107
EMPR BULL 1, p. 69
EMPR PF (Annual Report of Consolidated Silver Standard Mines
Limited, 1988)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 86-1A, pp. 589-594; 87-1A, pp. 735-742
GSC SUM RPT 1926A; 1929A
CJES Vol. 14, No. 7, pp. 1690-1695; Vol. 24, No. 2, pp. 302-313

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/06

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 004**

NATIONAL MINERAL INVENTORY:

NAME(S): **SUMMIT**, AZURE RIVER GROUP, SUMMIT FRACTION,
SUMMIT 2-4, BUZZARD, RENFREW 1 FRACTION,
RENFREW 2 FRACTION, OLDHAM OLDHAM 1-6,
OLDHAM 11-12, GRIZZLEY, HORNE

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 38 12 N
LONGITUDE: 119 50 37 W
ELEVATION: 1653 Metres

NORTHING: 5835650
EASTING: 307587

LOCATION ACCURACY: Within 500M

COMMENTS: Location of the Horne tunnel adit on the Summit claim group (Minister of Mines Annual Report 1929).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Tetrahedrite Arsenopyrite
Pyrite

COMMENTS: Significant minerals listed do not occur in ALL veins included in this mineral occurrence.

ASSOCIATED: Quartz Siderite

COMMENTS: Siderite occurs in many veins as a common constituent (Minister of Mines Annual Report 1938).

ALTERATION: Sericite

COMMENTS: Sericite likely represents digested remnants of schist inclusions (Minister of Mines Annual Report 1938).

ALTERATION TYPE: Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Shear Discordant

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

SHAPE: Irregular

DIMENSION: 76 x 6 Metres STRIKE/DIP: 040/

COMMENTS: Largest of three quartz veins, approximately 300 metres northwest of the Horne tunnel, is 76 metres long by 6 metres wide and strikes north 40 degrees east (Minister of Mines Annual Report 1929). TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Kaza	Undefined Formation	
Hadrynian	Cariboo	Isaac	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartz Sericite Schist
Quartzite
Quartz Vein
Quartz Pebble Conglomerate
Limestone Pebble Conglomerate
Limestone
Phyllite
Grit
Psammite

HOSTROCK COMMENTS: Late Proterozoic (Hadrynian) strata were deposited at some time during the interval 850 to 570 Ma (CJES Vol. 24, No. 2, pp. 302-313).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

Cariboo

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Mountains

GRADE: Greenschist
Amphibolite

INVENTORY

ORE ZONE: TUNNEL

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Chip

YEAR: 1938

COMMODITY	GRADE	
Silver	54.8600	Grams per tonne
Gold	41.1400	Grams per tonne

COMMENTS: Grades are for one (60 centimetre chip) of three samples taken from the Horne tunnel on the Summit 3 claim.

REFERENCE: Minister of Mines Annual Report 1938.

CAPSULE GEOLOGY

The area around the headwaters of Azure River has claimed attention for several years on account of the discovery of large bodies of auriferous quartz in metasedimentary rocks of the Shuswap Metamorphic Complex. The Summit mineral showing is located on a ridge between the Azure River and Hobson Creek, approximately 7.6 kilometres south of the headwaters of the Azure River.

The Summit mineral showing lies near the contact between the Hadrynian Upper Kaza Group and the stratigraphically overlying Isaac Formation of the Hadrynian Cariboo Group. The ground covering the Summit mineralization is on the crest and northeast limb of a major anticline which plunges at a low angle to the northwest. The country rock is predominantly rusty weathering, quartz-sericite schist, striking west and dipping 70 degrees north. Lesser amounts of impure quartzite, pebble conglomerate and interbedded limestone of the Isaac Formation also occur. Lithologies of the Hadrynian upper Kaza Group consist of quartzo-feldspathic psammite, phyllite, slate and minor grit.

All the mineralization on the property is quartz-filled fissures containing pyrite, locally accompanied by galena, chalcopyrite, sphalerite, and rare amounts of tetrahedrite and arsenopyrite. Quartz veins all dip steeply and tend to strike one of four principal directions. The general structure strikes an average of 300 degrees. Other sets strike 330 to 340 degrees and 20 to 30 degrees. Those which strike 20 to 30 degrees are the most prominent as to size and most frequently contain sulphides. Those veins which are in quartzite, tend to have many branches that leave the parent in one or more sets and pinch out at 5 centimetres to 15 metres. All wide quartz veins terminate abruptly.

The quartz within veins is white and crystalline and sulphides are erratically distributed as scattered grains, as veins and as pockets and smears. Pyrite tend to be either intercrystalline with quartz or shattered and veined by quartz. Galena, sphalerite and chalcopyrite with associated gold are distinctly later than, and found as veinlets in, the pyrite. Siderite, light when fresh, weathers deep brown to reddish and occurs in many veins as a common constituent. Sericite is locally present and likely represents digested remnants of schist inclusions.

At the main showing, the Horne tunnel (adit) is driven back about 7.5 metres into the base of a ridge. Near massive sulphides, consisting of a fine assemblage of pyrite, sphalerite, chalcopyrite and galena, occur along segments of the adit walls. Other portions are lightly mineralized with pyrite. Disseminated mineralization occurs up to 30 centimetres into host schists. Three samples were taken from the adit area and assayed as follows (Minister of Mines Annual Report 1938).

SAMPLE	LOCATION	Au(g/t)	Ag(g/t)
1	east wall of adit 2.13 to 3.66 metres back from portal.	4.80	10.29
2	11 metres from portal; 60 centimetre chip sample.	41.14	54.86
3	3 metres above portal; 132 centimetre chip sample on surface.	10.29	10.29

Approximately 677 metres northwest along regional strike (100/70NE) of a major fold, three quartz masses crop out within 60 metres of each other. One of these, an open cut measuring 2.44 metres wide by 6.0 metres long, exposes considerable siderite and locally a little pyrite in quartz veins. Small outcrops of quartz extend for 61 metres to the northwest and 76 to 122 metres to the southeast. These outcrops of quartz stringers and veins host disseminated pyrite, galena and arsenopyrite. A sample from this open cut assayed 30.17 grams per tonne gold and 17.14 grams per tonne silver (Minister of Mines Annual Report 1938).

BIBLIOGRAPHY

EMPR AR 1919-N179; 1920-N168; *1923-A157; *1925-A171; *1926-A189; *1927-C192; *1929-C221; *1930-A193; *1931-A107; 1933-A194; *1938-D3-D17; 1939-107

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1167
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR BULL *1, p. 69
EMPR PF (Report by N.E. Nelson, 1936)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 86-1A, pp. 589-594; 87-1A, pp. 735-742
GSC SUM RPT 1926A; *1929A
CJES Vol. 14, No. 7, pp. 1690-1695; Vol. 24, No. 2, pp. 302-313
Falconbridge File

DATE CODED: 1985/07/24
DATE REVISED: 1991/11/28

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 004**

MINFILE NUMBER: **083D 005**

NATIONAL MINERAL INVENTORY: 083D6 Cb1

NAME(S): **VERITY**, LEMPRIERE, VERITY FIRST,
AR, AR 1-4, MILL,
BLUE RIVER

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 083D06E
BC MAP:
LATITUDE: 52 23 58 N
LONGITUDE: 119 09 21 W
ELEVATION: 870 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Specimen pit on the Verity First claim (Assessment Report 10274).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5807654
EASTING: 353331

COMMODITIES: Niobium Tantalum Phosphate Uranium Rare Earths
 Vermiculite

MINERALS

SIGNIFICANT: Pyrochlore Columbite Apatite Vermiculite
COMMENTS: Refer to capsule geology for detailed mineralogy.
ASSOCIATED: Dolomite Calcite Magnetite Amphibole Zircon
 Pyrite Pyrrhotite Olivine
COMMENTS: Deposit classification is metasomatic.
ALTERATION: Amphibole Biotite Albite Perthite
COMMENTS: See comment under associated minerals.
ALTERATION TYPE: Fenitic
MINERALIZATION AGE: Devonian-Mississipp.
ISOTOPIC AGE: 325 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.
TYPE: N01 Carbonatite-hosted deposits
SHAPE: Tabular
DIMENSION: 800 x 30 Metres STRIKE/DIP: 095/32S TREND/PLUNGE:
COMMENTS: Radiometric date is from two zircon separates. Potassium-argon dates on richterite from beforosite are 92.5+/-3.2 and 80.2+/- 2.8 Ma. These ages represent metamorphic ages (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Horsethief Creek Undefined Formation Shuswap Metamorphic Complex
Proterozoic-Paleoz.

LITHOLOGY: Carbonatite
Beforsite
Sovite
Fenite
Schist
Pelite
Amphibolite
Quartz Hornblende Mica Schist

HOSTROCK COMMENTS: In Semipelite-Amphibolite Unit.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Carbonatite in central (Omineca) division of carbonatite belt.

INVENTORY

ORE ZONE: VERITY REPORT ON: Y
CATEGORY: Indicated YEAR: 1982
QUANTITY: 2000000 Tonnes
COMMODITY GRADE
Niobium 0.1180 Per cent
Tantalum 0.0200 Per cent
COMMENTS: Values are weighted averages of Nb2O5 and Ta2O5 from a ten block mineral inventory.
REFERENCE: Assessment Report 11130.

CAPSULE GEOLOGY

In British Columbia, carbonatites are found in a broad zone parallel to and encompassing the Rocky Mountain Trench, extending from the Elkford area northward to Williston Lake. Occurrences within this belt have been subdivided into three sub-belts. Most carbonatite occurrences are found in the central belt. The central belt, predominantly within the Omineca Belt of the Canadian Cordillera, hosts most known stratiform carbonatites in the area between Revelstoke and Valemount. Within this northwest trending belt, a number of carbonatite layers containing anomalous strontium, niobium, tantalum and rare earth elements occur within the Semipelite-Amphibolite division of the Hadrynian Horsethief Creek Group in the Monashee Mountains near Blue River (Fieldwork 1984). All of these carbonatites have sodic-pyroxene and amphibole-rich fenitic margins and are associated with nepheline and sodalite syenites, urtites to meltergites. The time of emplacement of these carbonatites appears to be prior to the deformation and metamorphism associated with the Jura-Cretaceous Columbian orogeny and, in part, related to extension and/or rifting along the western continental margin. A third major extensional event at the end of the Devonian (circa 350 Ma.) resulted in the intrusion of carbonatites. Carbonatites and surrounding metasedimentary rocks have been regionally metamorphosed to upper amphibolite grade (kyanite to sillimanite zone) (Open File 1987-17; Bulletin 83, in press).

The Verity carbonatite is easily reached by trails and logging roads which cross the North Thompson River and intersect Highway 5 at Lempriere Station, approximately 40 kilometres north of Blue River. This showing has the most varied stratigraphy of all the carbonatites in the area and is similar texturally and compositionally to the Paradise showing (083D 006) and the Lempriere Carbonatite showing (083D 028). The Verity also contains the best mineralization of the Blue River carbonatites.

Carbonatite, consisting of banded beforosite and sovite (locally intruding each other), occurs as a 15 to 30 metre thick sill within quartz-hornblende-mica schist and can be traced from the Specimen pit up the hillside for 800 metres to the east-northeast. It likely continues to the Paradise showing, 4500 metres to the east-northeast. A tectonic breccia showing hairline fractures is common in the beforosite. A banded texture caused by layering of the accessory minerals apatite, amphibole, olivine, magnetite, vermiculite, biotite, pyrite, pyrrhotite, pyrochlore, columbite, and zircon, is common in the sovite unit and less developed in the beforosite unit. Coarse olivine and apatite in sovite units form bands 1 to 5 centimetres thick. Magnetite occurs as discontinuous lenses in sovite layers up to 20 centimetres in diameter. The pyrochlore and columbite crystals occur as octahedrons up to 4 centimetres. The major elements in pyrochlore are sodium, tantalum, niobium, and calcium, and locally minor uranium. The major elements in columbite are niobium and iron.

A 1.1-metre sample taken in 1952 assayed 0.6 per cent Nb₂O₅, 0.095 per cent uranium, and 4.85 per cent P₂O₅ (Minister of Mines Annual Report 1952). In 1982, the highest drill intersection was 0.025 per cent uranium over 1.5 metres. The Verity carbonatite has indicated reserves of 2 million tonnes of 0.118 per cent Nb₂O₅ and 0.020 per cent Ta₂O₅ (Assessment Report 11130). Rare earths occur in the carbonatite as indicated by assays of a sample with the following values: 0.0171 per cent lanthanum, 0.0371 per cent cerium, 0.0147 per cent neodymium, 0.0001 per cent ytterbium and 0.0020 per cent scandium. This sample also assayed 0.015 tantalum (Open File 1987-17). Sovites at the Verity showing also contain greater than 4 per cent phosphate and more apatite than any other carbonatite (Assessment Report 10274). The Rare Earths are thought to be in fluoro-carbonate.

The Blue River property was originally staked in 1950 for vermiculite by O.E. French, a homesteader in the area. Later investigations by French resulted in the discovery of the pyrochlore-bearing carbonatites. In 1952, St. Eugene Mining Corporation, Ltd. optioned the property and additional claims were staked. Most of the exploration work, consisting of trenching, sampling and blasting, was confined to the Verity and Mill claims. The property was dropped by St. Eugene and remained idle until June of 1976 when J. Kruszewski restaked the area. In June 1978, another trenching and sampling program was conducted under the supervision of E. Myers, Calgary, Alberta, with Kruszewski's assistance. A total of 840 cubic meters of stripping was undertaken and two grab samples were taken. In 1979, Kruszewski was approached by Anschutz (Canada) Mining Ltd. and an option contract was signed in February, 1980. In 1981 and 1982, the company conducted geological mapping, drilling and sampling.

Commerce Resources Corp. drilled five holes in 2001 and

CAPSULE GEOLOGY

reported a new inferred resource, based on previous drilling, of 3.06 million tonnes grading 160 grams per tonne tantalum, 452 grams per tonne niobium and 3.20 per cent phosphate.

BIBLIOGRAPHY

- EMPR AR 1950-223-229; *1952-115-119; 1954-111; 1968-222
EMPR ASS RPT *1630, 6741, 7236, 8216, *9566, *10274, 10955, *11130, *12361
EMPR BULL *86 (in press)
EMPR EXPL 1978-117; 1980-149; 1981-250; 1982-127,128; 2001-33-43, 73-82
EMPR FIELDWORK 1979, pp. 118-119; 1980, pp. 111-112; 1981, pp. 68-69 *1984, pp. 84-94, 95-100
EMPR MAP *22, #33
EMPR OF *1987-17; *1990-32
EMPR PF (unidentified news clipping; Knox, A. (2000): Summary Report on the Blue River Carbonatite Property, from Commerce Resources Corp. website)
GSC BULL 239, pp. 121,122,150
GSC EC GEOL #16 (2nd Ed.), p. 236; *#18, pp. 31-35
GSC MAP 15-1967
GSC OF 551
GSC P 89-1E, pp. 95-100
CJES 1988 Vol. 25, No. 8, pp. 1323-1337
PR REL Commerce Resources Corp., New Release, Sept.4, Oct.22, 2001, May 16, Sept.17, 2002; Mar.5, 10, 2003
WWW <http://www.commerceresources.com>; <http://www.commerceresources.com/s/Home.asp>; <http://www.infomine.com/>
Canadian Mineralogist, 1961, Vol. 6, pp. 610-633
Pell J. and Hora Z.D. (1990): Rifting, alkaline rocks and related magmatic deposits in the southern Canadian Cordillera; Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, 8th IAGOD Paper

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/07

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 006**

NATIONAL MINERAL INVENTORY: 083D6 Cb2

NAME(S): **PARADISE** AR 1-4, AR 4

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 24 22 N
LONGITUDE: 119 05 21 W
ELEVATION: 2209 Metres

NORTHING: 5808262
EASTING: 357887

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of carbonatite location V; banded sovite/amphibolite zone with fenite zone at the base (Assessment Report 11130).

COMMODITIES: Niobium Tantalum Phosphate

MINERALS

SIGNIFICANT: Pyrochlore Columbite Apatite
COMMENTS: Refer to capsule geology for a detailed mineralogy.
ASSOCIATED: Amphibole Vermiculite Dolomite Calcite Magnetite
Zircon Olivine Biotite

COMMENTS: Deposit classification is metasomatic.
ALTERATION: Amphibole Biotite Albite Perthite

COMMENTS: See comment under associated minerals.

ALTERATION TYPE: Fenitic

MINERALIZATION AGE: Devonian-Mississipp.

ISOTOPIC AGE: 340 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.
TYPE: N01 Carbonatite-hosted deposits

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 100

Fractured
Metres

STRIKE/DIP: 100/32S

TREND/PLUNGE:

COMMENTS: Radiometric date is from zircon separates from Paradise Lake syenite. These provided a slightly discordant uranium-lead age of 340 Ma and lead-lead ages of 351 and 363 Ma (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Hadrynian
Proterozoic-Paleoz.

GROUP

Horsethief Creek

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Carbonatite
Sovite
Fenite
Quartz Hornblende Mica Schist
Garnet Biotite Quartz Schist
Feldspar Hornblende Gneiss
Nepheline Syenite
Pelite
Amphibolite
Beforsite

HOSTROCK COMMENTS: Beforsite also occurs in the Semipelite-amphibolite unit.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Shuswap Highland

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Amphibolite

COMMENTS: Carbonatites in central (Omineca) division of carbonatite belt.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1979

SAMPLE TYPE: Chip

COMMODITY

GRADE

Niobium 0.0320 Per cent

Phosphate 4.5600 Per cent

Tantalum 0.0130 Per cent

COMMENTS: Niobium and phosphate values are for Na2O5 and P2O5 respectively. Chip sample was over 5 metres in beforsite.

REFERENCE: Assessment Report 10279.

CAPSULE GEOLOGY

The Paradise carbonatite is similar in texture and composition to the Verity carbonatite prospect (083D 005), 4500 metres to the west-southwest. Exposures of carbonatite occur with high grade metasediments on the north face of Paradise Mountain, immediately south of Paradise Lake and along the ridge to the northwest, on both sides.

Carbonatite composition varies somewhat from outcrop to outcrop and within a single outcrop. Most consist of sovite and lesser local beforosite occurring as sills within quartz-hornblende-mica schist of the Semipelite-Amphibolite Division of the Hadrynian Horsethief Creek Group. A detailed description of the regional geology is given for the Verity carbonatite prospect (083D 005).

The beforosite and sovite-fenite gneiss are generally separate units but they locally intrude each other and continuous horizons grade from beforosite to sovite. Beforosite crystals were observed floating in a sovite matrix indicating the sovite was later. Similar observations were made in drilling at the Verity prospect. A biotite sovite phase is unique to the Paradise showing and occurs as pods and segregations associated with nepheline syenite and feldspar-hornblende gneiss. Calcite, biotite, apatite and magnetite comprise the major constituents of this phase (Open File 1987-17). Carbonatite outcrops are in contact with fenite containing pyrochlore crystals. Gneisses show an increase in amphibole nearing the contact with carbonatites. A banded texture caused by layering of the accessory minerals apatite, amphibole, olivine, magnetite, biotite, pyrite, pyrrhotite, pyrochlore, columbite, and zircon is common in the sovite unit and less developed in the beforosite unit.

Chip samples over 5 metres across beforosite assayed 0.013 per cent tantalum, 0.032 per cent Nb₂O₅, and 4.56 per cent P₂O₅ (Assessment Report 10274). A sovite sample was analyzed and contained 0.36 per cent strontium cent zirconium (Open File 1987-17).

BIBLIOGRAPHY

- EMPR AR 1950-223-229; *1952-115-119; 1954-111; 1968-282
EMPR ASS RPT *1630, *6741, *7236, 8216, 9566, 9923, *10274, 10955, *11130, 12361
EMPR BULL *86 (in press)
EMPR EXPL 1978-117; 1980-149; 1981-250; 1982-128
EMPR FIELDWORK 1979, pp. 118-119; 1980, pp. 149; 1981, pp. 68-69; *1984, pp. 84-94, 95-100
EMPR MAP 22, #33
EMPR OF *1987-17; 1990-32
GSC BULL 239, pp. 121-122
GSC EC GEOL No. 16 (2nd Edit.), p. 235; No. 29, pp. 72,134
GSC MAP 15-1967
GSC OF 2324
GSC P 89-1E, pp. 95-100
CJES 1988 Vol. 25, No. 8; pp. 1323-1337
WWW <http://www.infomine.com/>
Canadian Mineralogist 1961, Vol. 6, pp. 610-633
Pell J. and Hora, Z.D. (1990): Rifting, alkaline rocks and related magmatic deposits in the southern Canadian Cordillera; Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, 8th IAGOD Paper

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/07

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 007**

NATIONAL MINERAL INVENTORY:

NAME(S): **YELLOW CREEK**, MICA KING, CLEAR WHITE,
MICA QUEEN, BIG BEND

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D01W
BC MAP:

MINING DIVISION: Golden

LATITUDE: 52 00 05 N
LONGITUDE: 118 18 44 W
ELEVATION: 1950 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5762006
EASTING: 409920

LOCATION ACCURACY: Within 1 KM

COMMENTS: Old workings at 6400 feet between westward flowing and northwestward flowing forks (at the headwaters) of Yellow Creek (Industrial Minerals File: Watson, K.deP (1944): Draft report on the Mica Deposits on Yellow Creek).

COMMODITIES: Kyanite Mica Beryllium

MINERALS

SIGNIFICANT: Kyanite Muscovite Beryl
ASSOCIATED: Biotite Quartz Feldspar Tourmaline Garnet
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Layered Stratiform Vein Podiform
CLASSIFICATION: Pegmatite Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists O03 Muscovite pegmatite
O01 Rare element pegmatite - LCT family

SHAPE: Tabular
MODIFIER: Folded

DIMENSION: 6

Metres

STRIKE/DIP: 294/66

TREND/PLUNGE:

COMMENTS: The pegmatite sill ranges in thickness from 1.5 to 6 metres. Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, 1990).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Horsethief Creek

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Pelitic Kyanite Schist
Mica Schist
Siliceous Gneiss
Micaceous Pegmatite Sill
Micaceous Quartzite
Amphibolite
Semi Pelite
Pegmatite Dike

HOSTROCK COMMENTS: Occurrence is found in Semipelite-Amphibolite unit of the Horsethief Creek Group (Mitchell, 1976). See capsule geology for details.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: Syn-mineralization
Post-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

The Yellow Creek occurrence is located at the head waters of Yellow Creek on the west side of McNaughton Lake, approximately 13 kilometres south-southeast of Boat Encampment. Warsaw Mountain is located approximately 3.25 kilometres to the northwest.

Mineralization at the Yellow Creek occurrence consists of two types: kyanite and mica hosted in schists and gneiss, and mica and beryl hosted in pegmatite sills and dykes.

The area is underlain primarily by folded metasedimentary rocks of the Hadrynian Horsethief Creek Group. The regional foliation in the area strikes 294 degrees and dips 66 degrees. Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, pp. 103-106). An expanded description of the regional geology is given in the Warsaw Mountain showing (083D 041).

At the Yellow Creek occurrence, kyanite is present near the base of the Semipelite-Amphibolite unit (Geological Society of America Memoir 153) or equivalent Aluminous Pelite unit, both of the

CAPSULE GEOLOGY

Horsethief Creek Group (Open File 1988-26). A recent regional compilation, however, shows these lithologies as belonging to the underlying Lower Pelite unit of the Horsethief Creek Group (Geological Survey of Canada Open File 2324).

Kyanite is found mainly in schists and coarse gneisses with muscovite, biotite, quartz, feldspar and garnet. Greyish-blue flat kyanite crystals vary in size from place to place, ranging from 0.6 to 7.0 centimetres long. Kyanite comprises up to 10 to 15 per cent by volume of the rock in the area.

A micaceous pegmatite sill is exposed at about 1524 metres elevation over approximately 45 metres. Muscovite comprises 15 per cent per rock volume in isolated patches, generally averaging much less. A second pegmatite sill, 1.5 to 6.0 metres thick is exposed at 1951 metres and intrudes schist and gneiss. Muscovite averages approximately 10 per cent rock volume, reaching as high as 20 per cent over 3 square metres. Individual muscovite booklets reach a maximum of 20 centimetres diameter and 5 centimetres thick, the average being much smaller. Most of the muscovite is twinned, badly cracked and iron stained. Nearby exposures of pegmatite contain minor amounts of tourmaline (Watson, 1944).

A beryl crystal was observed at the locality of the pegmatite mentioned above (ibid.). Beryl was reported seen in pegmatites at the Head of Yellow Creek. Spectrographic analyses recorded trace beryllium in muscovite and biotite from pegmatite and in kyanite and garnet from the wall rock schist (American Mineralogist, Vol. 18, p. 94, 1947).

BIBLIOGRAPHY

- EMPR AR 1898-39; 1913-42; 1920-N95; 1928-C188; 1931-148; *1952-258
EMPR OF *1988-26
EMPR PF (*Watson, K.DeP (1944): Draft Report on Mica Deposits on Yellow Creek)
GSC EC GEOL No. *23, pp. 58, 60
GSC OF 2324
GSC P 66-1; *77-1C
GSA MEM 153, pp. 445-461
Geology *Vol 18, pp. 103-106, 1990
Mitchell, W.J. (1976): Structure and stratigraphy of the Warsaw Mountain area, British Columbia; unpublished M.Sc. thesis, University of Calgary, Alberta.
Perkins, M.J. (1983): Structural geology and stratigraphy, Big Bend of the Columbia River, Selkirk Mountains, British Columbia; unpublished Ph.D. thesis, Carleton University, Ottawa, Ontario.
*Watson, K de P. (1947): American Mineralogist, v. 18, p. 94.

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/07

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 008**

NATIONAL MINERAL INVENTORY:

NAME(S): **BROWN CREEK**

MINING DIVISION: Golden

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 04 00 N
LONGITUDE: 118 20 40 W
ELEVATION: 1166 Metres

NORTHING: 5769306
EASTING: 407842

LOCATION ACCURACY: Within 1 KM

COMMENTS: Kyanite is found in pelitic schists half a mile (0.8 kilometre) up Brown Creek which flows into the Columbia from the west, approximately 4 miles (6.44 kilometres) southeast of Boat Encampment (Annual Report 1952).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Garnet Biotite Muscovite
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Layered Stratiform Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded
COMMENTS: Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, 1990).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Horsethief Creek	Unnamed/Unknown Formation	

LITHOLOGY: Pelitic Kyanite Schist
Quartzofeldspathic Psammite
Amphibolite
Conglomerate
Grit
Calc-silicate

HOSTROCK COMMENTS: Mineralization is hosted in the Lower Pelite and Grit unit of the Horsethief Creek Group (EMPR OF 1988-26, GSC OF 2324).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
PHYSIOGRAPHIC AREA: Selkirk Mountains
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

CAPSULE GEOLOGY

The Brown Creek occurrence is located 0.8 kilometres up Brown Creek on the west side of McNaughton Lake, approximately 6.44 kilometres south-southeast of Boat Encampment. Warsaw Mountain is located approximately 2.5 kilometres to the southwest.

The area is underlain primarily by folded metasedimentary rocks of the Hadrynian Horsethief Creek Group. Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, pp. 103-106). An expanded description of the regional geology is given in the Warsaw Mountain showing (083D 041).

At the Brown Creek occurrence, kyanite is present at the contact between the Aluminous Pelite unit (Open File 1988-26) or the equivalent Lower Pelite (Geological Survey of Canada Open File 2324) and Lower Grit unit (Open File 1988-26 and Geological Survey of Canada Open File 2324) of the Horsethief Creek Group. The Aluminous Pelite or Lower Pelite unit consists of pelitic schist, locally kyanite-sillimanite-staurolite-garnet-biotite and/or muscovite-bearing, quartzofeldspathic psammite, conglomerate with clasts of marble, calc-silicate rock, quartzite and granite, and concordant and discordant amphibolite. The Lower Grit unit consists of granule conglomerate, quartzofeldspathic psammite and grit, minor pelitic schist and amphibolite. Kyanite occurs in pelitic schists with greyish-blue crystals, 0.6 to 7.0 centimetres long, locally comprising 10 to 20 per cent rock volume.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1176
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1931-148, *1952-258
EMPR ASS RPT 16544
EMPR OF *1988-26
GSC OF *2324
GSC P 66-1, *77-1C
GSA MEM 153, pp. 445-461
Geology Vol. 18, pp. 103-106, 1990
Mitchell, W.J. (1976): Structure and stratigraphy of the Warsaw
Mountain area, British Columbia; unpublished M.Sc. thesis,
Univeristy of Calgary, Alberta.
Perkins, M.J. (1983): Structural geology and stratigraphy, Big Bend
of the Columbia River, Selkirk Mountains, British Columbia;
unpublished Ph.D. thesis, Carleton University, Ottawa, Ontario.

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/07

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 009**

NATIONAL MINERAL INVENTORY:

NAME(S): **GORGE CREEK**

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D02E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 04 18 N
LONGITUDE: 118 33 44 W
ELEVATION: 610 Metres

NORTHING: 5770161
EASTING: 392927

LOCATION ACCURACY: Within 1 KM

COMMENTS: Kyanite occurs in outcrops exposed in road cuts along the Big Bend Highway between miles 89.5 and 91.8 north of Revelstoke (Annual Report 1952).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Garnet Biotite Muscovite Sillimanite Staurolite
MINERALIZATION AGE: Cretaceous

DEPOSIT

CHARACTER: Layered Stratiform Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: STRIKE/DIP: 083/44
COMMENTS: Strike and dip, taken is of prominent foliation (GSC Open File 2324).
Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, 1990).

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian	Horsethief Creek	Unnamed/Unknown Formation	

LITHOLOGY: Pelitic Kyanite Schist
Quartzofeldspathic Psammite
Amphibolite
Quartzite
Conglomerate
Calc-silicate

HOSTROCK COMMENTS: Mineralization is hosted in the Aluminous Pelite unit (OF 1988-26) or the underlying Lower Pelite unit (GSC OF 2324).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Gorge Creek occurrence is located 1 kilometre south-southeast from the Mica Dam on McNaughton Lake. The area is underlain primarily by folded metasedimentary rocks of the Hadrynian Horsethief Creek Group. The regional foliation in the area strikes 083 degrees and dips 44 degrees. Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, pp. 103-106). An expanded description of the regional geology is given in the Warsaw Mountain showing (083D 041).

In the Warsaw Mountain area, northern Selkirk Mountains, kyanite is present in localized pelitic horizons near the base of the Semipelite-Amphibolite division (Geological Society of America Memoir 153). The Aluminous Pelite unit (Open File 1988-26) and the Lower Pelite unit (Geological Survey of Canada Open File 2324) of the Horsethief Creek Group are more recent divisions correlative with the Semipelite-Amphibolite division. This unit consists of pelitic schist (locally kyanite, sillimanite, staurolite, garnet, biotite and/or muscovite-bearing), quartzofeldspathic psammite, conglomerate with clasts of marble, calcsilicate rock, quartzite and granite, and concordant and discordant amphibolite. Kyanite porphyroblasts in these horizons are up to 5 centimetres in length.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1178
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1931-148; *1952-258
EMPR OF *1988-26
GSC OF 2324
GSC P 66-1; *77-1C
GSA MEM 153, pp. 445-461
Geology Vol. 18, pp. 103-106, 1990
Mitchell, W.J. (1976): Structure and stratigraphy of the Warsaw
Mountain area, British Columbia; unpublished M.Sc. thesis,
Univeristy of Calgary, Alberta.
Perkins, M.J. (1983): Structural geology and stratigraphy, Big Bend
of the Columbia River, Selkirk Mountains, British Columbia;
unpublished Ph.D. thesis, Carleton University, Ottawa, Ontario.

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/07

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 010**

NATIONAL MINERAL INVENTORY:

NAME(S): **YELLOWHEAD**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D15W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 52 06 N
LONGITUDE: 118 45 52 W
ELEVATION: 1844 Metres

NORTHING: 5859082
EASTING: 381233

LOCATION ACCURACY: Within 1 KM

COMMENTS: Sandstone beds host quartz veins striking in almost every direction (Minister of Mines Annual Report 1927).

COMMODITIES: Silver Lead Copper

MINERALS

SIGNIFICANT: Galena Chalcopyrite

ASSOCIATED: Quartz

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Discordant Disseminated

CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au

SHAPE: Irregular

COMMENTS: Veins which are subvertical and 15 to 45 centimetres wide are lightly mineralized (Minister of Mines Annual Report 1927).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Miette	Undefined Formation	

LITHOLOGY: Massive Conglomerate Sandstone
Pelite
Phyllite
Quartzite
Limestone

HOSTROCK COMMENTS: Showing is hosted in middle Miette strata, one of three informal map units recognized in the area (GSC Paper 88-1D, pp. 105-113).

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

PHYSIOGRAPHIC AREA: Continental Ranges

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Grab

COMMODITY

GRADE

Silver

75.4000

Grams per tonne

Lead

5.0000

Per cent

COMMENTS: Trace gold was also recorded in two samples.

REFERENCE: Minister of Mines Annual Report 1927.

CAPSULE GEOLOGY

The Yellowhead showing is located on the north side of Sleeper Mountain, 3.5 kilometres due south of Grant Brook on the Canadian National Railway between Tete Jaune and Jasper.

The geology of the area has received considerable attention in recent years. Detailed mapping has been primarily conducted by E.W. Mountjoy in the Rainbow Range from 1964 to 1968. M.R. McDonough, more recently conducted detailed mapping in the northernmost Selwyn Range.

Three informal map units have been recognized within the Hadrynian Miette Group of the northernmost Selwyn Range. The lowermost consists of a pelite and quartzite succession assigned to lower Miette status. This strata underlies a thick sequence of massive conglomeratic sandstones (grits) and green pelites belonging to the middle Miette. The upper Miette consists of a sequence of dark calcareous pelites and black limestone with minor sandstone.

The structure of the area is dominated by a series of large,

CAPSULE GEOLOGY

upright F2 folds that form an anticlinorium in the Moose Lake Thrust, which truncates in the west limb of the Mount Robson synclinorium. Pelites of the lower and upper Miette are thickened primarily by folding and foliation development. Middle Miette strata are thickened by folding and thrust faulting. Pre F2 folding, bedding parallel thrusts also thickened middle Miette strata. This was first recognized by McDonough and Simony in 1988 (Geological Survey of Canada Paper 88-1D, pp. 105-113).

The metamorphic grade, in the area, decreases to the north and northeast into the biotite zone with scattered chloritoid of greenschist grade.

At about 1844 metres, the massive conglomeratic sandstone beds of the middle Miette unit, striking east-west, develop quartz veins which strike in almost every direction. These vary in width from 2.5 to 90 centimetres. The widest veins appear to be conformable with bedding and are barren. Veins which are more or less vertical, varying in width from 15 to 45 centimetres wide show slight galena and chalcopryrite. A sample from one of these mineralized veins assayed trace gold, 75.4 grams per tonne silver and 5 per cent lead (Minister of Mines Annual Report 1927).

BIBLIOGRAPHY

- EMPR AR *1927-163
GSC MAP 15-1967, 1339A
GSC OF 2259; *2260; 2324
GSC P 84-1A, pp. 99-102; *86-1A, pp. 619-626; *88-1D, pp. 105-113;
88-1E, pp. 171-176; 90-1E, pp. 81-89, 90-1E, pp. 359-367;
91-1E, pp. 5-11
CJES Vol 25, No. 10, pp. 1687-1702
Geology Vol. 16, No. 2, pp. 139-143; Vol. 27, pp. 477-493

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/07

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 011**

NATIONAL MINERAL INVENTORY:

NAME(S): **SPIDER, EAGLE**

MINING DIVISION: Cariboo

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D15W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 54 12 N
LONGITUDE: 118 59 58 W
ELEVATION: 1402 Metres

NORTHING: 5863389
EASTING: 365524

LOCATION ACCURACY: Within 1 KM

COMMENTS: Small quartz veins are developed in quartz conglomerate (Minister of Mines Annual Report 1927).

COMMODITIES: Silver Lead Zinc

MINERALS

SIGNIFICANT: Galena Sphalerite
COMMENTS: Chalcopyrite was reported at the nearby Yellowhead showing (083D 010) Minister of Mines Annual Report 1927).

ASSOCIATED: Quartz
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Discordant Disseminated
CLASSIFICATION: Hydrothermal Epigenetic
TYPE: I05 Polymetallic veins Ag-Pb-Zn±Au
SHAPE: Irregular
DIMENSION: 2 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Mineralization was reported in a vein 15 centimetres wide (Minister of Mines Annual Report 1927).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Miette Undefined Formation

LITHOLOGY: Massive Conglomerate Sandstone
Quartz Vein
Pelite
Phyllite
Quartzite
Limestone

HOSTROCK COMMENTS: Showing is hosted in middle Miette strata, one of three informal map units recognized in the area (GSC Paper 88-1D, pp. 105-113).

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1927
SAMPLE TYPE: Grab
COMMODITY GRADE
Silver 360.0000 Grams per tonne
Lead 62.0000 Per cent
Zinc 1.0000 Per cent

COMMENTS: Trace gold was recorded in two samples.
REFERENCE: Minister of Mines Annual Report 1927.

CAPSULE GEOLOGY

The Spider showing is located on the northwest of Sleeper Mountain, 5 kilometres due west of Grant Brook on the Canadian National Railway between Tete Jaune and Jasper.

The geology of the area has received considerable attention in recent years. Detailed mapping has been primarily conducted by E.W. Mountjoy in the Rainbow Range from 1964 to 1968. M.R. McDonough, more recently conducted detailed mapping in the northernmost Selwyn Range.

Three informal map units have been recognized within the Hadrynian Miette Group of the northernmost Selwyn Range. The lowermost consists of a pelite and quartzite succession assigned to

CAPSULE GEOLOGY

lower Miette status. This strata underlies a thick sequence of massive conglomeratic sandstones (grits) and green pelites belonging to the middle Miette. The upper Miette consists of a sequence of dark calcareous pelites and black limestone with minor sandstone.

North of Sleeper Creek, thick conglomerate and sandstone units form a channel-like feature that cuts into and eliminates the underlying pelite unit. Thick conglomerates were deposited by mass gravity processes, likely representing debris and grain flows, and developed channels in an anastomosing submarine fan complex.

The structure of the area is dominated by a series of large, upright F2 folds that form an anticlinorium in the Moose Lake Thrust, which truncates in the west limb of the Mount Robson Synclinorium. Pelites of the lower and upper Miette are thickened primarily by folding and foliation development. Middle Miette strata are thickened by folding and thrust faulting. Pre F2 folding, bedding parallel thrusts also thicken middle Miette strata. This was first recognized by McDonough and Simony (Geological Survey of Canada Paper 88-1D, pp. 105-113).

Metamorphic grade, in the area, decreases to the north and northeast into the biotite zone with scattered chloritoid of greenschist grade.

At about 1402 metres, the massive conglomeratic sandstone beds of the middle Miette unit, host small quartz veins. A vein 15 centimetres wide is well mineralized with galena and lesser sphalerite. A sample from one of these mineralized veins assayed trace gold, 360 grams per tonne silver, 62 per cent lead and 1 per cent zinc (Minister of Mines Annual Report 1927).

BIBLIOGRAPHY

- EMPR AR *1927-163
GSC MAP 15-1967, 1339A
GSC OF 2259; *2260; 2324
GSC P 84-1A, pp. 99-102; *86-1A, pp. 619-626; *88-1D, pp. 105-113;
88-1E, pp. 171-176; 90-1E, pp. 81-89, 90-1E, pp. 359-367;
91-1E, pp. 5-11
CJES Vol 25, No. 10, pp. 1687-1702
Geology Vol. 16, No. 2, pp. 139-143; Vol. 27, pp. 477-493

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/07

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1183
REPORT: RGEN0100

MINFILE NUMBER: **083D 012**

NATIONAL MINERAL INVENTORY:

NAME(S): **CANOE NORTH MICA**, CANOE, CANOE 1,
VTS GRID, VALEMOUNT, CANOE RIVER,
VALEMONT, JOHN 1-11, CEDARSIDE

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 083D14W
BC MAP:
LATITUDE: 52 45 35 N
LONGITUDE: 119 17 40 W
ELEVATION: 993 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Location of drillhole GM-12 on the Canoe North Mica occurrence
(Assessment Report 7687).

Open Pit

MINING DIVISION: Cariboo
UTM ZONE: 11 (NAD 83)
NORTHING: 5848011
EASTING: 345177

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica Muscovite
ASSOCIATED: Kyanite Staurolite Garnet Biotite Quartz
Feldspar Pyrite Pyrrhotite
COMMENTS: Garnet, rutile and ilmenite were identified by X-ray diffraction on a
schist sample by the Department of Mines, Ottawa (Industrial Minerals
File: Report for Mits Development Co. Ltd, June 1978).

MINERALIZATION AGE: Lower Cretaceous
ISOTOPIC AGE: 135 +/- 4 Ma

DATING METHOD:

MATERIAL DATED:

DEPOSIT

CHARACTER: Concordant Stratiform Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded
DIMENSION: 18 Metres STRIKE/DIP: 240/10
COMMENTS: Hole 78-1 collared in 18.3 metres of schist (Assessment Report 7687).
The foliation of layers within the showing strike 240 degrees and dip
10 degrees northwest (Minister of Mines Annual Report 1961).

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian Proterozoic-Paleoz.	Kaza	Undefined Formation	Shuswap Metamorphic Complex

LITHOLOGY: Pelitic Schist
Muscovite Quartz Schist
Biotite Muscovite Pelite
Psammite
Amphibolite
Marble
Calc-silicate
Conglomerate
Coarse Grained Grit
Diamictite

HOSTROCK COMMENTS: The Canoe North Mica occurrence is located on the northwestern margin
of the Shuswap Metamorphic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional
COMMENTS: Showing is immediately west of the southern Rocky Mountain Trench.

PHYSIOGRAPHIC AREA: Cariboo Mountains
RELATIONSHIP: Syn-mineralization
GRADE: Amphibolite

INVENTORY

ORE ZONE: QUARRY
REPORT ON: Y
CATEGORY: Inferred
QUANTITY: 1000000 Tonnes
COMMODITY: Mica
GRADE: 60.5000 Per cent
YEAR: 1980
COMMENTS: Fairly assured reserves.
REFERENCE: Canadian Mining Journal, May 1982, page 13.

MINFILE NUMBER: **083D 012**

INVENTORY

ORE ZONE: QUARRY REPORT ON: Y
CATEGORY: Measured YEAR: 1980
QUANTITY: 2290000 Tonnes
COMMODITY: Mica GRADE: 60.5000 Per cent
REFERENCE: Canadian Mining Journal, May 1982, page 13.

CAPSULE GEOLOGY

The Canoe North Mica property is situated on the north side of the Canoe River about 5 kilometres southwest of Cedarside.

The showing is underlain by folded Hadrynian Lower Kaza Group kyanite-staurolite-garnet-biotite and/or muscovite-quartz-feldspar pelitic schist. Other lithologies of the lower Kaza Group include psammite, amphibolite, marble, calc-silicate, conglomerate, coarse grained grit and diamictite. The foliation of layers within the showing strike 240 degrees and dip 10 degrees northwest. A more detailed description of the regional structure and metamorphism is given in the Canoe South Mica (083D 017) and Albreda (083D 018) occurrences.

In the quarry, schist consists predominantly of muscovite and quartz with lesser garnet, biotite and feldspar, in layers striking 240 degrees and dipping 10 degrees to the northwest. A sample from the main quarry was sent to the Department of Mines, Ottawa where garnet, rutile and ilmenite were identified by x-ray diffraction. The main quarry is about 61 metres in diameter and 3.0 to 4.5 metres deep.

In 1961, a drill program, consisting of 18 short holes covering an area of 152 square metres, indicated approximately 200,000 tonnes of reserves grading 85 to 90 per cent mica to depth of 3.65 metres (Northern Miner March 15, 1962). Some holes were drilled to a depth of 12 metres without reaching the lower limit of the mica-rich layer. A processing plant was built in Cedarside in 1960 and 100 tonnes of mica product was produced for market by Georgia Mineral Industries Ltd. (Minister of Mines Annual Report 1960). During 1961, a further 125 tonnes of mica were produced (Minister of Mines Annual Report 1961). In 1962 remodelling of the plant was completed and testing begun. Several shipments of mica were made to dry-wall joint cement consumers (Minister of Mines Annual Report 1962).

Mits Development Company Ltd. drilled a 91.5 metre hole on the Canoe 1 claim in 1978. In 1979, a further 16 holes were drilled totalling 641.3 metres. Forty five samples were submitted for froth flotation for mica recovery. Results ranged from 51.6 to 68.5 per cent muscovite (Assessment Report 7687).

Outland Resources Corp. outlined 2,290,000 tonnes of reserves after acquiring the property in 1980. The grade was 60.5 per cent muscovite. Another 1,000,000 tonnes of reserves was fairly assured (Canadian Mining Journal, May 1982).

Property work in 1986 and 1987 included a pre-feasibility study. Conclusions of the study were that present markets were inadequate to justify production at that time.

BIBLIOGRAPHY

EMPR AR 1902-1083-1084; *1960-148; *1961-151; *1962-158
EMPR ASS RPT *7687
EMPR BC METAL (Industrial mineral production fiche for Georgian Mineral Industries Ltd.)
EMPR EXPL 1978-E289; 1979-333; 1986-A79
EMR MIN BULL MR 223 (1989) B.C. 86
GSC EC GEOL No. 19, pp. 83,84
GSC M 15-1967; 1339A
GSC OF 2324
GSC P *89-1E, pp. 101-107, *90-1E, pp. 71-80
CMJ *May 1982, p. 13
GCNL No. 62, 155, 1981; No. 45, 1982; No. 107, 112, 1987
N MINER *March 15, 1962; March 11, 1982; Sept 1, 1983

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/08

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 013**

NATIONAL MINERAL INVENTORY:

NAME(S): **WAR COLT 1**, WAR COLT, WAR COLT 2

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D12W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 37 34 N
LONGITUDE: 119 49 53 W
ELEVATION: 1633 Metres

NORTHING: 5834444
EASTING: 308368

LOCATION ACCURACY: Within 500M

COMMENTS: Location of War Colt Tunnel (from figure 2; Minister of Mines Annual Report 1938).

COMMODITIES: Silver Gold Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Galena Sphalerite Pyrite

ASSOCIATED: Quartz Siderite

ALTERATION: Sericite

COMMENTS: Sericitic alteration was observed in other veins throughout the area.

ALTERATION TYPE: Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Shear Massive

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

SHAPE: Irregular

DIMENSION: 15 x 2 Metres STRIKE/DIP: 300/60N

TREND/PLUNGE:

COMMENTS: Mineralized quartz vein strikes 300 degrees, dips 60 northeast, and has been traced for 15 metres along strike. Maximum width is 2 metres but pinches out at both ends (Minister of Mines Annual Report 1929).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

Hadrynian

Proterozoic-Paleoz.

GROUP

Kaza

Cariboo

FORMATION

Undefined Formation

Isaac

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Massive Quartzite
Schist
Quartz Pebble Conglomerate
Quartz Sericite Schist
Phyllite
Argillite
Limestone
Quartzofeldspathic Psammite
Slate
Grit

HOSTROCK COMMENTS: Late Proterozoic (Hadrynian) strata were deposited at some time during the interval 850 to 570 Ma (CJES Vol. 24, No. 2, pp. 302-313).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

Cariboo

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Mountains

GRADE: Greenschist
Amphibolite

COMMENTS: Located near contact between upper Kaza Group and Isaac Formation.

INVENTORY

ORE ZONE: SHAFT

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1927

SAMPLE TYPE: Grab

COMMODITY

COMMODITY	GRADE	
Silver	445.7000	Grams per tonne
Gold	1.3700	Grams per tonne
Copper	7.8000	Per cent
Lead	8.0000	Per cent
Zinc	3.2000	Per cent

COMMENTS: Sample was from shaft.

REFERENCE: Minister of Mines Annual Report 1927.

CAPSULE GEOLOGY

The area around the headwaters of Azure River has claimed attention for several years due to the discovery of large bodies of auriferous quartz in metasedimentary rocks of the Shuswap Metamorphic Complex. Mineralization on the War Colt claim group is located on the east bank of the Azure River immediately south of the junction between the Azure River and War Colt Creek. The Summit (083D 004), Grizzley (083D 027) and Blue Ice (083D 003,025,026) occurrences all lie to the northwest.

The War Colt claim group lies near the contact between the Hadrynian upper Kaza Group and the stratigraphically overlying Isaac Formation of the Hadrynian Cariboo Group. The country rocks, striking 255 degrees, consist of massive quartzite, quartz pebble conglomerate, quartz-sericite schist, phyllite, argillite and limestone, of the Isaac Formation. Lithologies of the upper Kaza Group consist of quartzofeldspathic psammite, phyllite, slate and minor grit.

On the War Colt claims there are a number of exposures indicating intersecting veins. The most important showing is located along the east bank of the Azure River where a short tunnel has been driven 4.9 metres from an open pit in a northeast direction and a shallow shaft put down into a massive sulphide pocket within a quartz vein conformable with host schist and quartzite. Open cuts extend the exposed mineralized quartz 13.7 metres northwest and three open cuts lie to the south and southeast exposing a number of quartz bodies.

In the adit, the innermost 1.5 metres consists of smokey quartz and siderite in a vein striking 300 degrees, dipping 60 degrees northeast and traced 15 metres along strike. This vein, up to 2 metres wide, pinch out at both ends and is conformable with host rocks and hosts the massive sulphide pocket. A second vein appears to follow a northeast fracture and is approximately 2 metres wide.

Pyrite occurs locally near the portal and a sample of the northwest vein from near the portal assayed 3.43 grams per tonne gold and 185.1 grams per tonne silver (Minister of Mines Annual Report 1927). Chalcopyrite is abundant to the northwest. Galena and lesser sphalerite are frequently seen in veinlets crosscutting carbonate and accompanied by quartz. A sample from the shaft assayed 1.37 grams per tonne gold, 445.7 grams per tonne silver, 7.8 per cent copper, 8 per cent lead and 3.2 per cent zinc (Minister of Mines Annual Report 1927).

A showing of quartz and siderite, approximately 3 metres square, crops out at the junction of Canyon Creek with the Azure River. Bands of pyrite, up to 15 centimetres wide, follow an east-west vein wall and a parallel zone of pyrite 30 to 60 centimetres wide traverses the mass. A high grade grab of this zone assayed 2.74 grams per tonne gold and 10.3 grams per tonne silver (Minister of Mines Annual Report 1938).

BIBLIOGRAPHY

- EMPR AR 1919-N179; *1920-N168; *1923-A157; 1925-A171; 1926-A189;
*1927-C192; *1929-C221; 1930-A193; 1931-A107; *1933-A194;
*1938-D3-D17; 1939-107
EMPR BULL *1, p. 69
EMPR PF (War Colt Group report, 1 p., 1933; Report by N.E.
Nelson, 1936)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 86-1A, pp. 589-594; 87-1A, pp. 735-742
GSC SUM RPT 1926A; *1929A
CJES Vol. 14, No. 7, pp. 1690-1695; Vol. 24, No. 2, pp. 302-313

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/08

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 014**

NATIONAL MINERAL INVENTORY:

NAME(S): **WAR COLT 2**, WAR COLT, WAR COLT 1

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D12W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5834400
EASTING: 309495

LATITUDE: 52 37 34 N
LONGITUDE: 119 48 53 W
ELEVATION: 1666 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Exposure of massive quartz with some underground workings and stripped over 7.6 metres is 183 metres above War Colt 1 (083D 013) (location 1, figure 3, Minister of Mines Annual Report 1938).

COMMODITIES: Gold Silver Copper Lead Zinc

MINERALS

SIGNIFICANT: Chalcopyrite Tetrahedrite Galena Sphalerite Pyrite

ASSOCIATED: Quartz Siderite

COMMENTS: Siderite is commonly associated with many of the veins in the immediate vicinity although no mention is made of it for this showing.

ALTERATION: Sericite

COMMENTS: Sericitic alteration was observed in other veins throughout the area.

ALTERATION TYPE: Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Shear Disseminated

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: E03 Carbonate-hosted disseminated Au-Ag

SHAPE: Irregular

DIMENSION: 14 x 3 Metres STRIKE/DIP: 055/

COMMENTS: Exposure of massive quartz, trending 055 degrees, is 13.7 metres long metres wide (Minister of Mines Annual Report 1938). TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian
Hadrynian
Proterozoic-Paleoz.

GROUP

Kaza
Cariboo

FORMATION

Undefined Formation
Isaac

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Massive Quartzite
Quartz Pebble Conglomerate
Quartz Sericite Schist
Phyllite
Argillite
Limestone
Quartzofeldspathic Psammite
Slate
Grit

HOSTROCK COMMENTS: Late Proterozoic (Hadrynian) strata were deposited at some time during the interval 850 to 570 Ma (CJES Vol. 24, No. 2, pp. 302-313).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

Cariboo

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Mountains

GRADE: Greenschist
Amphibolite

COMMENTS: Located near contact between upper Kaza Group and Isaac Formation.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1938

SAMPLE TYPE: Grab

COMMODITY

COMMODITY	GRADE	
Silver	301.7000	Grams per tonne
Gold	28.8000	Grams per tonne
Copper	2.9000	Per cent
Lead	3.1000	Per cent

COMMENTS: Mineralization was not abundant in the sample which the above assay results were attained.

REFERENCE: Minister of Mines Annual Report 1938.

CAPSULE GEOLOGY

The area around the headwaters of Azure River has claimed attention for several years due to the discovery of large bodies of auriferous quartz in metasedimentary rocks of the Shuswap Metamorphic Complex. Mineralization on the War Colt claim group is located on the east bank of the Azure River immediately south of the junction between the Azure River and War Colt Creek. The Summit (083D 004), Grizzley (083D 027) and Blue Ice (083D 003,025,026) showings all lie to the northwest.

The War Colt claim group lies near the contact between the Hadrynian upper Kaza Group and the stratigraphically overlying Isaac Formation of the Hadrynian Cariboo Group. The country rocks, striking 255 degrees, consist of massive quartzite, quartz pebble conglomerate, quartz-sericite schist, phyllite, argillite and limestone, of the Isaac Formation. Lithologies of the Hadrynian upper Kaza Group consist of quartzofeldspathic psammite, phyllite, slate and minor grit.

On the War Colt claims there are a number of exposures indicating intersecting veins. Massive quartz, 13.7 metres long by 3 metres wide is located approximately 183 metres eastward from the War Colt 1 (083D 013) showing. It has been exposed by some underground workings and by stripping over 7.6 metres. The massive quartz body trends 055 degrees.

The quartz is barren except for a 9-metre band along the northwest boundary and a shorter parallel band, 1 metre wide, extending from the center of the mass. Mineralization is not abundant but includes chalcopyrite, tetrahedrite, galena and lesser sphalerite. A sample of material from this showing assayed 28.8 grams per tonne gold, 301.7 grams per tonne silver, 2.9 per cent copper and 3.1 per cent lead (Minister of Mines Annual Report 1938). In 1923, a chip sample across the 7.6 metres stripped area assayed 12.34 grams per tonne gold and 34.28 grams per tonne silver (Minister of Mines Annual Report 1923).

BIBLIOGRAPHY

EMPR AR 1919-N179; *1920-N168; *1923-A157; 1925-A171; 1926-A189;
*1927-C192; *1929-C221; 1930-A193; 1931-A107; *1933-A194;
*1938-D3-D17; 1939-107
EMPR BULL *1, p. 69
EMPR PF (Report by N.E. Nelson, 1936)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 86-1A, pp. 589-594; 87-1A, pp. 735-742
GSC SUM RPT 1926A; *1929A
CJES Vol. 14, No. 7, pp. 1690-1695; Vol. 24, No. 2, pp. 302-313

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/08

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 015**

NATIONAL MINERAL INVENTORY:

NAME(S): **BEND 2900**, BEND 1-45, BEND 1,
BEND, CANYON ZONE, MGM

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D01E
BC MAP:

MINING DIVISION: Golden

LATITUDE: 52 02 57 N
LONGITUDE: 118 13 14 W
ELEVATION: 884 Metres

UTM ZONE: 11 (NAD 83)

NORTHING: 5767210
EASTING: 416302

LOCATION ACCURACY: Within 500M

COMMENTS: Outcrop containing five bands of massive sulphides alternating with siliceous sulphide layers (Assessment Report 16544).

COMMODITIES: Silver Zinc Lead Gold

MINERALS

SIGNIFICANT: Sphalerite Galena Magnetite Pyrrhotite Pyrite
ASSOCIATED: Quartz Dolomite
ALTERATION: Silica
ALTERATION TYPE: Silicific'n
MINERALIZATION AGE: Proterozoic-Cambrian
ISOTOPIC AGE: DATING METHOD: Lead/Lead MATERIAL DATED: Galena

DEPOSIT

CHARACTER: Stratiform Massive Disseminated
CLASSIFICATION: Sedimentary Exhalative Syngenetic
TYPE: E14 Sedimentary exhalative Zn-Pb-Ag
DIMENSION: 5 Metres STRIKE/DIP: 290/55 TREND/PLUNGE:
COMMENTS: Strike and dip is from bedding at the southern end of the showing.
Lead isotope age from galena is Hadrynian-Cambrian (Fieldwork 1986).
Zone is 4.7 metres wide (Assessment Report 16544).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Middle Cambrian Chancellor Tsar Creek

LITHOLOGY: Manganiferous Dolomite
Micaceous Quartzite
Sericitic Schist
Quartzite
Carbonate
Pelite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland PHYSIOGRAPHIC AREA: Continental Ranges
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Biotite-sillimanite zone.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Chip
COMMODITY GRADE
Silver 12.9000 Grams per tonne
Lead 1.2000 Per cent
Zinc 4.5000 Per cent
COMMENTS: Grades are weighted averages of five samples for all commodities except gold, over an average width of 4.7 metres.
REFERENCE: Assessment Report 16544.

CAPSULE GEOLOGY

The Bend 2900 showing is located on the southeast slope of the Cummins River canyon approximately 300 metres southeast along strike from the Bend 1 Canyon Zone occurrence (083D 001) and is one of four newly described massive sulphide outcrops occurring at consecutively higher elevations beginning at 750 metres. The mineralization was discovered in 1987 by Cominco during an access road and drill site construction project. These newly discovered occurrences extend southeast of several known stratiform exhalative massive sulphide showings including the Bend 1 Canyon Zone and the Bend North Road

CAPSULE GEOLOGY

Zone (083D 002) forming a zone trending west-northwest almost 330 metres long and approximately 60 metres wide, on the north side of the Cummins River canyon.

A sequence of quartzites, carbonates and pelites from the Hadrynian Miette Group through the Lower Cambrian Gog Group through to the Middle Cambrian Chancellor Group comprises the rocks of the Southern Park Ranges in this area. Individual beds generally strike 290 degrees and dip 55 degrees northeast. For a more comprehensive description of the regional geology refer to the Bend 1 Canyon Zone occurrence (083D 001).

Stratiform mineralization at the Bend 2900 occurs within the Middle Cambrian Tsar Creek Formation of the Chancellor Group. The showing consists of 5 bands of massive pyrite, sphalerite, galena, and magnetite alternating with siliceous sulphide layers. Sulphide mineralization alternates with layers of manganiferous dolomite containing lenses of massive pyrite, sphalerite and galena. The zone is approximately 5 metres thick. The southern edge of the mineralization is in contact with micaceous quartzite containing disseminated and podded pyrite, pyrrhotite, sphalerite, and galena. Selected bands of the massive sulphide mineralization assayed 0.432 gram per tonne gold, 40.69 grams per tonne silver, 4.1 per cent lead and 10.0 per cent zinc (Assessment Report 16544). A weighted average of a chip sample over 4.7 metres from all five bands of massive sulphide mineralization assayed 12.9 grams per tonne silver, 1.2 per cent lead and 4.5 per cent zinc (Assessment Report 16544).

Other mineralized outcrops were discovered at 792 metres, 823 metres, 914 metres and 1067 metres elevation consecutively, along strike. These outcrops are considered here to be part of the Bend 2900 showing. A highly oxidized sample from 792 metres, 70 metres along strike from the Bend 1 Canyon Zone, assayed 34.0 grams tonne silver, 1.2 per cent lead and 2.2 per cent zinc (Assessment Report 16544). Rubbly outcrop of manganiferous dolomite from 823 metres assayed 21 to 87 grams per tonne silver, 1.1 to 4.5 per cent lead and 7 to 16 per cent zinc over less than one metre (Assessment Report 16544). At 914 metres, small rods of fine lenses of pyrite, sphalerite and galena were noted in sericitic schist. A few mineralized quartz filled fractures were found in a small oxidized zone within manganiferous dolomite exposed at 1067 metres, about 300 metres southeast along strike from the Bend 1 Canyon Zone.

BIBLIOGRAPHY

- EMPR AR 1959-90, 104; 1967-264
- EMPR ASS RPT 9994, 11565, 12155, 15251, *16544
- EMPR FIELDWORK *1986
- EMPR GEM 1970-446
- EMPR PF (Claim, trenching, diamond drilling and geology maps, The Consolidated Mining and Smelting Company (1967); Field Notes, J.T. Fyles (1970))
- GSC OF 2324
- GSC P 66-1, pp. 51-62
- CJES 15, pp. 86-98
- GSA MEM 153, pp. 445-461
- EMPR OF 2000-22

DATE CODED: 1991/10/11
DATE REVISED: 1991/10/11

CODED BY: KJM
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 016**

NATIONAL MINERAL INVENTORY:

NAME(S): **VALEMONT**, ABA SANDS

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 083D14W
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 49 42 N
LONGITUDE: 119 17 04 W
ELEVATION: 915 Metres

NORTHING: 5855620
EASTING: 346094

LOCATION ACCURACY: Within 500M

COMMENTS: The occurrence is located 1.6 kilometres west of Valemont (Minister of Mines Annual Report 1963).

COMMODITIES: Silica

MINERALS

SIGNIFICANT: Silica
MINERALIZATION AGE: Quaternary

DEPOSIT

CHARACTER: Unconsolidated
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: B12 Sand and Gravel

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE

Quaternary

GROUP

Unnamed/Unknown Group

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Silica Sand

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Southern Rocky Mountain Trench

CAPSULE GEOLOGY

The Valemont deposit is located 1.6 kilometres west of Valemont and was mined for sand blasting material by Alba Sands Ltd. in 1963 and 1964.

The sand is reported to grade 60 to 70 per cent silica. Approximately 150 tonnes of material was mined from an open pit on the property and sold mainly for sand blasting (Minister of Mines Annual Report 1963). A \$150,000 mill was constructed at the pit, which had a 200-ton per day capacity.

BIBLIOGRAPHY

EMPR AR *1963-151; *1964-207

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/05

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 017**

NATIONAL MINERAL INVENTORY:

NAME(S): **CANOE SOUTH MICA**, ALBREDA/CAMP CREEK, CANOE GRID

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 083D11W
BC MAP:

Underground

MINING DIVISION: Cariboo

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 43 55 N
LONGITUDE: 119 17 21 W

NORTHING: 5844910
EASTING: 345434

ELEVATION: 968 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Center of Canoe Grid (Industrial Minerals File, mineral property map 83D11/W).

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica Muscovite
ASSOCIATED: Kyanite Staurolite Garnet Biotite Quartz
Plagioclase

COMMENTS: The associated mineral assemblage will vary depending whether the showing is hosted by pelitic schist/pelite or within pegmatite bodies hosted in the former. Refer to capsule geology for explanation.

MINERALIZATION AGE: Lower Cretaceous

ISOTOPIC AGE: 135 +/- 4 Ma

DATING METHOD:

MATERIAL DATED:

DEPOSIT

CHARACTER: Concordant Stratiform Vein Disseminated
CLASSIFICATION: Metamorphic Pegmatite Industrial Min.

SHAPE: Tabular
MODIFIER: Folded

Faulted
Metres

STRIKE/DIP:

TREND/PLUNGE: 135/04

COMMENTS: Trend and plunge are for a fold axis approximately one kilometre south of the occurrence (GSC Paper 89-1E, pp. 101-107). Age of metamorphism is for the main metamorphic event (GSC Paper 90-1E, pp. 71-80).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Upper Proterozoic
Proterozoic-Paleoz.

GROUP

Kaza

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Pelitic Schist
Pegmatite
Sub Feldspathic Psammite
Sub Feldspathic Grit
Amphibolite
Diamicite
Marble
Calc-silicate
Quartzite
Conglomerate

HOSTROCK COMMENTS: Host rocks are interpreted to be lower Kaza Group (Geological Survey of Canada Open File 2324).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

COMMENTS: Relationship of metamorphism varies with age of the host rock.

Ancestral North America

RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Mountains

GRADE: Amphibolite

CAPSULE GEOLOGY

A showing of white muscovite has been exposed on the west side of Highway 5, approximately 9 kilometers south of Valemount. An open cut at the showing exposed quality white muscovite. It is not known whether this showing occurs in pelitic schist or pegmatite. A tunnel of unknown length was started at the west end of the pit. Mutiphase deformation has affected stratigraphy of the lower Kaza Group and underlying Hadrynian Horsethief Creek Group strata, resulting in large antiform-synform pairs trending northwest. At least three phases of deformation have been recognized. The later two phases have produced coaxial, generally northwest-plunging fold axes, superimposed on the limbs of large-scale, phase one structures (Geological Survey of Canada Paper 89-1E). The trend and plunge of a major fold axis 1 kilometre south of the Canoe South Mica occurrence are 135 and 04 degrees respectively.

CAPSULE GEOLOGY

Metamorphic grade is dominantly within the kyanite stability field of amphibolite grade, with local development of migmatite which increases from east to west. Pressures and temperatures of metamorphism range from 620 to 780 megapascals and 565 to 682 degrees celsius respectively (Geological Survey of Canada Paper 89-1E). The age of the main metamorphic event in this area is Early Cretaceous (135+/-4 Ma) (Geological Survey of Canada Paper 90-1E).

The showing occurs in Hadrynian lower Kaza Group pelitic schist (locally kyanite, staurolite, garnet, muscovite and biotite bearing) of the lower Kaza Group. Other lithologies of the lower Kaza Group in the vicinity include subfeldspathic psammite and grit, ortho-amphibolite, marble, calc-silicate, quartzite, diamictite and conglomerate (Geological Survey of Canada Open File 2324). Pegmatite bodies, ranging in thickness from 3 centimetres to 3 metres, are present throughout the area. They consist of coarse grained plagioclase, quartz and muscovite with minor garnet. Some bodies are transposed and deformed with host lithologies, whereas others crosscut foliation and folds of host lithologies, therefore representing different generations (Geological Survey of Canada Paper 89-1E).

Approximately 4 tonnes were mined with 4000 lbs (1815 kilograms) being packed out (Minister of Mines Annual Report 1915).

Mica schist from the Albreda vicinity was ground by L.T. Farley and Co. and by G.W. Richmond of Vancouver for use by roofing manufacturers in Vancouver and Victoria (Ministry of Mines Annual Report 1947). Between 1944 and 1954, 3,941 tonnes were mined, yielding 3,989,756 kilograms of mica. In 1960, N.E. Reid produced a minor amount from the area.

BIBLIOGRAPHY

- EMPR AR *1914-K54-K55; 1947-A220
- EMPR BC METAL (Industrial minerals production fiche on Fairey & Company)
- EMPR IND MINFILE (*Report for Mits Development Co. Ltd., June 1978)
- GSC EC GEOL No. 19, pp. 83-84
- GSC MAP 15-1967; 1339A
- GSC OF 2324
- GSC P *89-1E, pp. 101-107; *90-1E, pp. 71-80

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/08

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 018**

NATIONAL MINERAL INVENTORY:

NAME(S): **ALBREDA**, DEC GRID

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D11E
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 40 16 N
LONGITUDE: 119 13 29 W
ELEVATION: 1067 Metres

NORTHING: 5838008
EASTING: 349576

LOCATION ACCURACY: Within 500M

COMMENTS: Centre of the Dec claim grid (Industrial Minerals File: Report for Mits Development Company Ltd., June 1978).

COMMODITIES: Mica Kyanite

MINERALS

SIGNIFICANT: Mica Muscovite Kyanite
COMMENTS: Refer to capsule geology for explanation.
ASSOCIATED: Biotite Plagioclase Quartz Garnet Staurolite
Sillimanite

COMMENTS: The associated mineral assemblage will vary depending whether the mica/kyanite is hosted in pelitic schist/pelite or within pegmatite dykes hosted in the former. Refer to capsule geology for explanation.

MINERALIZATION AGE: Lower Cretaceous

ISOTOPIC AGE: 135 +/- 4 Ma

DATING METHOD:

MATERIAL DATED:

DEPOSIT

CHARACTER: Concordant Stratiform Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists O03 Muscovite pegmatite
SHAPE: Tabular
MODIFIER: Folded

DIMENSION: Metres STRIKE/DIP: 100/48 TREND/PLUNGE: 284/09

COMMENTS: Strike/dip are for regional foliation and trend/plunge are for fold axis near showing (GSC Paper 89-1E, pp. 101-107). Age of mineralization is for the main metamorphic event (GSC Paper 90-1E, pp. 71-80).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Kaza	Undefined Formation	
Hadrynian	Horsethief Creek	Undefined Formation	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Biotite Muscovite Pelite
Semi Pelite
Pelitic Schist
Quartz Biotite Muscovite Schist
Amphibolite Schist
Coarse Grained Grit
Quartz Biotite Plagioclase Psammite
Garnet Amphibolite
Pegmatite

HOSTROCK COMMENTS: Pelitic schists are locally kyanite, sillimanite, staurolite, garnet, quartz, biotite and/or muscovite bearing (GSC Open File 2324).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Cariboo Mountains

TERRANE: Kootenay

Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP:

GRADE: Amphibolite

COMMENTS: Showing is immediately west of the southern Rocky Mountain Trench.

CAPSULE GEOLOGY

The Albreda showing is located about 6.5 kilometres north-northwest of the Albreda Station on the Canadian National Railway from Kamloops to Tete Jaune Cache and Jasper.

Little information is available for this occurrence except boulders of mica-garnet schist containing a fairly high proportion of bladed kyanite are exposed in railway cuttings for about half a mile in the vicinity of Albreda (Minister of Mines Annual Report 1947). It is not known whether there are nearby exposures hosted in within pelite/schist units of the metasediments themselves or in pegmatite dykes within enclosing metasediments. A claim group of four claims, the Dec Grid, was reported by the Mits Development Co. Ltd. in June 1978 and is assumed to cover the previously described kyanite bearing

CAPSULE GEOLOGY

boulders.

The Canoe River map area is predominantly underlain by a folded sequence of Hadrynian metasedimentary strata, belonging to the Horsethief Creek and Kaza groups and their basement gneisses. Horsethief Creek Group strata in the Canoe River area are locally sufficiently pelitic to produce abundant aluminosilicate minerals (kyanite) when subject to high grade regional metamorphism (Open File 1988-26). The metamorphic grade is dominantly within the kyanite stability field of amphibolite grade. The age of the main metamorphic event in the area is Early Cretaceous (135+/-4 Ma) (Geological Survey of Canada Paper 90-1E, pp 71-80). Further information on temperatures and pressures are given in the Canoe South Mica occurrence (083D 017).

Recent geologic mapping of the area by Walker (1989) suggests this region consists of an overturned north-facing metasedimentary package. Host rocks of the showing are interpreted as Hadrynian lower Kaza Group, consisting predominantly of biotite-muscovite-rich pelites, with lesser coarse grits and psammites and minor amphibolite and semipelite (Geological Survey of Canada Paper 89-1E, pp. 101-107).

Alternatively, Murphy (1990) interprets these rocks as belonging to the Semipelite-Amphibolite division of the Hadrynian Horsethief Creek Group, which he has subdivided into six regional mappable units. The lower two of these units host the Albreda mica occurrence. The basal unit consists of thin to medium bedded, flaggy, quartz-biotite-plagioclase psammite, stratiform amphibolite schist, massive conformable garnet amphibolite and kyanite-staurolite-garnet-muscovite-biotite-quartz-plagioclase schist (locally with quartzofeldspathic knots and laminae). The overlying unit consists of pelitic schists with minor psammite laced with quartzofeldspathic stringers lending the appearance of migmatite (Geological Survey of Canada Paper 90-1E, pp 71-80). Refer to the Canoe South Mica showing (083D 017) for additional comments on the regional structure.

Pegmatite bodies, ranging in thickness from 3 centimetres to 3 metres are present throughout the area. These consist of coarse grained plagioclase, quartz and muscovite with minor garnet. Some bodies are transposed and deformed with host lithologies, whereas others crosscut foliation and folds of host lithologies, therefore representing different generations (Geological Survey of Canada Paper 89-1E). It is not known whether any of these pegmatites host mica of commercial quality.

BIBLIOGRAPHY

EMPR AR 1915-K54-K55; 1920-N95-N96; 1931-A148-A149; *1947-A215-A216
1952-A258
EMPR OF *1988-26
GSC EC GEOL No. 19, pp. 83-84
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P *89-1E, pp. 101-107; *90-1E, pp. 71-80

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/09

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 019**

NATIONAL MINERAL INVENTORY:

NAME(S): **MICA MOUNTAIN**, BARRON 1-4, BONANZA GROUP,
BONANZA, PREMIER, MINNIE SMITH,
DREADNOT, ADVENTURE, BOULDER,
MAMMOTH, MICA, TETE JAUNE,
RELIANCE CLAIM GRP.

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D13E
BC MAP:
LATITUDE: 52 53 56 N
LONGITUDE: 119 32 48 W
ELEVATION: 2316 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Main sill located at the centre of the Barron claim group (Assessment Report 276).

MINING DIVISION: Cariboo
UTM ZONE: 11 (NAD 83)
NORTHING: 5864060
EASTING: 328709

COMMODITIES: Mica Kyanite Beryllium

MINERALS

SIGNIFICANT: Mica Muscovite Kyanite Beryl
COMMENTS: The age of post-phase 3 deformation (D3) pegmatites is 125+/-7 Ma and pre-phase 3 deformation (D3) pegmatites 154+/-6 Ma (Geological Survey of Canada Paper 90-1E, pp. 71-80).
ASSOCIATED: Quartz Feldspar Garnet Tourmaline Apatite
MINERALIZATION AGE: Lower Cretaceous
ISOTOPIC AGE: 125 +/- 7 Ma DATING METHOD: Unknown MATERIAL DATED: Unknown

DEPOSIT

CHARACTER: Vein Concordant Discordant Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O03 Muscovite pegmatite P02 Kyanite-sillimanite schists
SHAPE: Irregular
DIMENSION: 152 x 23 Metres STRIKE/DIP: 135/35S TREND/PLUNGE:
COMMENTS: Orientation of pegmatite on the Reliance claim group is 135/30-40SW (EMPR AR 1920). Dimensions are for pegmatite on the Bonanza claim (EMPR IND MIN FILE; Report by J.M. Cummings, 1941).

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian Proterozoic-Paleoz.	Kaza	Undefined Formation	Shuswap Metamorphic Complex

LITHOLOGY: Pegmatite Dike
Pegmatite Sill
Garnet Mica Schist
Quartz Mica Schist
Quartz Feldspar Mica Schist
Pelitic Schist

HOSTROCK COMMENTS: Mica Mountain occurrence is located on the northeastern margin of the Shuswap Metamorphic Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Mountains
TERRANE: Kootenay Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: Pre-mineralization GRADE: Amphibolite
Post-mineralization
COMMENTS: Showing is immediately west of southern Rocky Mountain Trench.

CAPSULE GEOLOGY

The Mica Mountain showing is located on the northern and eastern flanks of Mica Mountain between 2072 and 2487 metres, Tete Jaune Cache is approximately 10 kilometres to the northeast.

Mica Mountain has a long history of mica and lesser kyanite prospecting and exploration recorded as far back as 1898. At various times a number of attempts have been made to develop properties on Mica Mountain, but the showings to date contain too low a proportion of sheet mica of marketable grade to permit profitable operation (Minister of Mines Annual Report 1947). Work on these claims consisted primarily of short adits, winces and trenches along and into pegmatite bodies.

Mica at these old showings is hosted in pegmatite dykes and sills. Sills are transposed and deformed with host lithologies, whereas dykes crosscut foliation and folds of host rocks. Based on

CAPSULE GEOLOGY

crosscutting relations, pegmatite bodies were intruded prior to and after phase three deformation. Phase three deformation consists of variable developed crenulation cleavages on a micro and mesoscopic scale and open to tight, isoclinal folds (coaxial with phase two folds) on a meso and megascopic scale. These later pegmatites have small apophyses into host lithologies, which show no evidence of strain. Pegmatites are hosted in pelitic schists of the Hadrynian lower Kaza Group. Schists are largely mica-garnet, quartz-mica, quartz-feldspar-mica in composition. Other lithologies of the lower Kaza Group include psammite, amphibolite, marble and calc-silicate. The Canoe South Mica showing (083D 017) contains a more detailed description of the regional deformation and conditions of metamorphism in the area.

The age of pegmatites has been determined as being 154+/-6 Ma and 125+/-7 Ma for pre and post phase three deformation pegmatites, respectively.

Quartz, feldspar and muscovite comprise the main constituents of the pegmatites. Accessories include garnet, tourmaline, kyanite, beryl and apatite. Pegmatites are commonly irregular and lens-like bodies, most frequently oriented 135 degrees and dipping 30 to 40 degrees to the southwest. Textures within these bodies vary greatly with only certain mica bands large enough to be of commercial value (Minister of Mines Annual Report 1920). Where muscovite is of good quality, it is light brown to light greenish and occurs in well formed booklets ranging from 10 by 10 by 1.25 centimetres to 45 by 30 by 5 centimetres; however, the quantities in any one pegmatite is not unusually high (Geological Survey of Canada Economic Geology Report No. 19). In certain pegmatites, muscovite was noted to be the best quality and of the greatest abundance in small pockets near the hanging wall (Minister of Mines Annual Reports 1899, 1913). Elsewhere, quality muscovite was observed concentrated in bands up to 1.5 metres wide on either side of the hanging or foot walls (Assessment Report 276).

Beryl was reported in pegmatite on the Bonanza property on Mica Mountain by McEvoy (Minister of Mines Annual Report 1898) and deScmid (Minister of Mines Annual Report 1913). Lay (Minister of Mines Annual Report 1928) found no trace of beryl or any other unusual accessory mineral. But a composite sample was reported (GSC petrographic analyses) to contain less than 0.01 per cent beryllium (Geological Survey of Canada, Economic Geology Report No. 23).

BIBLIOGRAPHY

- EMPR AR 1888-313; 1893-80A-81A; *1898-39; 1912-K52-K53; *1913-K59;
1914-K56-K57; 1915-K54-K55; *1920-N95-N96; 1921-N95,N96; 1924-152;
*1928-C188-C189; 1931-A148-A149; *1947-A215-A216,A220
EMPR ASS RPT *276
EMPR OF 1988-26
EMPR PF (*Report on the Bonanza Mica Property, Mica Mtn., Tete Jaune,
B.C., J.M. Cummings, 1941)
GSC EC GEOL *No. 19, pp. 83-84,90; *No. 23, pp. 58, 60
GSC MAP 15-1967, 1339A
GSC OF 2324
GSC P *60-21, p. 9; 89-1E, pp. 101-107; 90-1E, pp. 71-80

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/09

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 020**

NATIONAL MINERAL INVENTORY:

NAME(S): **HIGHWAY DEPOSIT LOWER SHOWING**, HIGHWAY DEPOSIT UPPER SHOWING, MICA CREEK,
MICA WONDER GROUP, COLUMBIA GROUP, MICA CREEK FIRST FORK,
MICA CREEK SECOND FORK, POTLATCH CREEK, FRED LAING RIDGE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D02E 083D01W
BC MAP:
LATITUDE: 52 01 34 N
LONGITUDE: 118 34 20 W
ELEVATION: 725 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Mica-bearing pegmatite dyke at the Highway Deposit Lower Showing
(Newmarch, 1942).

MINING DIVISION: Revelstoke
UTM ZONE: 11 (NAD 83)
NORTHING: 5765109
EASTING: 392132

COMMODITIES: Mica Kyanite

MINERALS

SIGNIFICANT: Muscovite Kyanite
ASSOCIATED: Biotite Tourmaline Quartz Feldspar Garnet
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Discordant Stratiform Layered
CLASSIFICATION: Pegmatite Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists O03 Muscovite pegmatite
SHAPE: Tabular
MODIFIER: Faulted
DIMENSION: 1 x 1 Metres STRIKE/DIP: 065/90 TREND/PLUNGE:
COMMENTS: Strike and dip are for mica-bearing pegmatite dyke at the Highway
Deposit Lower Showing (Newmarch, 1942). Mica booklets occur over a
1.2 metre square area in a 1.2 metre wide pegmatite dyke.

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE: Hadrynian GROUP: Horsethief Creek FORMATION: Unnamed/Unknown Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Kyanite Garnet Mica Schist
Micaceous Pegmatite Dike
Micaceous Pegmatite Sill
Pelite
Semi Pelite
Marble Gneiss

HOSTROCK COMMENTS: Mica is found in micaceous pegmatite dykes and sills and with kyanite
and garnet within the Lower Pelite unit (GSC OF 2324).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
Syn-mineralization

CAPSULE GEOLOGY

The Highway Deposit Lower Showing is one of many micaceous pegmatite dyke and sill occurrences in an area covering both slopes of Fred Laing Ridge including the northerly flowing tributaries of Potlatch Creek, the southerly flowing tributaries of Mica Creek and portions of the valley bottom of the main Mica Creek (Newmarch, 1942). Pegmatites, as large semi-concordant bodies, are abundant along the contact between the Semipelite and Pelite units of the Hadrynian Horsethief Creek Group. Distribution within the northern Semipelite unit is sporadic. A common association with marble was noticed along a southeast trending ridge 3 kilometres south-southwest of Warsaw Mountain.

At least two generations of pegmatites occur in this area. Earlier generation pegmatites are concordant and boudinaged within enclosing semipelite units. Younger generation pegmatites crosscut layering and schistosity. Pegmatite dykes and sills in the area range from 0.90 to 9.0 metres in width, with thick pegmatites usually discordant. Orientations are also highly variable.

All pegmatites are plagioclase-rich, typically consisting of 70 per cent plagioclase, 20 per cent muscovite and 10 per cent quartz. Plagioclase is often strained and well twinned (Mitchell, 1976). Mica within these dykes and sills range from 5 to 20 per cent by rock

CAPSULE GEOLOGY

volume and in size from 0.32 to 8.9 centimetres diameter and 5.0 centimetres thick. Mica booklets often show evidence of internal strain. Minerals associated with mica are almandine garnet and black tourmaline (Newmarch, 1942). For a detailed description of the regional geology refer to the Warsaw Mountain showing (083D 041).

At the Highway Deposit Lower Showing, mica booklets 7.62 by 7.62 centimetres, appear to be concentrated in an area of about 120 square centimetres in a 1.22-metre wide pegmatite dyke. This zone consists of 20 per cent muscovite by rock volume. This mica-bearing pegmatite dyke strikes 065 degrees and dips vertically.

A 0.635-centimetre band of kyanite is found in the enclosing schists. In the lower reaches of Mica Creek kyanite forms bands within schists. At the headwaters of the first and second tributaries of Mica Creek kyanite is present in localized pelitic horizons near the base of the Semipelite-Amphibolite division (Geological Society of America Memoir 153), the Aluminous Pelite unit (Open File 1988-26) or Lower Pelite unit (Geological Survey of Canada Open File 2324) of the Horsethief Creek Group. Kyanite porphyroblasts in these horizons are up to 5 centimetres in length.

BIBLIOGRAPHY

- EM EXPL 2001-73-82
EMPR AR 1899-H133
EMPR OF 1988-26
EMPR PF (*Newmarch, C.B. (1942): Preliminary Report on mica deposits on the Mica Creek area)
GSC EC GEOL NO 19-90
GSC OF 2324
GSC P 77-1C
GSA Memoir 153, pp. 445-461
Mitchell, W.J. (1976): *Structure and stratigraphy of the Warsaw Mountain area, British Columbia; unpublished M.Sc thesis, University of Calgary, Alberta.
Perkins, M.J. (1983): Structural geology and stratigraphy, Big Bend of the Columbia River, Selkirk Mountains, British Columbia; unpublished Ph.D. thesis, Carleton University, Ottawa, Ontario.

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/09

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 021**

NATIONAL MINERAL INVENTORY:

NAME(S): **POTLATCH**, COLUMBIA RIVER BIG BEND

MINING DIVISION: Revelstoke

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D01W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 04 00 N
LONGITUDE: 118 28 04 W
ELEVATION: 1584 Metres

NORTHING: 5769470
EASTING: 399389

LOCATION ACCURACY: Within 500M

COMMENTS: Kyanite in schist and pegmatite is found six kilometres southwest of Boat Encampment (Mitchell, 1976).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite
ASSOCIATED: Muscovite Quartz Plagioclase
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
DIMENSION:
COMMENTS: Strike and dip is of the prominent foliation (Geological Survey of Canada Open File 2324).

TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian	Horsethief Creek	Unnamed/Unknown Formation	

LITHOLOGY: Pelite
Pelitic Schist
Quartz Mica Pegmatite
Quartzofeldspathic Psammite
Conglomerate
Amphibolite

HOSTROCK COMMENTS: Kyanite is found in pegmatites and pelites within the Aluminous Pelite unit (EMPR OF 1988-26) or equivalent Lower Pelite unit (GSC OF 2324).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca	PHYSIOGRAPHIC AREA: Selkirk Mountains
TERRANE: Kootenay	
METAMORPHIC TYPE: Regional	RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Potlatch occurrence is located on a northwest trending ridge 6.0 kilometres northwest from Warsaw Mountain on the northeast side of Potlatch Creek.

The area is underlain primarily by metasedimentary rocks of the Hadrynian Horsethief Creek Group. For a more detailed description of the regional geological settings refer to the Warsaw Mountain occurrence (083D 041).

At least two generations of pegmatites occur in this area. Earlier generation pegmatites are concordant and boudinaged within enclosing pelitic schist units. Younger generation pegmatites crosscut layering and schistosity. Pegmatite dykes and sills in the area range from 0.90 to 9.0 metres in width, with thick pegmatites usually discordant. Orientations are also highly variable.

At the Potlatch occurrence, kyanite is present in pegmatites hosted in the Aluminous Pelite unit (Open File 1988-26) or equivalent Lower Pelite unit (Geological Survey of Canada Open File 2324) of the Horsethief Creek Group. The Aluminous Pelite or Lower Pelite unit consists of pelitic schist, quartzofeldspathic psammite, conglomerate with clasts of marble, calc-silicate rock, quartzite and granite, and concordant and discordant amphibolite.

All pegmatites are plagioclase-rich, typically consisting of 70 per cent plagioclase, 20 per cent muscovite and 10 per cent quartz. Plagioclase is often strained and well twinned (Mitchell, 1976). Kyanite crystals are found in a pegmatite matrix of quartz and mica and in surrounding pelitic schists.

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1201
REPORT: RGEN0100

BIBLIOGRAPHY

EMPR AR 1931-148, *1952-258
EMPR OF *1988-26
GSC OF *2324
GSC P 66-1; *77-1C
GSA Memoir 153, pp. 445-461
Mitchell, W.J. (1976): *Structure and stratigraphy of the Warsaw
Mountain area, British Columbia; unpublished M.Sc. thesis,
Univeristy of Calgary, Alberta.
Perkins, M.J. (1983): Structural geology and stratigraphy, Big Bend
of the Columbia River, Selkirk Mountains, British Columbia;
unpublished Ph.D. thesis, Carleton University, Ottawa, Ontario.

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/09

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 022**

NATIONAL MINERAL INVENTORY:

NAME(S): **PARADISE SYENITE** PARADISE, AR 1-4,
AR 4, PARADISE LAKE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E
BC MAP:
LATITUDE: 52 23 01 N
LONGITUDE: 119 05 23 W
ELEVATION: 2286 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of outcrop (figure 24a, page 90, Fieldwork 1984).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5805761
EASTING: 357777

COMMODITIES: Nepheline Syenite Sodalite Niobium Tantalum Uranium
Rare Earths

MINERALS

SIGNIFICANT: Nepheline Sodalite Pyrochlore Pyrrhotite
COMMENTS: Refer to capsule geology for a detailed mineralogy.
ASSOCIATED: Microcline Plagioclase Biotite Muscovite Cancrinite
Zircon Perthite Calcite
MINERALIZATION AGE: Devonian-Mississipp.
ISOTOPIC AGE: 340 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R13 Nepheline syenite N01 Carbonatite-hosted deposits
SHAPE: Tabular
MODIFIER: Folded Faulted
DIMENSION: 5 Metres STRIKE/DIP: 120/22S TREND/PLUNGE:
COMMENTS: Zircons separated from the Paradise Lake syenites provided slightly discordant analyses which suggest a uranium-lead age of 340 Ma and lead-lead ages of 351 and 363 Ma (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Horsethief Creek Undefined Formation Shuswap Metamorphic Complex
Proterozoic-Paleoz.

LITHOLOGY: Nepheline Syenite Gneiss
Sodalite Syenite Gneiss
Calcareous Syenite Gneiss
Quartz Hornblende Mica Schist
Carbonatite
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Kootenay Monashee
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Syenites are associated with carbonatites in central (Omenica) belt.

INVENTORY

ORE ZONE: SAMPLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1987
SAMPLE TYPE: Rock
COMMODITY GRADE
Tantalum 0.0011 Per cent
COMMENTS: Value is from nepheline and sodalite syenite sample.
REFERENCE: Open File 1987-17.

CAPSULE GEOLOGY

The Paradise Syenite showing is located approximately 4.5 kilometres east of the Verity carbonatite showing (083D 005). Blue River is 45 kilometres to the south along Highway 5. This showing is only accessible by helicopter support from Valemount or Blue River, as no trail exists in to the area from lower elevations.
A nepheline syenite gneiss complex crops out east and north of the Paradise carbonatite showing (083D 006) but lies stratigraphically below carbonatite. The syenite complex occurs as sills within quartz-hornblende-mica schist of the Semipelite

CAPSULE GEOLOGY

Amphibolite Division of the Hadrynian Horsethief Creek Group. In general, the syenites are composed of grey weathering, medium grained, layered and foliated gneisses. They are locally migmatitic, with massive, medium to coarse grained, lensoidal leucosomes.

Exposures of carbonatite occur with high grade metasediments on the north face of Paradise Mountain, immediately south of Paradise Lake and along the ridge to the northwest, on both sides. The relationship between syenite and carbonatite is unknown due to structural complications but a uranium/lead isotopic age of 340 Ma from a zircon separate, suggests that they are penecontemporaneous intrusives of Devono-Mississippian (circa 350 Ma) age (Bulletin 86, in press). The regional foliation generally strikes 120 degrees and dips 15 to 30 degrees southwest. Two major orientations of faults occur locally with the more prominent striking 345 degrees and dipping steeply to the west. Motion on these faults is west side down. The other strikes east-west dipping near vertical. Structures to the north and northeast of Paradise indicate the area has undergone regional doming.

The major constituents of the syenite are: microcline, plagioclase, nepheline and biotite. Accessory minerals include muscovite, sodalite, cancranite, zircon and perthite. Trace minerals present are: calcite, magnetite, pyrrhotite, pyrochlore and uranopyrochlore (Open File 1987-17). Maximum thickness of nepheline syenite outcrops is 3.65 to 4.56 metres. Syenite is locally associated with amphibolite. In the cirque above Paradise Lake, synclinally folded nepheline syenite has black amphibolite in the core. On the west wall of the cirque and to the east above the cirque, nepheline syenite structurally overlies and is in contact with amphibolite. A boulder in talus contained biotite-rich sovite in nepheline syenite. Directly below the nepheline complex is a zone of pegmatite sill-like bodies consisting of feldspar, quartz and muscovite. At one exposure, the upper contact was observed to be discordant with the enclosing schist, where schist formed small folds up to 6 metres across.

The nepheline syenite has a low Sr87/Sr86 ratio of 0.7047 +/- 0.0004. This low ratio indicates a probable sub-crustal origin (Assessment Report 1630). Chemical analyses of trace and rare earth elements of a nepheline-sodalite syenite is as follows (in per cent): 0.0011 tantalum, 0.091 strontium, 0.00023 thorium, 0.1330 zirconium, 0.0001 lanthanum and cerium, 0.00019 neodymium, 0.00006 ytterbium and 0.00001 scandium (Open File 1987-17).

BIBLIOGRAPHY

- EM EXPL 2001-73-82
- EMPR ASS RPT *1630, *11130
- EMPR BULL *86 (in press)
- EMPR FIELDWORK *1984, pp. 84-94; 95-100
- EMPR OF *1987-17, pp. 42
- GSC MAP 15-1967
- GSC OF 2324
- GSC P 89-1E, pp. 95-100
- CJES 1988 Vol. 25, No. 8, pp. 1323-1337
- Canadian Mineralogist 1961, Vol. 6, pp. 610-633
- Pell, J. and Hora, Z.D. (1990): Rifting, alkaline rocks and related magmatic deposits in the southern Canadian Cordillera; Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, 8th IAGOD paper, 1990.

DATE CODED: 1991/11/08
DATE REVISED: 1991/11/08

CODED BY: KJM
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 023**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOWARD CREEK SYENITE**, HOWARD CREEK, TOP 1-4,
TOP 1, 7803, 7804

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D07W
BC MAP:
LATITUDE: 52 22 40 N
LONGITUDE: 118 51 54 W
ELEVATION: 2420 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Nepheline syenite outcrop #35 (figure 26, Fieldwork 1984).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5804694
EASTING: 373053

COMMODITIES: Nepheline Syenite Sodalite Niobium Tantalum Uranium

MINERALS

SIGNIFICANT: Nepheline Sodalite Pyrochlore Pyrrhotite
COMMENTS: Refer to capsule geology for a detailed mineralogy.
ASSOCIATED: Microcline Plagioclase Biotite Muscovite Cancrinite
Zircon Perthite Calcite
MINERALIZATION AGE: Devonian-Mississipp.
ISOTOPIC AGE: circa 350 Ma. DATING METHOD: MATERIAL DATED:

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.
TYPE: R13 Nepheline syenite N01 Carbonatite-hosted deposits
SHAPE: Tabular
MODIFIER: Folded Faulted
DIMENSION: 20 x 5 Metres STRIKE/DIP: 120/22S TREND/PLUNGE:
COMMENTS: Zircons separated from the Paradise Lake syenites provided slightly discordant analyses which suggest a uranium-lead age of 340 Ma and lead-lead ages of 351 and 363 Ma (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian Proterozoic-Paleoz.	Horsethief Creek	Undefined Formation	Shuswap Metamorphic Complex

LITHOLOGY: Nepheline Syenite Gneiss
Sodalite Syenite Gneiss
Calcareous Syenite Gneiss
Quartz Hornblende Mica Schist
Carbonatite
Amphibolite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Syenites are associated with carbonatites in central (Omenica) belt.

CAPSULE GEOLOGY

The Howard Creek Syenite showing is located at the headwaters of Howard Creek, 13 kilometres west of McNaughton Lake and 41 kilometres northeast of Blue River. The Verity carbonatite showing (083D 005) lies approximately 4.5 kilometres to the east. This showing is only accessible by helicopter support from Valemount or Blue River, as no trail exists in to the area from lower elevations.

A nepheline syenite gneiss outcrop, measuring 5 by 20 metres, occurs in a south-facing cirque, adjacent to the Howard Creek carbonatite showing (083D 043). The syenite gneiss occurs as a sill within quartz-hornblende-mica schist of the Semipelite Amphibolite division of the Hadrynian Horsethief Creek Group. The syenite is composed of grey weathering, medium grained, layered and foliated gneiss. It is locally migmatitic, with massive, medium to coarse grained, lensoidal leucosomes.

The relationship between syenite and carbonatite is unknown due to structural complications but a slightly discordant uranium/lead isotopic age of 340 Ma and lead/lead ages of 351 and 363 Ma suggest that they are penecontemporaneous intrusives of Devono-Mississippian (circa 350 Ma) age (Bulletin 86, in press). The regional foliation generally strikes 120 degrees and dips 15 to 30 degrees southwest. Two major orientations of faults occur locally with the more

CAPSULE GEOLOGY

prominent striking 345 degrees and dipping steeply to the west. Motion on these faults is west side down. The other orientation strikes east-west dipping near vertical. Structures to the north and northwest of Howard Creek indicate the area has undergone regional doming.

The major constituents of the syenite are: microcline, plagioclase, nepheline and biotite. Accessory minerals include muscovite, sodalite, cancranite, zircon and perthite. Trace minerals present are: calcite, magnetite, pyrrhotite, pyrochlore and uranopyrochlore (Open File 1987-17).

Strontium content of the nepheline syenite is 0.070 percent (Fieldwork 1984).

BIBLIOGRAPHY

- EM EXPL 2001-73-82
- EMPR BULL *86 (in press)
- EMPR FIELDWORK *1984, pp. 84-94; 95-100
- EMPR OF *1987, pp. 41-48
- GSC MAP 15-1967
- GSC OF 2324
- GSC P 89-1E, pp. 95-100
- CJES 1988 Vol. 25, No. 8, pp. 1323-1337
- Canadian Mineralogist 1961, Vol. 6, pp. 610-633
- Pell, J. and Hora, Z.D. (1990): Rifting, alkaline rocks and related magmatic deposits in the southern Canadian Cordillera; Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, 8th IAGOD paper, 1990.

DATE CODED: 1991/11/08
DATE REVISED: 1991/11/08

CODED BY: KJM
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 024**

NATIONAL MINERAL INVENTORY:

NAME(S): **MILEDGE RIVER**, THUNDER RIVER, NORTH THOMPSON RIVER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06W 083D06E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5800679
EASTING: 340943

LATITUDE: 52 20 00 N
LONGITUDE: 119 20 04 W
ELEVATION: Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: The northern of two west-northwest striking bands present; location data for the center of the northern band (area 2, figure 5, Open File 1988-26).

COMMODITIES: Kyanite Garnet

MINERALS

SIGNIFICANT: Kyanite Garnet
ASSOCIATED: Sillimanite Biotite Quartz
MINERALIZATION AGE: Lower Cretaceous
ISOTOPIC AGE: 135 +/- 4 Ma DATING METHOD: Unknown MATERIAL DATED: Unknown

DEPOSIT

CHARACTER: Vein Layered Stratabound
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded
COMMENTS: The age of mineralization is for the main metamorphic event (Geological Survey of Canada Paper 90-1E, pp. 71-80).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Horsethief Creek	Undefined Formation	
Hadrynian	Kaza	Undefined Formation	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Pelitic Schist
Quartzofeldspathic Psammite
Amphibolite
Marble
Calc-silicate
Diamictite
Conglomerate
Quartzite
Quartzofeldspathic Grit
Graphitic Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Mountains
TERRANE: Kootenay Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite
COMMENTS: Showing is on the northeastern margin of Shuswap Metamorphic Complex.

CAPSULE GEOLOGY

The Canoe River map area is predominantly underlain by a sequence of folded Hadrynian metasedimentary strata, belonging to the Windermere Supergroup (Miette, Horsethief Creek and Kaza groups) and their basement gneisses. Lithologies of the lower Kaza Group include pelitic schist (locally kyanite-sillimanite-staurolite-garnet-biotite and/or muscovite-bearing), amphibolite, marble, calc-silicate, diamictite, conglomerate and quartzite. Quartzofeldspathic psammite and grit, pelitic schist, amphibolite and graphitic phyllite comprise lithologies of the Upper Clastic division of the Horsethief Creek Group.

Strata of the lower Kaza and Horsethief Creek groups in the Canoe River area are locally sufficiently pelitic to produce abundant garnet and aluminosilicate minerals when subjected to high-grade regional metamorphism (Open File 1988-26).

In the southeastern Cariboo Mountains, approximately 30 kilometres southwest of Valemount, pelitic schists locally contain up to 20 per cent kyanite, up to 15 per cent fibrolitic sillimanite and up to 25 per cent garnet (Pell, 1984). Kyanite grains are commonly in excess of 2 centimetres in length. These extremely aluminous pelitic

CAPSULE GEOLOGY

strata are largely confined between a carbonate marker horizon in the lower Kaza Group and the Middle Marble division of the underlying Horsethief Creek Group. Less commonly, aluminous pelitic horizons are present in the Horsethief Creek Group Semipelite-Amphibolite division, immediately underlying the Middle Marble Division. Pelitic schists in this region also frequently contain quartz-kyanite-rich segregation lenses.

BIBLIOGRAPHY

EMPR AR 1920-N95-N96; 1931-A148-A149; 1947-A215-A216; 1952-A258;
1964-185-186; 1965-185-186
EMPF OF *1988-26, p. 12, figure 5
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 84-1A, pp. 91-94
CJES *Vol. 14, No. 7, pp. 1630-1635; Vol. 24, No. 2, pp. 302-313
Pell, J. (1984): *Stratigraphy, structure and metamorphism of
Hadrynian strata in the southeastern Cariboo Mountains, British
Columbia; Unpublished Ph.D. thesis, University of Calgary, p. 185

DATE CODED: 1991/11/21
DATE REVISED: 1991/11/21

CODED BY: KJM
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 025**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUE ICE (W ZONE)**, BLUE ICE, BLUE LEAD,
 BLE ICE (E ZONE), BLE ICE (SE ZONE), WELLS,
 GLACIER

STATUS: Showing
 REGIONS: British Columbia
 NTS MAP: 083D12W
 BC MAP:
 LATITUDE: 52 41 09 N
 LONGITUDE: 119 54 23 W
 ELEVATION: 1829 Metres
 LOCATION ACCURACY: Within 500M
 COMMENTS: Location is for lenses of conformable quartz in contact with limestone
 (from figures 1 and 3, Minister of Mines Annual Report 1938).

MINING DIVISION: Kamloops
 UTM ZONE: 11 (NAD 83)
 NORTHING: 5841287
 EASTING: 303561

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite
 ASSOCIATED: Quartz Siderite
 ALTERATION: Sericite
 COMMENTS: There is sericitic alteration (Minister of Mines Annual Report 1938).
 ALTERATION TYPE: Sericitic
 MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Discordant Disseminated
 CLASSIFICATION: Hydrothermal Epigenetic Replacement
 TYPE: E03 Carbonate-hosted disseminated Au-Ag
 SHAPE: Irregular
 DIMENSION: 140 x 36 Metres STRIKE/DIP: 330/
 COMMENTS: Total exposed length of complex quartz veining in quartzite is 140
 metres and maximum width of 36 metres. Short tension gashes align on
 330 degree trend (Minister of Mines Annual Report 1938).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian	Kaza	Undefined Formation	
Hadrynian	Cariboo	Isaac	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Massive Quartzite
 Limestone
 Quartz Sericite Schist
 Quartz Pebble Conglomerate
 Phyllite
 Argillite
 Quartzofeldspathic Psammite
 Slate
 Grit

HOSTROCK COMMENTS: Late Proterozoic (Hadrynian) strata were deposited at some time during
 the time interval 850 to 570 Ma (CJES Vol. 24, No. 2, pp. 302-313).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
 TERRANE: Kootenay Cariboo PHYSIOGRAPHIC AREA: Cariboo Mountains
 METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
 Amphibolite

COMMENTS: Located near contact between the upper Kaza Group and Isaac Formation.

INVENTORY

ORE ZONE: WEST REPORT ON: N
 CATEGORY: Assay/analysis YEAR: 1929
 SAMPLE TYPE: Chip

<u>COMMODITY</u>	<u>GRADE</u>	
Silver	96.0000	Grams per tonne
Gold	3.0800	Grams per tonne
Lead	0.4000	Per cent
Zinc	3.2000	Per cent

 COMMENTS: Chip sample of mineralized quartz confined to seams parallel to
 fracturing.
 REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

The area around the headwaters of Azure River has claimed attention for several years due to the discovery of large bodies of auriferous quartz in metasedimentary rocks of the Shuswap Metamorphic Complex. Mineralization of the Blue Ice claim group is located at the headwaters of Hobson (Fred Wells) Creek.

The Blue Ice claim group lies near the contact between the Hadrynian upper Kaza Group and the stratigraphically overlying Isaac Formation of the Hadrynian Cariboo Group. The ground covering the Blue Ice claim group mineralization is on the crest and northeast limb of a major anticline which plunges at a low angle to the northwest. The country rocks, striking 255 degrees, consist of massive quartzite, quartz pebble conglomerate, quartz-sericite schist, phyllite, argillite and limestone, of the Isaac Formation. Lithologies of the Hadrynian upper Kaza Group consist of quartzofeldspathic psammite, phyllite, slate and minor grit.

Mineral occurrences at the head of Hobson Creek are found in zones of fracturing, crosscutting host rocks at an oblique angle. Lenticular quartz bodies consisting of white quartz host pyrite, galena and chalcopyrite, sphalerite and arsenopyrite, at points where these bodies intersect cross fracturing striking 300 degrees. Quartz veins hosted in fractures are also mineralized. Most are narrow, irregular stockworks or sets of short quartz-filled cracks and tension gashes approximately perpendicular to bedding. Siderite is a common accessory in quartz veins. Mineralization locally extends into interbedded limestone bands, forming massive sulphide replacement.

The Blue Ice W Zone is located partially beneath the toe of a glacier. This zone consists of complex quartz veining in quartzite over a total exposed length of 140 metres and a maximum width of 36 metres. The zone is bound to the southwest by a limestone band, which can be traced to the northeast over 46 metres where it is covered by glacial moraine. Quartz veins and lenses strike 015 degrees or more commonly quartz filled tension gashes align 330 degrees. Quartz comprises 20 per cent by rock volume of the entire zone. Of this 50 per cent is mineralized with galena, sphalerite, chalcopyrite and pyrite. This mineralization is confined to quartz seams parallel to fracturing. Sulphide mineralization is also found disseminated within host sericitic schist up to several feet from quartz bodies. There is sericitic alteration.

A general chip sample of mineralized quartz sampled assayed 3.08 grams per tonne gold, 96.00 grams per tonne silver, 0.4 per cent lead and 3.2 per cent zinc (Minister of Mines Annual Report 1929). Seven sample were taken from this zone in 1939, of which 2 assayed as follows: the first, quartz with 3 to 5 per cent mineralization, 0.68 grams per tonne gold and 6.8 grams per tonne silver; the second, mineralized stringers in host schist, 49.37 grams per tonne gold and 54.86 grams per tonne silver (Minister of Mines Annual Report 1938).

Please refer to 083D 003 (Blue Ice (SE zone)) for more information.

BIBLIOGRAPHY

- EMPR AR 1919-N179; 1920-N168; 1923-A157; 1925-A171; 1926-A189;
1927-C192; *1929-C221; 1930-A193; 1931-A107; *1933-A194;
*1938-D3-D17; 1939-107
EMPR BULL 1, p. 69
EMPR PF (Report by N.E. Nelson, 1936)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 86-1A, pp. 589-594; 87-1A, pp. 735-742
GSC SUM RPT 1926A; 1929A
CJES Vol. 14, No. 7, pp. 1690-1695; Vol. 24, No. 2, pp. 302-313

DATE CODED: 1991/11/29
DATE REVISED: 1991/11/29

CODED BY: KJM
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 026**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUE ICE (E ZONE)**, BLUE ICE, BLUE LEAD,
BLUE ICE (W ZONE), BLE ICE (SE ZONE), WELLS,
GLACIER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D12W
BC MAP:
LATITUDE: 52 40 55 N
LONGITUDE: 119 53 48 W
ELEVATION: 2073 Metres
LOCATION ACCURACY: Within 500M

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5840828
EASTING: 304200

COMMENTS: The zone is 76 metres long, intersected by cross fractures and with development of a number of quartz bodies, aggregating 7.3 metres in width (Minister of Mines Annual Report 1929).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Galena Sphalerite Chalcopyrite Pyrite
ASSOCIATED: Quartz Siderite
COMMENTS: Siderite partially comprises carbonate gangue in main replacement body (Minister of Mines Annual Report 1938).
ALTERATION: Sericite
COMMENTS: Sericitic alteration occurs in other quartz bodies on the Blue Ice claim group.
ALTERATION TYPE: Sericitic
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stockwork Shear Massive
CLASSIFICATION: Hydrothermal Epigenetic Replacement
TYPE: E03 Carbonate-hosted disseminated Au-Ag
SHAPE: Irregular
DIMENSION: 33 x 6 Metres STRIKE/DIP: 015/
COMMENTS: A section of limestone band, 267 metres long, continuously exposed, is heavily mineralized and forms a replacement body 5.7 metres wide by 33 metres long (Minister of Mines Annual Report 1938).
TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Kaza	Undefined Formation	
Hadrynian	Cariboo	Isaac	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Massive Quartzite
Limestone
Quartz Sericite Schist
Quartz Pebble Conglomerate
Phyllite
Argillite
Quartzofeldspathic Psammite
Slate
Grit

HOSTROCK COMMENTS: Late Proterozoic (Hadrynian) strata were deposited at some time during the time interval 850 to 570 Ma (CJES Vol. 24, No. 2, pp. 302-313).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Mountains
TERRANE: Kootenay Cariboo
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Greenschist
Amphibolite

COMMENTS: Located near contact between upper Kaza Group and Isaac Formation.

INVENTORY

ORE ZONE: EAST

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Grab

YEAR: 1929

COMMODITY	GRADE	
Silver	212.6000	Grams per tonne
Gold	13.7000	Grams per tonne
Lead	7.0000	Per cent
Zinc	10.0000	Per cent

COMMENTS: Combined assay results from two samples: one quartz and galena, the other quartz and sphalerite, from quartz lenses in fracture system.

REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

The area around the headwaters of Azure River has claimed attention for several years due to the discovery of large bodies of auriferous quartz in metasedimentary rocks of the Shuswap Metamorphic Complex. Mineralization on the Blue Ice claim group is located at the headwaters of Hobson (Fred Wells) Creek.

The Blue Ice claim group lies near the contact between the Hadrynian upper Kaza Group and the stratigraphically overlying Isaac Formation of the Hadrynian Cariboo Group. The ground covering the Blue Ice claim group mineralization is on the crest and northeast limb of a major anticline which plunges at a low angle to the northwest. The country rocks, striking 255 degrees, consist of massive quartzite, quartz pebble conglomerate, quartz-sericite schist, phyllite, argillite and limestone, of the Isaac Formation. Lithologies of the Hadrynian upper Kaza Group consist of quartzofeldspathic psammite, phyllite, slate and minor grit.

Mineral occurrences at the head of Hobson Creek are found in zones of fracturing, crosscutting host rocks at an oblique angle. Lenticular quartz bodies consisting of white quartz host pyrite, galena and chalcopryrite, sphalerite and arsenopyrite, at points where these bodies intersect cross fracturing striking 300 degrees. Quartz veins hosted in fractures are also mineralized. Most are narrow, irregular stockworks or sets of short quartz-filled cracks and tension gashes approximately perpendicular to bedding. Siderite is a common accessory in quartz veins. Mineralization locally extends into interbedded limestone bands, forming massive sulphide replacement.

The East Zone is located under the southern flank of the foot of a glacier occupying the divide between Hobson Creek and the pass at the head of the Azure River. Here, a zone 76 metres wide, intersected by cross fractures and the development of a number of quartz bodies, aggregating 61 to 91 metres long by 7.3 metres wide.

Erratic mineralization consists of pyrite, galena, sphalerite and chalcopryrite and is found in three different orientations of quartz fissures but most commonly 010 to 020 degrees. Mineralization, predominantly pyrite, is semi-massive in some veins over widths of 5 to 60 centimetres and lengths up to 6 metres. Of six samples taken from this area in 1938, one of quartz with 60 per cent pyrite assayed 22.6 grams per tonne gold and 154.3 grams per tonne silver (Minister of Mines Annual Report 1938). Combined assay results from two samples taken in 1929 were 13.7 grams per tonne gold, 212.6 grams per tonne silver, 7 per cent lead and 10 per cent zinc (Minister of Mines Annual Report 1929).

Also at this showing, a continuous exposure of limestone, 267 metres long, is heavily mineralized with primarily pyrite forming a replacement body 33.5 metres long by 5.79 metres wide. Replacement mineralization seems definitely related to small pyrite-carbonate-bearing bodies in cross fissures in quartzite. In the main replacement body, sulphides occur in carbonate gangue, partially composed of siderite. The margins of this replacement body are definite. Pyrite comprises 50 to 90 per cent of the mass, varying in coarseness from a fine sugary texture to cubes 2.5 centimetres or more across. A sample was channel sampled across 5.5 metres (18 feet) near the center of the body from the hanging wall. Results are as follows with values expressed in grams per tonne (Minister of Mines Annual Report 1938).

SAMPLE	WIDTH	LOCATION	Au	Ag
1	5 feet	NE wall; nearly solid pyrite	25.37	10.28
2	next 5 feet	75 per cent pyrite	5.48	trace
3	next	75 per cent	8.23	20.57
4	next 3 feet	within 8 inches of footwall	trace	6.86

In addition to quartz veins, there is strong evidence of a replacement body beneath the ice in the presence of considerable

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1212
REPORT: RGEN0100

CAPSULE GEOLOGY

float in moraine to the northwest of the glacial stream discharge.
Please refer to 083D 003 (Blue Ice (SE zone)) for more
information.

BIBLIOGRAPHY

EMPR AR 1919-N179; 1920-N168; 1923-A157; 1925-A171; 1926-A189;
1927-C192; *1929-C221; 1930-A193; 1931-A107; *1933-A194;
*1938-D3-D17; 1939-107
EMPR BULL 1, p. 69
EMPR PF (Report by N.E. Nelson, 1936)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 86-1A, pp. 589-594; 87-1A, pp. 735-742
GSC SUM RPT 1926A; 1929A
CJES Vol. 14, No. 7, pp. 1690-1695; Vol. 24, No. 2, pp. 302-313

DATE CODED: 1991/11/30
DATE REVISED: 1998/12/08

CODED BY: KJM
REVISED BY: GJP

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 027**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRIZZLEY**, SUMMIT

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D12W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 39 37 N
LONGITUDE: 119 53 08 W
ELEVATION: 1950 Metres

NORTHING: 5838389
EASTING: 304854

LOCATION ACCURACY: Within 5 KM

COMMENTS: Quartz body is exposed along the north side of the hill flanking one of the tributary streams of the south fork of Hobson Creek, at the extreme west end of the Grizzley claims (Minister of Mines Annual Report 1929).

COMMODITIES: Silver Gold Lead Zinc

MINERALS

SIGNIFICANT: Galena Arsenopyrite Pyrite

COMMENTS: Significant minerals listed do not occur in ALL veins included in this mineral occurrence.

ASSOCIATED: Quartz Siderite

COMMENTS: The quartz vein exposed at the west end of the claims has considerable siderite associated with it.

ALTERATION: Sericite

COMMENTS: Sericite has been identified to the southeast in veins at the Summit showing.

ALTERATION TYPE: Sericitic

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant Disseminated

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

SHAPE: Irregular

DIMENSION: 91 x 2 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Trenching at the east end of the claim group has exposed a quartz body 60 to 90 metres long by 2.4 metres wide, concordant with host rocks (Minister of Mines Annual Report 1929).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Kaza	Undefined Formation	
Hadrynian	Cariboo	Isaac	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Quartz Sericite Schist
Phyllite
Massive Quartzite
Quartz Pebble Conglomerate
Limestone Pebble Conglomerate
Limestone
Grit
Psammite
Argillite
Slate

HOSTROCK COMMENTS: Late Proterozoic (Hadrynian) strata were deposited at some time during the interval 850 to 570 Ma (CJES Vol. 24, No. 2, pp. 302-313).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

Cariboo
RELATIONSHIP:

PHYSIOGRAPHIC AREA: Cariboo Mountains

GRADE: Greenschist
Amphibolite

COMMENTS: Located near contact between upper Kaza Group and Isaac Formation.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1929

COMMODITY	GRADE	
Silver	157.7000	Grams per tonne
Gold	5.8000	Grams per tonne
Lead	7.0000	Per cent
Zinc	1.6000	Per cent

COMMENTS: Sample from lower end of a massive quartz vein trending northwest.
Trenching has exposed arsenopyrite and galena mineralization.

REFERENCE: Minister of Mines Annual Report 1929.

CAPSULE GEOLOGY

The area around the headwaters of Azure River has claimed attention for several years due to the discovery of large bodies of auriferous quartz in metasedimentary rocks of the Shuswap Metamorphic Complex. The Grizzley showing is located at the headwaters of Hobson (Fred Wells) Creek.

The Grizzley showing lies near the contact between the Hadrynian upper Kaza Group and the stratigraphically overlying Isaac Formation of the Hadrynian Cariboo Group. The ground covering the Grizzley showing is on the crest and northeast limb of a major anticline which plunges at a low angle to the northwest. The country rocks, striking 255 degrees, consist of massive quartzite, quartz pebble conglomerate, quartz-sericite schist, phyllite, argillite and limestone, of the Isaac Formation of the Hadrynian Cariboo Group. Lithologies of the Hadrynian upper Kaza Group consist of quartzofeldspathic psammite, phyllite, slate and minor grit.

The showing is located on the Grizzley claims, originally staked to cover the extension of mineralization on the Summit claim (083D 004) group which is located to the southeast on the summit of the divide above the north fork of Hobson Creek.

Several quartz bodies are exposed throughout the area. At the extreme west end of the Grizzley claims, one of these quartz bodies is exposed along the north side of the hill flanking one of the tributary streams of the south fork of Hobson Creek. It is conformable with the country rock and has considerable siderite associated with it. Another seam, about 70 centimetres wide, occupies a fracture perpendicular to the previous quartz body and contains patches of solid galena. Towards the eastern end of the showing trenching has exposed a conformable quartz body 60 to 90 metres long by 2.4 metres wide, containing galena and pyrite.

To the north a quartz body strikes northwest and is exposed over 107 metres length by 7.6 metres in width. Surface trenching has revealed fairly heavy arsenopyrite and galena mineralization. A sample from this vein assayed 5.8 grams per tonne gold, 157.7 grams per tonne silver, 7 per cent lead and 1.6 per cent zinc (Minister of Mines Annual Report 1929).

BIBLIOGRAPHY

EMPR AR 1919-N179; 1920-N168; 1923-A157; 1925-A171; 1926-A189;
1927-C192; *1929-C221; 1930-A193; 1931-A107; 1938-D3-D17;
1939-107
EMPR BULL 1, p. 69
EMPR PF (Report by N.E. Nelson, 1936)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 86-1A, pp. 589-594; 87-1A, pp. 735-742
GSC SUM RPT 1926A; 1929A
CJES Vol. 14, No. 7, pp. 1690-1695; Vol. 24, No. 2, pp. 302-313

DATE CODED: 1991/12/10
DATE REVISED: / /

CODED BY: KJM
REVISED BY:

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 028**

NATIONAL MINERAL INVENTORY:

NAME(S): **LEMPRIERE CARBONATITE** LEMPRIERE, AR 2,
AR, AR 1-4, VERITY,
VERITY FIRST, MILL, MILL 2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E
BC MAP:
LATITUDE: 52 24 08 N
LONGITUDE: 119 08 18 W
ELEVATION: 1370 Metres
LOCATION ACCURACY: Within 500M

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5807927
EASTING: 354530

COMMENTS: Carbonatite outcrop 1.55 kilometres east-northeast of the Verity occurrence (083D 005) (Assessment Report 10274).

COMMODITIES: Niobium Tantalum Phosphate Uranium Rare Earths

MINERALS

SIGNIFICANT: Pyrochlore Columbite Apatite Vermiculite
COMMENTS: Pyrochlore was identified in chip samples. Other minerals are assumed from the similarity to the Verity occurrence (083D 005).

ASSOCIATED: Dolomite Calcite Magnetite Amphibole Zircon
Pyrite Pyrrhotite Olivine

COMMENTS: Associated minerals are assumed from the similarity to the nearby Verity occurrence (083D 005).

ALTERATION: Amphibole Biotite Albite Perthite

COMMENTS: See comments under associated minerals.

ALTERATION TYPE: Fenitic

MINERALIZATION AGE: Devonian-Mississipp.

ISOTOPIC AGE: circa 350 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated

CLASSIFICATION: Magmatic Industrial Min.

TYPE: N01 Carbonatite-hosted deposits

SHAPE: Tabular

MODIFIER: Folded

COMMENTS: Isotopic age of circa 350 Ma is from two zircon separates from the Verity occurrence (083D 005), (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Horsethief Creek	Undefined Formation	Shuswap Metamorphic Complex
Proterozoic-Paleoz.			

LITHOLOGY: Carbonatite
Beforsite
Sovite
Fenite
Quartz Plagioclase Hornblende Schist
Schist
Amphibolite
Pegmatite

HOSTROCK COMMENTS: Occurrence is hosted in the Semipelite-Amphibolite unit of the Horsethief Creek Group.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

COMMENTS: Carbonatite in central (Omineca) division of carbonatite belt.

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Post-mineralization

GRADE: Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Chip
COMMODITY

YEAR: 1981

COMMODITY	GRADE	
Niobium	0.0433	Per cent
Phosphate	2.3400	Per cent
Tantalum	0.0118	Per cent

COMMENTS: Grades are the weighted average of three 0.3 metre chip samples (3828 to 3830).

REFERENCE: Assessment Report 10274.

CAPSULE GEOLOGY

The Lempriere carbonatite is easily reached by trails and logging roads which cross the North Thompson River and intersect Highway 5 at Lempriere Station, approximately 40 kilometres north of Blue River. It lies 1.55 kilometres east-northeast of the Verity occurrence (083D 005) and 1.90 kilometres southeast of the Mill occurrence (083D 034). A detailed description of the regional geologic setting is given in the Verity occurrence, immediately to the south.

Two areas east of the Verity occurrence were examined and sampled in 1982. The upper and most easterly of these two areas, consisting of outcrop exposed by an uprooted tree, is the Lempriere showing. This may be part of an exposure mapped in 1952 (Geological Survey of Canada Economic Geology No. 18, p. 32). The carbonatite is similar to exposure in the Specimen Pit at the Verity occurrence.

A total of six samples were taken from the Lempriere showing in 1981. Pyrochlore was visible in some chips from samples 3829 and 3830. The weighted average grades from three 0.3-metre chip samples (3828 to 3830) are 0.0118 per cent Tantalum, 0.0433 per cent Nb2O5 and 2.34 per cent P2O5 (Assessment Report 10274). An additional three samples (625 to 627) were taken in 1982. Analytical results ranged from 0.10 to 0.12 per cent Nb2O5 and from 0.015 to 0.026 tantalum (Assessment Report 11130).

BIBLIOGRAPHY

- EMPR AR 1950-223-229; 1952-115-119; 1954-111; 1968-222
EMPR ASS RPT 1630, 6741, 7236, 8216, 9566, *10274, 10955, *11130, 12361
EMPR BULL *86 (in press)
EMPR EXPL 1978-117; 1980-149; 1981-250; 1982-127,128
EMPR FIELDWORK 1979, pp. 118-119; 1980, pp. 111-112; 1981, pp. 68-69 1984, pp. 84-94, 95-100
EMPR MAP 22, #33
EMPR OF *1987-17; *1990-32
GSC BULL 239, pp. 121,122,150
GSC EC GEOL #16 (2nd Ed.), p. 236; *#18, pp. 31-35
GSC MAP 15-1967
GSC OF 551
GSC P 89-1E, pp. 95-100
CJES 1988 Vol. 25, No. 8, pp. 1323-1337
WWW <http://www.commerceresources.com>
Canadian Mineralogist, 1961, Vol. 6, pp. 610-633
Pell J. and Hora Z.D. (1990): Rifting, alkaline rocks and related magmatic deposits in the southern Canadian Cordillera; Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, 8th IAGOD Paper

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/09

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 029**

NATIONAL MINERAL INVENTORY:

NAME(S): SERPENTINE, LEMPRIERE

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E 083D07W
BC MAP:

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 23 00 N
LONGITUDE: 119 00 04 W
ELEVATION: 1830 Metres

NORTHING: 5805559
EASTING: 363806

LOCATION ACCURACY: Within 5 KM

COMMENTS: Beryl occurs in pegmatite at the head of Serpentine Creek, 6.5 kilometres south of Lempriere (Industrial Minerals File, Personal Communication, D. Hora).

COMMODITIES: Beryllium

MINERALS

SIGNIFICANT: Beryl
ASSOCIATED: Quartz Feldspar Mica Tourmaline Topaz
COMMENTS: Associated mineralogy is inferred from the Yellow Creek (083D 007) and Mica Mountain (083D 019) showings.

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Concordant Discordant Disseminated
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: 001 Rare element pegmatite - LCT family

DIMENSION: 15 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Pegmatite dykes and pods up to 15 metres thick are found throughout the area (Geological Survey of Canada Paper 89-1A, pp. 95-100).

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Horsethief Creek	Undefined Formation	Shuswap Metamorphic Complex
Proterozoic-Paleoz.			

LITHOLOGY: Pegmatite
Pelite
Semi Pelite
Calc-silicate
Metabasite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Kootenay

Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP: Pre-mineralization
Post-mineralization

GRADE: Amphibolite

COMMENTS: Relationship of metamorphism varies with age of pegmatite.

CAPSULE GEOLOGY

The Serpentine beryllium occurrence is located at the headwaters of Serpentine Creek, about 6.5 kilometres southeast of Lempriere.

Metasediments and interlayered metabasites of the Semipelite Amphibolite and lower Pelite units of the Hadrynian Horsethief Creek Group host locally abundant pegmatite pods and layers in the area. The region has been affected by three phases of deformation which produced large tight folds and a pervasive, intense foliation. Regional metamorphism is within the kyanite and sillimanite stability fields of amphibolite grade. Temperatures have been estimated at 595+/- 12 degrees celsius and pressures at 5.5+/-0.6 kilobars (Geological Survey of Canada Paper 89-1E, pp. 95-100). This metamorphism has been determined to have occurred at circa 100 Ma, based on field relations, high precision U-Pb zircon and monazite analyses and petrogenetic constraints (Geology, v. 18, p. 103-106).

Beryllium occurrences are fairly numerous in a belt along the northeastern margin of the Western Cordillera region. Cordilleran pegmatites are mainly in areas that are perhaps more highly metamorphosed than areas with nonpegmatite deposits (Geological Survey of Canada Economic Geology Report No. 23).

Pegmatite pods and dykes up to 15 metres thick are found throughout the area and intrude all lithologies. Field relations vary widely, with some pegmatites being folded by phase three deformation while others are not and can be seen to truncate the host rock layering. Pegmatites may be extremely coarse grained with

CAPSULE GEOLOGY

individual muscovite and biotite crystals locally exceeding 15 centimetres (Geological Survey of Canada Paper 89-1E, pp. 95-100).

At the Serpentine showing beryl crystals up to 20 millimetres in diameter have been found in pegmatite (Industrial Minerals File). Refer to the Mica Mountain (083D 019) and Yellow Creek (083D 007) showings for a more detailed description of beryllium-bearing pegmatites.

BIBLIOGRAPHY

EM EXPL 2001-73-82
EMPR AR 1898-39; 1913-42; 1920-N95; 1928-C188
EMPR IND MIN FILE (Lempriere - 083D06E)
GSC EC GEOL No. *23, pp. 58, 60
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P *89-1E. pp. 95-100
PERS COMM Hora, D.
American Mineralogist, Vol. 32, p. 94., 1947
Sevigny, J.H. et al., (1990): Northern Monashee Mountains, Omenica Crystalline Belt, British Columbia: Timing of metamorphism, anatexis, and tectonic denudation; Geology, v. 18, p. 103-108.

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/09

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 030**

NATIONAL MINERAL INVENTORY:

NAME(S): **NORTH BLUE RIVER**, BLUE RIVER, WHITERIVER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D03W
BC MAP:
LATITUDE: 52 07 00 N
LONGITUDE: 119 23 04 W
ELEVATION: 915 Metres
LOCATION ACCURACY: Within 5 KM
COMMENTS: Center of a large pegmatite body immediately northwest of Blue River (Geological Survey of Canada, Paper 84-1A, p. 92).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5776696
EASTING: 336744

COMMODITIES: Mica

MINERALS

SIGNIFICANT: Mica Muscovite
ASSOCIATED: Quartz Albite Oligoclase Garnet Tourmaline
 Kyanite Beryl Apatite

COMMENTS: Pegmatite is composed principally of albite and oligoclase feldspar and a vitreous quartz. Accessories include garnet, kyanite, tourmaline beryl and apatite (Minister of Mines Annual Report 1902).

MINERALIZATION AGE: Lower Cretaceous

ISOTOPIC AGE: 125 +/- 7 Ma

DATING METHOD: Unknown

MATERIAL DATED: Unknown

DEPOSIT

CHARACTER: Vein Concordant Discordant Disseminated
CLASSIFICATION: Pegmatite Industrial Min.

TYPE: O03 Muscovite pegmatite

SHAPE: Tabular

DIMENSION: 60 x 30 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Some of these pegmatite bands are over 30 metres wide and 60 metres long (AR 1902). The age of post/pre phase 3 deformation pegmatites is 125+/-7 and 154+/-6 Ma, respectively (GSC Paper 90-1E).

HOST ROCK

DOMINANT HOSTROCK: Metaplutonic

STRATIGRAPHIC AGE

Hadrynian
Proterozoic-Paleoz.

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Pegmatite
Pelitic Schist
Micaceous Schist
Semi Pelite
Psammite
Grit
Marble
Calc-silicate

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Cariboo Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP: Pre-mineralization
Post-mineralization

GRADE: Amphibolite

COMMENTS: Relationship of metamorphism varies with age of pegmatite.

CAPSULE GEOLOGY

The North Blue River is a mica showing hosted in pegmatite, 5 kilometres northwest of Blue River.

The Canoe River map area is predominantly underlain by a sequence of Hadrynian metasedimentary strata, belonging to the Windermere Supergroup (Miette, Horsethief Creek and Kaza groups) and their basement gneisses. Lithologies common to the area include semipelite, psammite, grit, marble and calc-silicate.

Little information is available for this showing which was first mentioned as one of several occurrences of large books and crystals of mica hosted in pegmatites in the Canoe River area (Minister of Mines Annual Report 1902).

A large pegmatite body was mapped in 1983 as part of a field study of the structural evolution and metamorphism in the Blue River area (Geological Survey of Canada Paper 84-1A, pp. 91-94). The description of pegmatite in the Blue River area given in 1902 is assumed to be part of this body or an apophyses of it.

The ages of pre and post phase three deformation pegmatites has

CAPSULE GEOLOGY

been determined to be 154+/-6 Ma and 125+/-7 Ma respectively from pegmatites in the Cariboo Mountains west of Valemount (Geological Survey of Canada Paper 90-1E, pp. 71-80).

Large masses of pegmatite were observed interbanded with micaceous schists of the Hadrynian Horsethief Creek Group. Albite or oligoclase feldspar and a vitreous quartz comprise the major principal constituents (Minister of Mines Annual Report 1902). Other pegmatites in the Canoe River area contain garnet, tourmaline, kyanite, beryl and apatite as accessories (Minister of Mines Annual Report 1920). Some pegmatite bands and masses are over 30 metres wide and 60 metres long. It is these pegmatites in which large crystals of commercial sheet mica are found, geological and geochemical conditions permitting (Minister of Mines Annual Report 1902).

BIBLIOGRAPHY

EMPR AR 1888-313; 1893-80A-81A; 1898-39; *1902-1083; 1912-K52-K53;
1913-K59; 1914-K56-K57; 1920-N95-N96; 1921-N95,N96; 1924-152;
1928-C188,C189; 1947-A220
GSC EC GEOL No. 19, pp. 83-84
GSC MAP 15-1967, 1339A
GSC OF 2324
GSC P *84-1A, pp. 91-94; 90-1E, pp. 71-80
WWW http://www.infomine.com/index/properties/BLUE_RIVER.html

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/09

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 031**

NATIONAL MINERAL INVENTORY:

NAME(S): **GRANT BROOK**

STATUS: Past Producer
REGIONS: British Columbia
NTS MAP: 083D15E
BC MAP:

Open Pit

MINING DIVISION: Cariboo

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 54 34 N
LONGITUDE: 118 42 59 W

NORTHING: 5863576
EASTING: 384576

ELEVATION: 1471 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Center of dolomite outcrop, 3.3 kilometres east of the Grant Brook station (CANMET Report 811, page 217).

COMMODITIES: Dolomite Marble Dimension Stone

MINERALS

SIGNIFICANT: Dolomite

ASSOCIATED: Quartz Chlorite Pyrite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Massive
CLASSIFICATION: Sedimentary Industrial Min.

TYPE: R10 Dolomite

DIMENSION: 1600 x 120 Metres

STRIKE/DIP: R04 Dimension stone - marble
114/60 TREND/PLUNGE:

COMMENTS: The dolomite bed dips 30 to 90 degrees north.

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Cambrian	Gog	Mural	

LITHOLOGY: Dolomite
Limestone
Shale
Sandstone
Quartz Sandstone
Quartzite
Pelite

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

PHYSIOGRAPHIC AREA: Continental Ranges

INVENTORY

ORE ZONE: QUARRY

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1944

SAMPLE TYPE: Chip

COMMODITY

GRADE

Dolomite

20.6800

Per cent

COMMENTS: Taken across 30.5 metres. Grade given for MgO.

REFERENCE: CANMET Report 811, page 217, Sample 96A.

CAPSULE GEOLOGY

The Grant Brook deposit consists of a band of dolomite, at least 120 metres wide. The dolomite outcrops on Grant Brook, 3.3 kilometres east of the Grant Brook Station of the Canadian National Railway, and continues southeastward along the mountainside for at least 1.6 kilometres, 100 to 180 metres above the railway.

The area is underlain by a sequence of quartz-rich sandstones and coarser clastics, carbonates and pelites and other associated fine grained clastics from the Upper Proterozoic (Hadrynian) Miette Group through the Lower Cambrian Gog Group to the Middle Cambrian Chancellor Group. The Gog Group is subdivided into the lower McNaughton Formation, the Mural Formation and the upper Mahto Formation. The Resplendent fault and Moose Lake thrust are major structural elements that, in part, separate Cambrian stratigraphy from Hadrynian Miette stratigraphy to the southwest.

At the Grant Brook deposit, the entire dolomite bed is hosted in the Mural Formation of the Lower Cambrian Gog Group. The Mural Formation, in the immediate area, consists of limestone and dolomite with interbedded shale and sandstone. The dolomite bed, striking 114 degrees and dipping 30 to 90 degrees north, consists of fine grained,

CAPSULE GEOLOGY

variably banded and mottled, pink, white and bluish white, impure dolomite. The dolomite is interbedded with layers of light green, talcose shale, 3 millimetres to 0.6 metres thick. Throughout the rest of the deposit, only a few streaks of blue and purple shale are present. The dolomite is thinly laminated to thinly bedded and massively but variably jointed, with most joints dipping westward. The rock is contaminated with minor crystals and veins of white quartz, a few chloritic streaks and a trace of pyrite. The deposit becomes more siliceous to the west. Several chip samples analyzed as follows (in per cent) (Canada Bureau of Mines Report 811, p. 217, Samples 96A, 96B, 96C):

Sample	CaO	MgO	SiO2	Al2O3	Fe2O3	Sulphur
96A	30.93	20.68	1.54	0.51	0.44	0.01
96B,96C	30.08	20.04	3.93	0.55	0.63	0.015

Sample 93A was taken across 30.5 metres of white and bluish white dolomite exposed in a quarry. Assays for samples 96B and 96C have been averaged. The two samples were taken in succession across 30.5 metres of pink and white dolomite in the quarry.

The deposit was also investigated for its dimension stone potential. The stone, very hard and compactly crystalline, is generally white in color. The stone is strong, of low porosity, and should prove to have good weathering properties, however, it would be hard to work. The dolomitic character of the stone is shown by a high specific gravity and weight per cubic foot and by a slight loss under the corrosion test relative to the marbles from other localities. This test produced only slight etching and scarcely any color change. The specific values of test results on sample number 1249 were:

Specific Gravity	= 2.855
Weight per cubic foot	= 177.32
Pore Space	= 0.57
Ratio of Absorption	= 0.150 (in one hour)
Coefficient of Saturation	= 0.74 (in one hour)
Crushing Strength	= 25,114 psi
Loss on Corrosion	= 0.00586 grams per square inch

This analysis reveals the high dolomitic character of the stone (Canada Bureau of Mines Report 452, p. 142-146, Sample 1249).

A small, unknown quantity of dolomite was quarried for marble by the Grant Brook Marble Company sometime before 1914.

BIBLIOGRAPHY

GSC MAP 15-1967, 1339A
GSC OF 2259; *2260; 2324
GSC P 84-1A, pp. 99-102; *86-1A, pp. 619-626; *88-1D, pp. 105-113;
88-1E, pp. 171-176; 90-1E, pp. 81-89, 90-1E, pp. 359-367;
91-1E, pp. 5-11
CANMET Report *452, Vol. 5, pp. 143-146; *811, Part 5, pp. 217,218
CJES Vol 25, No. 10, pp. 1687-1702
Geology Vol. 16, No. 2, pp. 139-143

DATE CODED: 1985/07/24
DATE REVISED: 1991/12/03

CODED BY: GSB
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

CAPSULE GEOLOGY

occurred at 135 +/- 4 Ma (Geological Survey of Canada Paper 90-1E, pp. 71-80). Refer to the Canoe South Mica showing (083D 017) for a detailed description of the regional deformation and metamorphism.

The deposit is comprised of two distinct zones of muscovite rich schist. A zone of quartz-muscovite-biotite schist, 65 metres wide, trends 115 degrees for at least 250 metres, possibly up to 1350 metres, and dips steeply southwest. Minor garnet and locally intense iron staining due to pyrrhotite are present. The zone grades northeastward into interbedded quartz-hornblende-biotite-garnet schist and quartzite. The zone is in sharp contact to the southwest with quartzite and micaceous quartzite. A second less well defined zone (the M-10 zone) occurs southwest of the previous zone, where large blocks of quartz mica schist are exposed on the steep north bank of the North Thompson River. The blocks are likely slumped material, only slightly removed from bedrock.

Schist samples from the main zone are reported to contain 44.47 per cent muscovite, of which 15 per cent was contaminated with graphite (Assessment Report 13844). Muscovite from the M-10 zone was found to be free of graphite. Grinding and beneficiation tests, performed at the University of Toronto, indicate that a concentrate, containing at least 95 per cent muscovite, can be produced. Good liberation and separation occur in the 0.15 to 0.6 millimetre size range (Assessment Report 12679).

BIBLIOGRAPHY

EMPR AR 1899-81A
EMPR ASS RPT *12679; *13844
EMPR INF CIRC 1986-1, p. 70
GSC EC GEOL No. 19, pp. 83-84
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 87-1A, pp. 713-718; 89-1E, pp. 101-107; 90-1E, pp. 71-80

DATE CODED: 1986/03/14
DATE REVISED: 1991/11/19

CODED BY: ZDH
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 033**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUE RIVER FELDSPAR**, BLUE RIVER, BLUE 1-3,
BLUE 2

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 083D03W
BC MAP:
LATITUDE: 52 07 03 N
LONGITUDE: 119 20 42 W
ELEVATION: 792 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of Blue 2 claim, 3 kilometres west-northwest of the community of Blue River (Assessment Report 12892).

NORTHING: 5776701
EASTING: 339447

COMMODITIES: Feldspar

MINERALS

SIGNIFICANT: Feldspar
COMMENTS: Glass feldspar.
ASSOCIATED: Quartz Muscovite Biotite
COMMENTS: Coarse assemblage of white feldspar and quartz.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Massive
CLASSIFICATION: Pegmatite Industrial Min.
TYPE: O04 Feldspar-quartz pegmatite
SHAPE: Tabular
DIMENSION: 1475 x 490 Metres
COMMENTS: Pegmatite dyke dimension.

STRIKE/DIP: TREND/PLUNGE:

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian Proterozoic-Paleoz.	Horsethief Creek	Unnamed/Unknown Formation	Shuswap Metamorphic Complex

LITHOLOGY: Biotite Quartz Feldspar Gneiss
Biotite Gneiss
Coarse Grained Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Monashee
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Shuswap Highland

RELATIONSHIP: GRADE: Amphibolite

CAPSULE GEOLOGY

The Blue River Feldspar showing is located approximately 3 kilometres west of the town of Blue River on the north side of the Blue River valley. A pegmatite dyke, hosted in gneissic rocks along the northern margin of the Paleozoic to Proterozoic Shuswap Metamorphic Complex, has been explored as a source of feldspar. The deposit was mapped and drilled by G.R. Guillet in 1984.

Three major stratigraphic units are recognized in the area; metasedimentary rocks of the Semipelite-Amphibolite, the Middle Marble and the Upper Clastic units of the Hadrynian Horsethief Creek Group. These units are regionally metamorphosed to upper amphibolite grade. A pegmatite body, approximately 10 by 4 kilometres in area, is located on the north side of Blue River and trends east-west. A south-southwest apophyses of this pegmatite body extends southerly towards the Blue River where it outcrops at this deposit. The pegmatite intrudes biotite-quartz-feldspar gneiss of the Hadrynian Horsethief Creek Group.

The pegmatite consists of a coarse assemblage of white feldspar and quartz with accessory muscovite. The dyke, which strikes northeast and dips vertically, has been traced along strike for 1475 metres with a width of 490 metres and is best observed in outcrop along the base of the north valley wall of the Blue River.

A drill hole encountered two pegmatite sections of 6.2 and 3.6 metres separated by gneiss before intersecting the main pegmatite zone at 26.2 metres depth. The drill hole was terminated at 40 metres still in pegmatite. The weighted average of three samples of drill core analyzed as follows after dry magnetic separation (Assessment Report 12892):

CAPSULE GEOLOGY

SiO2 - 74.4 per cent
Al2O3 - 14.7 per cent
Fe2O3 - 0.076 per cent
CaO - 1.73 per cent
MgO - 0.04 per cent
Na2O - 3.89 per cent
K2O - 4.53 per cent
MnO - < 0.01 per cent
TiO2 - 0.01 per cent
P2O5 - 0.02 per cent
LOI - 0.53 per cent
Chromium - < 10 ppm
Rubidium - 130 ppm
Strontium - 630 ppm
Yttrium - < 10 ppm
Zirconium - < 10 ppm
Niobium - 20 ppm

Based on company results, the pegmatite contains feldspathic material which meets industry specifications for glass and ceramic applications.

BIBLIOGRAPHY

EMPR ASS RPT *12892
EMPR OF *1991-10
GSC MAP 1339A; 15-1967
GSC OF 2324
GSC P *84-1A, pp. 91-94
WWW http://www.infomine.com/index/properties/BLUE_RIVER.html

DATE CODED: 1986/03/14
DATE REVISED: 1991/03/22

CODED BY: ZDH
REVISED BY: PSF

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 034**

NATIONAL MINERAL INVENTORY:

NAME(S): **MILL**, LEMPRIERE, VERITY,
AR, AR-2

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 52 25 05 N
LONGITUDE: 119 08 49 W
ELEVATION: 870 Metres

NORTHING: 5809705
EASTING: 353997

LOCATION ACCURACY: Within 500M
COMMENTS: Drillhole M-2 on AR-2 claim (Assessment Report 9566).

COMMODITIES: Niobium Tantalum Phosphate

MINERALS

SIGNIFICANT: Pyrochlore Columbite Apatite
COMMENTS: Refer to capsule geology for a detailed mineralogy.
ASSOCIATED: Dolomite Calcite Amphibole Olivine Biotite
 Zircon Magnetite Pyrite
COMMENTS: See capsule geology for associated minerals. See the Verity

ALTERATION: Amphibole Biotite Albite Perthite
COMMENTS: See comment under associated minerals. See the Verity occurrence
(083D 005) for details.

ALTERATION TYPE: Fenitic
MINERALIZATION AGE: Devonian-Mississipp.
ISOTOPIC AGE: circa 350 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.
 TYPE: N01 Carbonatite-hosted deposits
 SHAPE: Tabular
 MODIFIER: Folded
DIMENSION: 300 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Uranium-lead age dates on zircon from the Verity and Paradise showings
of 325 and 340 Ma respectively indicate a mid-Paleozoic (Devono-
Mississippian) age of emplacement (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Horsethief Creek Undefined Formation Shuswap Metamorphic Complex
Proterozoic-Paleoz.

LITHOLOGY: Carbonatite
 Beforsite
 Sovite
 Quartz Hornblende Mica Schist
 Gneiss
 Semi Pelite
 Amphibolite

HOSTROCK COMMENTS: Sovite zone can be traced discontinuously in a north-south direction
for 300 metres.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Carbonatites in central (Omineca) division of carbonatite belt.

INVENTORY

ORE ZONE: DRILLHOLE REPORT ON: N
CATEGORY: Assay/analysis YEAR: 1980
SAMPLE TYPE: Drill Core
COMMODITY GRADE
Niobium 0.2400 Per cent
Phosphate 3.3800 Per cent
Tantalum 0.0110 Per cent
COMMENTS: Values are from drill hole M-2 at 120 to 133 foot interval. Niobium
grade is for Nb2O5.
REFERENCE: Assessment Report 9566.

CAPSULE GEOLOGY

The Mill carbonatite showing is located approximately 1600 metres due north of the Verity occurrence (083D 005). The Mill is easily reached by logging roads which cross the North Thompson River and intersect highway 5 at Lempriere Station, 40 kilometres north of Blue River.

Carbonatite consisting of sovite and lesser beforosite occurs as sills within quartz-hornblende-mica schist of the Semipelite Amphibolite division of the Hadrynian Horsethief Creek Group. For a comprehensive description of the regional geologic setting of the Mill showing refer to the Verity carbonatite (083D 005).

The Mill showing consists primarily of two major sovite units similar to the lower two sovite units of the Verity. This zone can be traced discontinuously in a north-south direction for up to 300 metres. The gneiss and carbonatite have been folded into a tight fold and carbonatite appears to be concordant with the gneiss foliation. To the west of the fold axis the carbonatite dips steeply to the west.

A banded texture caused by layering of the accessory minerals apatite, amphibole, olivine, magnetite, biotite, pyrite, pyrrhotite, pyrochlore, columbite, and zircon is common in the sovite unit and less developed in the beforosite unit.

Anomalous values of niobium occur in the lower half of the lower sovite unit. Values up to 0.42 per cent Nb2O5 over 1.5 metres occur for a strike length of 100 metres (Assessment Report 10274). Drill intersections from holes M-1 and M-2 assayed up to 0.24 per cent Nb2O5, 0.089 per cent tantalum, and 4.62 per cent P2O5 (Assessment Report 9566). A drill hole intersection between 120 to 133 feet in hole M-2 assayed 0.24 per cent Nb2O5, 0.011 per cent tantalum, and 3.38 per cent P2O5 (Assessment Report 9566).

BIBLIOGRAPHY

- EMPR AR 1950-223-229; 1952-115-119; *1954-111; 1968-222
EMPR ASS RPT 1630, 6741, 7236, 8216, *9566, 9923, *10274, 10955, 11130
EMPR BULL *86 (in press)
EMPR EXPL 1978-117; 1979-119; 1980-149; 1981-250; 1982-127-128;
2001-73-82
EMPR FIELDWORK 1979, pp. 118-119; 1980, pp. 111-112; 1981, pp. 68-69;
1984, pp. 84-94, 95-100
EMPR MAP 22, #33
EMPR OF 1987-17; 1990-32
GSC BULL 239, pp. 121-122
GSC EC GEOL No 16 (2nd Edit), pp. 235-236; No. 18, pp. 31-35; No. 29,
pp. 72,134
GSC MAP 15-1967
GSC OF 2324
GSC P 89-1E, pp. 95-100
CJES 1988 Vol. 25, No. 8, pp. 1323-1337
WWW <http://www.commerceresources.com>
Canadian Mineralogist, Vol. 6, pp. 610-633, 1961
Pell J. and Hora, Z.D. (1990): Rifting, alkaline rocks and related
magmatic deposits in the southern Canadian Cordillera; Ministry
of Energy, Mines and Petroleum Resources, Geological Survey
Branch, 8th IAGOD Paper

DATE CODED: 1987/07/28
DATE REVISED: 1991/12/09

CODED BY: LDJ
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 035**

NATIONAL MINERAL INVENTORY:

NAME(S): **FIR, AZ - 1, FIR 1,
FIR 2, BLUE RIVER**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E
BC MAP:

LATITUDE: 52 18 39 N
LONGITUDE: 119 10 24 W
ELEVATION: 790 Metres

LOCATION ACCURACY: Within 500M

COMMENTS: Drill site for holes BC-18 to 21 on Fir 2 claim (Assessment Report 9923). Located within the north Thompson River valley, about 23 kilometres north of Blue River on western side of Rocky Mountain trench.

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

NORTHING: 5797835
EASTING: 351844

COMMODITIES: Niobium Tantalum Phosphate

MINERALS

SIGNIFICANT: Pyrochlore Columbite Apatite
ASSOCIATED: Dolomite Calcite Amphibole Olivine Magnetite
Pyrite Pyrrhotite Biotite

COMMENTS: Deposit classification is metasomatic.
ALTERATION: Amphibole Albite Perthite
COMMENTS: See comment under associated minerals. See the Verity occurrence (083D 005) for details.

ALTERATION TYPE: Fenitic

MINERALIZATION AGE: Devonian-Mississipp.

ISOTOPIC AGE: circa 350 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.
TYPE: N01 Carbonatite-hosted deposits

SHAPE: Tabular

DIMENSION: 400 Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: Uranium-lead age dates on zircon from the Verity and Paradise showings of 325 and 340 Ma respectively indicate a mid-Paleozoic (Devono-Mississippian) age of emplacement (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Hadrynian
Proterozoic-Paleoz.

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Carbonatite
Beforsite
Sovite
Quartz Hornblende Mica Schist
Amphibole Biotite Schist
Biotite Muscovite Gneiss
Amphibole Biotite Garnet Gneiss
Semi Pelite
Amphibolite

HOSTROCK COMMENTS: Carbonatite likely strikes 400 metres in a northerly direction.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

COMMENTS: Carbonatites in central (Omineca) division of carbonatite belt.

PHYSIOGRAPHIC AREA: Monashee Mountains

RELATIONSHIP: Post-mineralization

GRADE: Amphibolite

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 2001

SAMPLE TYPE: Grab

COMMODITY

GRADE

Niobium	0.1178	Per cent
Phosphate	3.2800	Per cent
Tantalum	0.0202	Per cent

COMMENTS: In DDH-1, over 76.47 metres.

REFERENCE: EMPR Exploration & Mining 2001, pages 73-88.

BIBLIOGRAPHY

083D 005)
GSC BULL 239, pp. 121-122
GSC EC GEOL No 16 (2nd Edit), pp. 235-236; No. 18, pp. 31-35; No. 29,
pp. 72,134
GSC MAP 15-1967
GSC OF 2324
GSC P 89-1E, pp. 95-100
CJES 1988 Vol. 25, No. 8, pp. 610-633
PR REL Commerce Resources Corp., Jun.5, 2002; Sept.17, 2002; Mar.5,
10, 2003
WWW http://www.infomine.com/index/properties/BLUE_RIVER.html;
<http://www.commerceresources.com>
Canadian Mineralogist 1961, Vol. 6, pp. 610-633
Pell, J. and Hora, Z.D. (1990): Rifting, alkaline rocks and related
magmatic deposits in the southern Canadian Cordillera; Ministry
of Energy, Mines and Petroleum Resources, Geological Survey
Branch, 8th IAGOD Paper

DATE CODED: 1987/07/28
DATE REVISED: 1991/12/09

CODED BY: LDJ
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 036**

NATIONAL MINERAL INVENTORY:

NAME(S): **BONE CREEK**, GUM CREEK, BE 1-3,
BC 1-4, BLUE 2-3

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 52 17 55 N
LONGITUDE: 119 09 58 W
ELEVATION: 1173 Metres

NORTHING: 5796461
EASTING: 352296

LOCATION ACCURACY: Within 500M
COMMENTS: Location of drill hole BC-12 (Assessment Report 9566).

COMMODITIES: Niobium Tantalum Uranium Phosphate Rare Earths

MINERALS

SIGNIFICANT: Pyrochlore Columbite Apatite
ASSOCIATED: Ankerite Amphibole Dolomite Olivine Magnetite
 Molybdenite Phlogopite Ilmenite
COMMENTS: Deposit classification is metasomatic.

ALTERATION: Amphibole Albite Perthite
COMMENTS: See comment under associated minerals. See the Verity occurrence (083D 005) for details.

ALTERATION TYPE: Fenitic
MINERALIZATION AGE: Devonian-Mississipp.
ISOTOPIC AGE: circa 350 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.

TYPE: N01 Carbonatite-hosted deposits

SHAPE: Tabular

MODIFIER: Faulted

DIMENSION: 2 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Uranium-lead age dates on zircon from the Verity and Paradise showings of 325 and 340 Ma, respectively indicate a mid-Paleozoic (Devono-Mississippian) age of emplacement (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Hadrynian
Proterozoic-Paleoz.

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Carbonatite
Rauhaugite
Quartz Hornblende Mica Schist
Pelite
Amphibolite
Biotite Hornblende Gneiss
Semi Pelite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

PHYSIOGRAPHIC AREA: Monashee Mountains

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Amphibolite

COMMENTS: Carbonatites in central (Omineca) division of carbonatite belt.

INVENTORY

ORE ZONE: DRILLHOLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1980

SAMPLE TYPE: Drill Core

COMMODITY

GRADE

Niobium 0.2100 Per cent

Phosphate 1.9000 Per cent

Tantalum 0.0578 Per cent

COMMENTS: Values are from drill hole BC-12 at the 7.47 to 7.62 metre interval. Niobium and phosphate values are Nb2O5 and P2O5 respectively.

REFERENCE: Assessment Report 9566.

CAPSULE GEOLOGY

The Bone Creek carbonatite is located on the east side of the North Thompson River. It is easily accessed by logging roads which

CAPSULE GEOLOGY

intersect Highway 5 about 23 kilometres north of Blue River.

The Bone Creek showing is a buff-weathering rauhaugite, occurring as a sill within quartz-hornblende-mica schist of the Semipelite Amphibolite Division of the Hadrynian Horsethief Creek Group. Other lithologies include biotite hornblende gneiss, semipelite and amphibolite. The Verity occurrence (083D 005) contains a more detailed description of the regional setting.

This rauhaugite showing consists of two main outcrops. Drill hole data suggests that a thin horizontal sheet, approximately 2.3 metres thick pinches out to the north, or has been offset by faulting.

Accessory minerals in the carbonatite include amphibole, apatite, magnetite and minor phlogopite. Ilmenite, pyrochlore, columbite and zircon may be present in trace amounts. The amphibole may be richterite, soda-tremolite, tremolite or actinolite. Amphibole and apatite within the rauhaugite define a foliation parallel with compositional banding. Vertical mineral zoning is apparent in weathered outcrop. Alternating apatite-amphibole-rich and carbonate-rich layers parallel the foliation and the contact with country rocks. Color banding of 2 to 5 centimetres thickness in weathered outcrops is not reflected in drill core.

The carbonatite, as indicated by drilling, averaged 0.0198 per cent tantalum, 0.047 per cent niobium, and 3.4 per cent P2O5. A one-metre intersection assayed 0.0188 per cent uranium. (Assessment Report 9566, 10274). A 15-centimetre core sample from drill hole BC-12 assayed 0.0578 per cent tantalum, 0.21 per cent niobium and 1.9 per cent phosphate (Assessment Report 9566). The highest phosphate assay value, from drill hole BC-5, was 5.37 per cent (Assessment Report 9566). Molybdenite was also noted in drill core from this showing.

BIBLIOGRAPHY

- EMPR AR 1950-223-229; 1952-115-119; 1954-111; 1968-222
EMPR ASS RPT 1630, 6741, 7236, 8216, *9566, 9923, *10274, 10955, 11130
EMPR BULL *86 (in press)
EMPR EXPL 1978-117; 1979-119; 1980-149; 1981-250; 1982-127-128; 2001-73-82
EMPR FIELDWORK 1979, pp. 118-119; 1980, pp. 111-112; 1981, pp. 68-69; *1984, pp. 84-94, 95-100
EMPR MAP 22, #33
EMPR OF *1987-17, 1990-32
GSC BULL 239, pp. 121-122
GSC EC GEOL No 16(2nd Edit), pp. 235-236; No. 18, pp. 31-35; No. 29, pp. 72,134
GSC MAP 15-1967
GSC OF 2324
GSC P 89-1E, pp. 95-100
CJES 1988 Vol. 25, No. 8, pp. 1323-1337
WWW <http://www.infomine.com/>
Canadian Mineralogist 1961, Vol. 6, pp. 610-633
Pell, J. and Hora, Z.D. (1990); Rifting, alkaline rocks and related magmatic deposits in the southern Canadian Cordillera; Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, 8th IAGOD Paper

DATE CODED: 1987/07/28
DATE REVISED: 1991/11/06

CODED BY: LDJ
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 037**

NATIONAL MINERAL INVENTORY:

NAME(S): **AEG, JTM, MUD LAKE,**
ORION, ORION 5

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D03E
BC MAP:
LATITUDE: 52 08 00 N
LONGITUDE: 119 11 04 W
ELEVATION: 1300 Metres

MINING DIVISION: Kamloops

UTM ZONE: 11 (NAD 83)

NORTHING: 5778119
EASTING: 350492

LOCATION ACCURACY: Within 500M
COMMENTS: Center of four two-post mining claim group northeast of Mud Lake
(Assessment Report 7783).

COMMODITIES: Niobium	Strontium	Tantalum	Phosphate	Cerium
Lanthanum	Scandium	Neodymium	Rare Earths	Thorium
Uranium	Zirconium			

MINERALS

SIGNIFICANT: Pyrochlore Columbite Zircon Apatite
ASSOCIATED: Calcite Dolomite Ilmenite Olivine Amphibole
Phlogopite Chlorite Antigorite

COMMENTS: The complete mineralogy is given in the capsule geology.
ALTERATION: Augite Albite Perthite
COMMENTS: See structural comments below, capsule geology and the Verity showing
(083D 005) for details.

ALTERATION TYPE: Fenitic
MINERALIZATION AGE: Upper Mississippian
ISOTOPIC AGE: 328 +/- 30 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Concordant Disseminated
CLASSIFICATION: Magmatic Industrial Min.
TYPE: N01 Carbonatite-hosted deposits
SHAPE: Tabular
MODIFIER: Other
DIMENSION: 150 x 4 Metres STRIKE/DIP: TREND/PLUNGE:

COMMENTS: Carbonatites are thin discontinuous, sill-like intrusions with minimal
amounts of associated fenite (Open File 1987-17). Radiometric date
is a preliminary uranium/lead age on zircon (Fieldwork 1984).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Hadrynian Proterozoic-Paleoz.	Horse Thief Creek	Unnamed/Unknown Formation	Shuswap Metamorphic Complex

LITHOLOGY: Carbonatite
Rauhaugite
Amphibolite Biotite Plagioclase Schist
Semi Pelite
Amphibolite
Fenite

HOSTROCK COMMENTS: Carbonatite showings occur within the Semipelite division of the
Hadrynian Horse Thief Creek Group (Open File 1987-17).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Carbonatite in central (Omineca) division of carbonatite belt.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
 SAMPLE TYPE: Rock
 COMMODITY

YEAR: 1978

COMMODITY	GRADE	
Cerium	0.0415	Per cent
Lanthanum	0.0200	Per cent
Neodymium	0.0165	Per cent
Phosphate	3.4400	Per cent
Strontium	0.2780	Per cent
Tantalum	0.0097	Per cent

REFERENCE: Open File 1987-17.

CAPSULE GEOLOGY

The AEG carbonatite showing is located northeast of Blue River, at kilometre 14.2 on Redsand logging road (Exploration 1979). It is the southernmost of seven known carbonatite occurrences in the Blue River area.

The AEG showing is below treeline, thus outcrop exposure is limited. Of the three types of carbonatites in the Blue River area, the AEG showing is a buff weathering dolomitic (rauhaugite) with 5 to 15 per cent amphibole, 2 to 10 per cent apatite, magnetite and minor phlogopite within folded amphibolite-biotite-feldspar schist of the Semipelite Amphibolite division of the Hadrynian Horsethief Creek Group. For a detailed regional geological description for this and other carbonatite occurrences in the Blue River area refer to the Verity showing (083D 005).

The major outcrop at the AEG occurrence has been traced for over 150 metres along strike and has a maximum thickness of greater than 4 metres. Calcite, dolomite, apatite, ilmenite, forsterite, tremolite-actinolite, chlorite, antigorite, vermiculite, talc, mica, pyrrhotite and lesser amounts of phlogopite, chondrodite, pyroxene, magnetite and limonite comprise the detailed mineralogy of the AEG showing (Fieldwork 1981). Pyrochlore, columbite and zircon may be present in trace amounts. Amphibole and apatite define a contact, and external schistosity parallels foliation. Vertical zoning was noted in weathered outcrop (Fieldwork 1984) but no segregations were found (Open File 1987-17).

In many places fenite can be seen enveloping carbonatite and replacing schists (Fieldwork 1979). Ferro-augite-albite-biotite fenitization may extend up to one metre into adjacent quartz-albite-biotite or biotite-sillimanite-garnet schists. Often a 5 centimetre band of ferro-augite-rich rocks with interstitial albite separates fenite from rauhaugite. Contacts between rauhaugite and fenite are sharp with rauhaugite showing embayed relations with fenite. Schist-fenite contacts are gradational (Fieldwork 1979).

A sample collected from the middle of the claim group at the highest reading from a ground scintillometer survey, returned 0.0116 per cent uranium from a semi quantitative spectrographic analysis (Assessment Report 7783). Analysis of a samples collected from the showing in 1987, indicated 0.278 per cent strontium, 0.002 per cent zirconium, 0.02 per cent lanthanum, 0.0415 per cent cerium, 0.0165 per cent neodymium, 0.0038 per cent scandium, 0.0097 per cent tantalum and 3.44 per cent phosphate (Open File 1987-17). Analytical results of a sample of rauhaugite collected in 1978 are 0.35 per cent strontium, 0.4 per cent niobium, 2 per cent phosphorus and 0.0254 per cent thorium (Fieldwork 1979).

BIBLIOGRAPHY

- EMPR AR 1950-223-229; 1952-115-119; 1954-111; 1968-222
 EMPR ASS RPT 1630, 6741, 7236, *7783, 8216, 9566, 9923, 10274, 10955, 11130
 EMPR BULL 86 (in press)
 EMPR EXPL 1978-117; 1979-119; 1980-149; 1981-250; 1982-127-128; 2001-73-82
 EMPR FIELDWORK 1979, pp. 118-119; 1980, pp. 111-112; 1981, pp. 68-69; *1984, pp. 84-94, 95-100
 EMPR MAP 22, #33
 EMPR OF 1987-17; 1990-32
 GSC BULL 239, pp. 121-122
 GSC EC GEOL No 16 (2nd Edit), pp. 235-236; No. 18, pp. 31-35; No. 29, pp. 72,134
 GSC MAP 15-1967
 GSC OF 2324
 GSC P 89-1E, pp. 95-100
 CJES 1988 Vol. 25, No. 8, pp. 1323-1337
 WWW <http://www.infomine.com/>
 Canadian Mineralogist, Vol. 6, pp. 610-633, 1961
 Pell J. and Hora, Z.D. (1990): Rifting, alkaline rocks and related magmatic deposits in the southern Canadian Cordillera; Ministry

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1236
REPORT: RGEN0100

BIBLIOGRAPHY

of Energy, Mines and Petroleum Resources, Geological Survey
Branch, 8th IAGOD Paper

DATE CODED: 1987/07/29
DATE REVISED: 1991/12/09

CODED BY: LDJ
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 038**

NATIONAL MINERAL INVENTORY:

NAME(S): **PUNCH BOWL**, PUNCH

MINING DIVISION: Golden

STATUS: Prospect
REGIONS: British Columbia
NTS MAP: 083D08E
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 23 00 N
LONGITUDE: 118 10 04 W
ELEVATION: 2200 Metres

NORTHING: 5804317
EASTING: 420519

LOCATION ACCURACY: Within 500M

COMMENTS: Location is of the center of the Punch claim group (Assessment Report 19354).

COMMODITIES: Gold Silver Lead Zinc Copper

MINERALS

SIGNIFICANT: Gold Galena Sphalerite Pyrite

COMMENTS: Chalcopyrite may also have been observed.

ASSOCIATED: Quartz Mica K-Feldspar Carbonate

ALTERATION: Limonite Hematite

COMMENTS: Bedding parallel veins weather recessively and locally exhibit surface gossan resulting from the oxidation of pyrite (Assessment Report 19354).

ALTERATION TYPE: Oxidation

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein Stratiform Concordant

CLASSIFICATION: Hydrothermal Epigenetic

TYPE: E03 Carbonate-hosted disseminated Au-Ag

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 50 x 1 Metres

STRIKE/DIP: 325/70W

TREND/PLUNGE: 145/20

COMMENTS: Tight to isoclinal, overturned mesoscopic folds are northeast verging. Axial planes dip moderately to steeply southwest. Fold axes trend 140 to 150 degrees, plunging gently southeast (CJES Vol. 27, pp. 477-493).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Cambrian	Gog	McNaughton	

LITHOLOGY: Feldspathic Quartzite
Pelitic Quartzite
Quartzitic/Quartzose Pelite
Breccia
Conglomerate
Arenite
Grit
Psammite
Carbonate

GEOLOGICAL SETTING

TECTONIC BELT: Foreland

PHYSIOGRAPHIC AREA: Continental Ranges

TERRANE: Ancestral North America

METAMORPHIC TYPE: Regional

RELATIONSHIP: Post-mineralization

GRADE: Greenschist
Amphibolite

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis

YEAR: 1989

SAMPLE TYPE: Rock

COMMODITY

GRADE

Silver 0.4000 Grams per tonne

Gold 26.2900 Grams per tonne

COMMENTS: Gold and silver analyzed by atomic absorption spectroscopy and fire assay.

REFERENCE: Assessment Report 19354.

CAPSULE GEOLOGY

The Punch Bowl showing occurs in the Punch claims, which lie at the boundary between the eastern and the western Main Ranges of the Continental Ranges at Athabasca Pass, approximately 60 kilometres

CAPSULE GEOLOGY

south-southwest of Jasper. This boundary is coincident with the continental divide. The boundary at this latitude is marked by the southwest dipping Chatter Creek thrust fault. Southwest of the Punch claims, the hanging wall of the Chatter Creek thrust is composed of grits, pelites, psammites and carbonates of the Hadrynian Miette Group and overlying Lower Cambrian clastics of the Gog Group. The region is dominated by broad open folds comprising the Baker Glacier syncline and Porcupine Creek anticlinorium. Northwest of the claims, the Chatter Creek thrust sheet contains the Fraser River antiform. Within the Chatter Creek thrust sheet, metamorphic grade increases westward from greenschist to kyanite-staurolite bearing assemblages of amphibolite grade.

The footwall of the Chatter Creek thrust sheet to the north and east is composed of the Lower Cambrian Gog Group, overlain by a series of thickly bedded, dominantly carbonate rocks of Middle Cambrian age striking 325 degrees and dipping 20 degrees. Tight to isoclinal, overturned mesoscopic folds occurring within imbricate quartzite slices, within this thrust sheet, have fold axes that trend 140 to 150 degrees and plunge gently southeast.

Within the claim area, the Gog Group strata are subdivided into the lowermost McNaughton, the Mural and uppermost Mahto formations, in the immediate footwall of the Chatter Creek Thrust. Gold mineralized quartz veins are contained solely within the McNaughton Formation. The predominant lithology is a medium to coarse grained, moderate to poorly sorted, pale weathering, gray feldspathic quartzite. Other lesser lithologies include pelite and conglomerate.

Paleo-environmental interpretations of the McNaughton Formation include a tidally dominated association of a shallow marine shelf environment in the Eastern Main Ranges to tidal complex transitions in more westerly outcrops.

Gold-quartz mineralization is contained in a series of discrete vein structures confined to quartzites and lesser pelites of the McNaughton Formation. Over 20 veins have produced anomalous gold values; although distribution of gold within individual veins is highly erratic. Visible gold has been observed. Thus far, only bedding parallel veins contain high grade gold mineralization. These veins vary from a few centimetres thick by 1 metre long, up to 70 to 100 centimetres wide by 50 metres long. Observations show all bedding parallel veins intrude pelite and/or quartzite with breccia textures common within veins. Vein size and distribution is fundamentally controlled by the geometry and distribution of the original pelitic layers, particularly where pelitic horizons contain greater than 30 per cent detrital quartz.

Quartz is the dominant vein filling phase, comprising over 95 per cent of the total vein volume. Variable and unevenly distributed pyrite, native gold, galena, sphalerite, carbonate and white mica, and potassium feldspar comprise the remaining modal fraction. The distribution of hydrothermal vein constituents is markedly higher in zones of intense pelite brecciation. The majority of quartz was deposited as open space filling during multiple phases of vein opening. Two broad generations of vein filling have been recognized in the building of bedding parallel veins. The second stage of vein filling represents a late incursion of hydrothermal fluids during which most of the gold was deposited. Wall rock alteration is noticeably absent adjacent to most bedding parallel veins but wall rock sulphidization likely accompanied gold stage vein filling.

With respect to regional deformation, gold mineralization appears to be late stage; hence, structures and veining associated with incipient phase three deformation may prove significant. Gold emplacement and discordant veining were confined to the onset of late compressional deformation leading to the development of the Chatter Creek thrust.

A sample taken from approximately the 2088 metre level of McGillivray Ridge was analyzed for a 32 element suite. Partial results of these analyses are: 26.29 grams per tonne gold and 0.40 gram per tonne silver (Assessment Report 19354).

BIBLIOGRAPHY

EMPR ASS RPT *16242, *19354
GSC MAP 15-1967, 1339A
GSC OF 2324
GSC P 86-1A, pp. 177-183; 91-1E, pp. 5-11
CJES *Vol. 27, pp. 477-493
GAC Special Paper Number 6, pp. 7-25
GCNL #15,#167, 1988

DATE CODED: 1987/12/14
DATE REVISED: 1991/12/09

CODED BY: GJP
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 039**

NATIONAL MINERAL INVENTORY:

NAME(S): **AZURE LAKE**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D05W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 27 40 N
LONGITUDE: 119 57 55 W
ELEVATION: 1500 Metres

NORTHING: 5816461
EASTING: 298553

LOCATION ACCURACY: Within 1 KM

COMMENTS: Kyanite locality in area 1, figure 5, Open File 1988-26.

COMMODITIES: Kyanite Sillimanite

MINERALS

SIGNIFICANT: Kyanite Sillimanite
ASSOCIATED: Garnet Biotite Muscovite Quartz Plagioclase
Staurolite

ALTERATION: Sericite Chlorite

COMMENTS: Fine grained sericite-chlorite alteration of garnet represents late retrograde metamorphism (Canadian Journal of Earth Sciences, Vol. 14, No. 7, pp. 1690-1695).

ALTERATION TYPE: Propylitic
MINERALIZATION AGE: Mesozoic

DEPOSIT

CHARACTER: Layered Stratabound
CLASSIFICATION: Metamorphic Industrial Min.

TYPE: P02 Kyanite-sillimanite schists

SHAPE: Tabular

MODIFIER: Folded

COMMENTS: Whole rock Rb-Sr dates of 138+/-12 Ma and 163+/-7 Ma obtained from granodiorite stocks in Wells Gray Provincial Park restrict the age of metamorphism to Upper Triassic to Upper Jurassic (CJES Vol. 14, No. 7)

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian
Hadrynian
Proterozoic-Paleoz.

GROUP

Horsethief Creek
Kaza

FORMATION

Undefined Formation
Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Shuswap Metamorphic Complex

LITHOLOGY: Pelite
Pelitic Schist
Phyllite
Quartzofeldspathic Grit
Marble
Quartzite
Calc-silicate
Diamictite
Conglomerate

HOSTROCK COMMENTS: Area is underlain by a sequence of undifferentiated Hadrynian Windermere Supergroup metasediments (Open File 1988-26).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

COMMENTS: Showing is on the northeastern margin of Shuswap Metamorphic Complex.

Barkerville

PHYSIOGRAPHIC AREA: Cariboo Mountains

RELATIONSHIP: Syn-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

The Canoe River map area is predominantly underlain by a undifferentiated sequence of Hadrynian metasedimentary strata, belonging to the Windermere Supergroup (Miette, Horsethief Creek and Kaza groups) and their basement gneisses. Horsethief Creek Group strata in the Canoe River area are locally sufficiently pelitic to produce abundant garnet and aluminosilicate minerals when subjected to high-grade regional metamorphism (Open File 1988-26).

Detailed mapping in Wells Gray Provincial Park has outlined a complex, polyphase geologic history with four deformational and two metamorphic episodes. Regional metamorphic assemblages rapidly increase from lower greenschist, in the Braithwaite Creek area, to upper amphibolite facies at the margin of the Shuswap Metamorphic Complex, immediately west of the Azure Lake showing (Canadian Journal of Earth Sciences, Vol. 14, No. 7, pp. 1630-1635).

CAPSULE GEOLOGY

In the Cariboo Mountains, north of Azure Lake, strata, which most likely correlate with the lower Kaza or Horsethief Creek groups, contain abundant locally kyanite-sillimanite-staurolite-garnet-biotite and/or muscovite-bearing pelite. Other lithologies probably correlative with the lower Kaza Group include quartzite, calc-silicate, diamictite and conglomerate. The lower carbonate unit of the lower Kaza Group consists of phyllite quartzofeldspathic grit and marble (Geological Survey of Canada Open File 2324). Pelites locally contain 2 to 15 per cent garnet, 0 to 15 per cent coarse kyanite porphyroblasts and traces to 15 per cent sillimanite, predominantly in the form of fibrolite (Pigage, 1978).

BIBLIOGRAPHY

EMPR AR 1920-N95-N96; 1931-A148-A149; 1947-A215-A216; 1952-A258;
1964-185-186; 1965-185-186
EMPF OF *1988-26, p. 12, Figure 5
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 87-1A, pp. 735-742
CJES *Vol. 14, No. 7, pp. 1630-1635
Pigage, L.C. (1978): *Metamorphism and deformation on the northeast margin of the Shuswap Metamorphic Complex, Azure Lake, British Columbia; Unpublished Ph.D. thesis, University of British Columbia, Vancouver, British Columbia, p. 289
Falconbridge File

DATE CODED: 1988/03/30
DATE REVISED: 1991/12/09

CODED BY: JP
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 040**

NATIONAL MINERAL INVENTORY:

NAME(S): **THUNDER RIVER**, NORTH THOMPSON RIVER

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D06E 083D06W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5792123
EASTING: 347498

LATITUDE: 52 15 30 N
LONGITUDE: 119 14 04 W
ELEVATION: 1675 Metres

LOCATION ACCURACY: Within 1 KM

COMMENTS: The southern of two west-northwest striking bands present; the location data is for the east end of the southern band (area 3, figure 5, Open File 1988-26).

COMMODITIES: Kyanite Garnet

MINERALS

SIGNIFICANT: Kyanite Garnet
ASSOCIATED: Sillimanite Staurolite Biotite Muscovite Quartz
MINERALIZATION AGE: Lower Cretaceous
ISOTOPIC AGE: 135 +/- 4 Ma DATING METHOD: Unknown MATERIAL DATED: Unknown

DEPOSIT

CHARACTER: Vein Layered Stratabound
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded
COMMENTS: The age of mineralization is for the main metamorphic event (Geological Survey of Canada Paper 90-1E, pp. 71-80).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Hadrynian	Horsethief Creek	Undefined Formation	
Hadrynian	Kaza	Undefined Formation	
Proterozoic-Paleoz.			Shuswap Metamorphic Complex

LITHOLOGY: Pelitic Schist
Quartzofeldspathic Psammite
Amphibolite
Marble
Calc-silicate
Diamictite
Conglomerate
Quartzite
Quartzofeldspathic Grit
Graphitic Phyllite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Mountains
TERRANE: Kootenay Barkerville
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite
COMMENTS: Showing is on the northeastern margin of Shuswap Metamorphic Complex.

CAPSULE GEOLOGY

The Canoe River map area is predominantly underlain by a sequence of folded Hadrynian metasedimentary strata, belonging to the Windermere Supergroup (Miette, Horsethief Creek and Kaza groups) and their basement gneisses.

Lithologies of the lower Kaza Group include pelitic schist (locally kyanite-sillimanite-staurolite-garnet-biotite and/or muscovite-bearing), amphibolite, marble, calc-silicate, diamictite, conglomerate and quartzite. Quartzofeldspathic psammite and grit, pelitic schist, amphibolite and graphitic phyllite comprise lithologies of the Upper Clastic division of the Horsethief Creek Group.

Strata of the lower Kaza and Horsethief Creek groups in the Canoe River area are locally sufficiently pelitic to produce abundant garnet and aluminosilicate minerals when subjected to high-grade regional metamorphism (Open File 1988-26).

In the southeastern Cariboo Mountains, approximately 30 kilometres southwest of Valemount, pelitic schists locally contain up to 20 per cent kyanite, up to 15 per cent fibrolitic sillimanite and up to 25 per cent garnet (Pell, 1984). Kyanite grains are commonly in

CAPSULE GEOLOGY

excess of 2 centimetres in length. These extremely aluminous pelitic strata are largely confined between a carbonate marker horizon in the lower Kaza Group and the Middle Marble division of the underlying Horsethief Creek Group. Less commonly, aluminous pelitic horizons are present in the Horsethief Creek Group Semipelite-Amphibolite division, immediately underlying the Middle Marble Division. Pelitic schists in this region also frequently contain quartz-kyanite-rich segregation lenses.

BIBLIOGRAPHY

EMPR AR 1920-N95-N96; 1931-A148-A149; 1947-A215-A216; 1952-A258;
1964-185-186; 1965-185-186
EMPF OF *1988-26, p. 12, Figure 5
GSC MAP 15-1967; 1339A
GSC OF 2324
GCS P 84-1A, pp. 91-94
CJES *Vol. 14, No. 7, pp. 1630-1635; Vol. 24, No. 2, pp. 302-313
Pell, J. (1984): *Stratigraphy, structure and metamorphism of
Hadrynian strata in the southeastern Cariboo Mountains, British
Columbia; Unpublished Ph.D. thesis, University of Calgary, p. 185

DATE CODED: 1988/03/30
DATE REVISED: 1991/12/09

CODED BY: JP
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 041**

NATIONAL MINERAL INVENTORY:

NAME(S): **WARSAW MOUNTAIN**

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D01W
BC MAP:

MINING DIVISION: Revelstoke

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 01 32 N
LONGITUDE: 118 23 51 W
ELEVATION: 2621 Metres

NORTHING: 5764802
EASTING: 404118

LOCATION ACCURACY: Within 500M

COMMENTS: A 10 centimetre zone with 5 centimetre long kyanite blades is indicated on Map 4 at station 47 (Mitchell, W.J. (1976)).

COMMODITIES: Kyanite

MINERALS

SIGNIFICANT: Kyanite

ASSOCIATED: Garnet Biotite

MINERALIZATION AGE: Cretaceous

ISOTOPIC AGE: circa 100 Ma

DATING METHOD: Uranium/Lead

MATERIAL DATED: Zircon, Monazite

DEPOSIT

CHARACTER: Layered Stratiform Massive Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists

SHAPE: Tabular

MODIFIER: Folded

DIMENSION: 3000 x 30

Metres

STRIKE/DIP:

TREND/PLUNGE:

COMMENTS: A prominent kyanite-rich zone can be traced over 3 kilometres and is up to 30 metres wide (Mitchell, 1976). Upper amphibolite facies metamorphic conditions were reached at circa 100 Ma (Geology Vol. 18).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE

Hadrynian

GROUP

Horsethief Creek

FORMATION

Unnamed/Unknown Formation

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Kyanite Schist
Pelite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca

TERRANE: Kootenay

METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Selkirk Mountains

RELATIONSHIP: Syn-mineralization

GRADE: Amphibolite

CAPSULE GEOLOGY

The Warsaw Mountain occurrence is located on the southeast spur of Warsaw Mountain and is one of several kyanite occurrences within a 9 kilometre radius from Warsaw Mountain. Most occurrences occur along a northwest trending belt extending northwestly from Warsaw Mountain along Fred Laing Ridge to the confluence of Potlatch Creek with McNaughton Lake and southeastward through the head waters of Yellow Creek.

The area is underlain primarily by metasedimentary rocks of the Hadrynian Horsethief Creek Group. Three phases of intense folding have been recognized and have been affected by Barrovian metamorphism ranging from the garnet zone to the sillimanite zone of amphibolite grade. Phase 1 and 2 of folding are characterized by very tight to isoclinal folds with narrow hinge zones. A penetrative, axial planar schistosity is associated with them. In areas of higher metamorphic grade, migmatite and pegmatite constitute 10 to 30 per cent by volume of the rocks. Phase 3 folding is unevenly distributed throughout the area. Folds generally have southwest dipping axial surfaces and a steeply dipping crenulation cleavage associated with them. Temperatures of metamorphism have been established between 540 and 585 degrees celcius and pressures between 5 and 8 kilobars (Geological Survey of Canada Paper 77-1C). Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, pp. 103-106).

In the Warsaw Mountain area kyanite is present in localized pelitic horizons near the base of the Semipelite-Amphibolite division (Geological Society of America Memoir 153), the Aluminous Pelite unit (Open File 1988-26) or Lower Pelite unit (Geological Survey of Canada Open File 2324) of the Horsethief Creek Group. Kyanite is rare in the Northern Semipelite unit (Mitchell, 1976), but when found,

MINFILE NUMBER: **083D 041**

CAPSULE GEOLOGY

porphyroblasts in this horizon are abundant and up to 5 centimetres in length. A prominent kyanite-rich zone is located 400 metres north of the Northern Semipelite unit-Pelite unit contact. This zone is up to 30 metres wide and can be traced along strike for over 3 kilometres (Mitchell, 1976). Kyanite at the Yellow Creek (083D 007) showing may occur along the southern extension of this zone. Elsewhere in the Northern Semipelite unit (Mitchell, 1976), kyanite is found in abundance at the head waters of Potlatch Creek (083D 021) and on the ridge northeast of Potlatch Creek. Kyanite also occurs disseminated throughout the Pelite unit (Mitchell, 1976). Individual crystals are generally less than one centimetre long.

BIBLIOGRAPHY

- EMPR AR 1931-148, *1952-258
EMPR OF *1988-26
GSC MEM 153, pp. 445-461
GSC OF *2324
GSC P 66-1; *77-1C
Geology Vol. 18, pp. 103-106, 1990
Mitchell, W.J. (1976): Structure and stratigraphy of the Warsaw Mountain area, British Columbia; unpublished M.Sc. thesis, University of Calgary, Alberta.
Perkins, M.J. (1983): Structural geology and stratigraphy, Big Bend of the Columbia River, Selkirk Mountains, British Columbia; unpublished Ph.D. thesis, Carleton University, Ottawa, Ontario.

DATE CODED: 1988/03/30
DATE REVISED: 1991/12/09

CODED BY: JP
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 042**

NATIONAL MINERAL INVENTORY:

NAME(S): **HOWARD CREEK GARNET**

MINING DIVISION: Kamloops

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D07W
BC MAP:

UTM ZONE: 11 (NAD 83)

LATITUDE: 52 23 37 N
LONGITUDE: 118 54 05 W
ELEVATION: 2280 Metres

NORTHING: 5806519
EASTING: 370623

LOCATION ACCURACY: Within 1 KM

COMMENTS: Centre of area 4, figure 5, Open File 1988-26.

COMMODITIES: Garnet

MINERALS

SIGNIFICANT: Garnet
ASSOCIATED: Kyanite Biotite
MINERALIZATION AGE: Cretaceous
ISOTOPIC AGE: circa 100 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon, Monazite

DEPOSIT

CHARACTER: Layered Stratabound Disseminated
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: P02 Kyanite-sillimanite schists
SHAPE: Tabular
MODIFIER: Folded
COMMENTS: Upper amphibolite facies metamorphic conditions were reached in the northern Monashee Mountains at circa 100 Ma (Geology Vol. 18, pp 103-106).

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE: Hadrynian GROUP: Horsethief Creek FORMATION: Undefined Formation IGNEOUS/METAMORPHIC/OTHER:

LITHOLOGY: Pelitic Schist
Calc-silicate
Metabasite
Pegmatite
Granodiorite
Carbonatite
Quartzofeldspathic Psammite
Quartzofeldspathic Grit
Amphibolite
Marble

HOSTROCK COMMENTS: Pelitic schists are locally kyanite-sillimanite-garnet-staurolite-biotite and/or muscovite bearing (GSC Open File 2324).

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Ancestral North America
METAMORPHIC TYPE: Regional RELATIONSHIP: Syn-mineralization GRADE: Amphibolite

CAPSULE GEOLOGY

The Canoe River map area is predominantly underlain by a sequence of folded Hadrynian metasedimentary strata, belonging to the Windermere Supergroup (Miette, Horsethief Creek and Kaza groups) and their basement gneisses. Horsethief Creek Group strata in the Canoe River area are locally sufficiently pelitic to produce abundant garnet and aluminosilicate minerals when subjected to high-grade regional metamorphism.

A variety of lithologies crop out in the northern Monashee Mountains. Metasediments and metabasites of the Hadrynian Horsethief Creek Group are dominant and all are intruded by locally abundant pegmatite pods and layers. The Semipelite-Amphibolite division of the Horsethief Creek Group underlies most of the field area with a thin calc-silicate zone and the lower Pelite unit being infolded into the Semipelite-Amphibolite unit. Pelite, calc-silicate, metabasite, pegmatite, granodiorite and carbonatite have been mapped during the course of a regional project on the metamorphism and structure of the area (Geological Survey of Canada Paper 89-1E, pp. 95-100). In a recent compilation of the Canoe River area quartzofeldspathic psammite and grit, pelitic schist, amphibolite and marble comprise the Semipelite-Amphibolite division. For a more detailed explanation of the regional geology refer to the Howard Creek Carbonatite showing

CAPSULE GEOLOGY

(083D 043) and the Verity showing (083D 005).
At the headwaters of Howard Creek, approximately 30 kilometres southeast of Valemont, pelitic schists and pelites in the Horsethief Creek Group Semipelite-Amphibolite division contain 20 to 25 per cent coarse garnets which range in size from 2 to 6 centimetres in diameter (Open File 1988-26). Garnet is also common phase in all other lithologies throughout the area. Kyanite is also present, but not abundant at this locality.

BIBLIOGRAPHY

EMPR BULL 86 (in press)
EMPR OF 1987-17; *1988-26, p. 12, Fig. 5
GSC MAP 15-1967, 1339A
GSC OF 2324
GSC P 86-1B, pp. 693-698; *87-1A, pp. 751-756; *89-1E, pp. 95-100
CJES Vol. 25, No. 8, pp. 1323-1337, 1988
Geology Vol. 18, pp. 103-106, 1990

DATE CODED: 1988/03/30
DATE REVISED: 1991/12/09

CODED BY: JP
REVISED BY: KJM

FIELD CHECK: Y
FIELD CHECK: N

MINFILE NUMBER: **083D 043**

NATIONAL MINERAL INVENTORY: 083D7 Sr1

NAME(S): **HOWARD CREEK CARBONATITE** TOP, TOP 1-4,
TOP 1, 7803, 7804

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D07W
BC MAP:
LATITUDE: 52 23 15 N
LONGITUDE: 118 53 21 W
ELEVATION: 2300 Metres
LOCATION ACCURACY: Within 500M
COMMENTS: Centre of carbonatite (urtite) zone (figure 23, Fieldwork 1984).

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)
NORTHING: 5805818
EASTING: 371436

COMMODITIES: Strontium Phosphorus Phosphate Tantalum Lanthanum
Cerium Neodymium Rare Earths Niobium

MINERALS

SIGNIFICANT: Pyrochlore Columbite Apatite
COMMENTS: Refer to capsule for a detailed mineralogy.
ASSOCIATED: Calcite Dolomite Amphibole Hornblende Clinopyroxene
Sphene Biotite Phlogopite
COMMENTS: Deposit classification is metasomatic.
ALTERATION: Amphibole Biotite Albite Perthite
COMMENTS: See comment under associated minerals.
ALTERATION TYPE: Fenitic
MINERALIZATION AGE: Devonian-Mississipp.
ISOTOPIC AGE: circa 350 Ma DATING METHOD: Uranium/Lead MATERIAL DATED: Zircon

DEPOSIT

CHARACTER: Stratiform Layered Massive
CLASSIFICATION: Metamorphic Industrial Min.
TYPE: N01 Carbonatite-hosted deposits
SHAPE: Tabular
MODIFIER: Folded Faulted
DIMENSION: 300 x 20 Metres STRIKE/DIP: 090/40S TREND/PLUNGE:
COMMENTS: Uranium-lead age dates on zircon from the Verity and Paradise showings
of 325 and 340 Ma respectively indicate a mid-Paleozoic (Devono-
Mississippian) age of emplacement (Bulletin 86, in press).

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Horsethief Creek Undefined Formation Shuswap Metamorphic Complex
Proterozoic-Paleoz.

LITHOLOGY: Carbonatite
Urtite
Ijolite
Nepheline Syenite
Sphene Amphibolite
Pelitic Schist
Calc-silicate
Pegmatite
Granodiorite
Marble

HOSTROCK COMMENTS: Carbonatites are hosted in the Semipelite-Amphibolite unit.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Monashee Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: Post-mineralization GRADE: Amphibolite
COMMENTS: Carbonatites in central (Omineca) division of carbonatite belt.

INVENTORY

ORE ZONE: SAMPLE

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Rock
COMMODITY

YEAR: 1987

	GRADE	
Cerium	0.0530	Per cent
Lanthanum	0.0241	Per cent
Neodymium	0.0223	Per cent
Phosphorus	5.4500	Per cent
Strontium	0.3120	Per cent

REFERENCE: Open File 1987-17, page 42.

CAPSULE GEOLOGY

The Howard Creek carbonatite is located at the headwaters of Howard Creek, 13 kilometres east of McNaughton Lake and 41 kilometres northeast of Blue River.

Carbonatites are hosted in a series of Hadrynian Horsethief Creek Group, Semipelite-Amphibolite division pelitic schists of amphibolite grade (kyanite zone), exposed at approximately 2300 metres in a south-facing cirque. Other lithologies belonging to the Semipelite-Amphibolite division in the area include calc-silicate, pegmatite, granodiorite and marble. At least three phases of structural deformation have been recognized. Multiphase folding and dextral en-echelon faulting have displaced all rocks. The regional foliation strikes 090 and dips 40 degrees south. The regional geology is described in detail in the Verity carbonatite showing (083D 005).

At least two separate carbonatite bodies conformable to the regional schistosity have been identified over 300 metres stratigraphic thickness. These outcrops vary from 10 to 20 centimetres in thickness. Separate bands of sovite and rauhaugite comprise carbonatite outcrops. Infrequent boudins of coarse grained amphibolite, 5 to 50 centimetres long, are found within carbonatite and nepheline syenite. Dragfolds and tight crenulations are evident in carbonatites, particularly near contacts with the host rock. This evidence suggests that carbonatites were transposed parallel to the regional foliation during the first deformational event. Other lithologies described at the Howard Creek Carbonatite showing include urtite, ijolite and nepheline syenite (Open File 1987-17).

Minerals identified in the carbonatites include calcite, dolomite, apatite, richterite, hornblende (edenite possibly), clinopyroxene, sphene, biotite, phlogopite, nepheline, zircon, pyrochlore, baddeleyite, ilmenite, magnetite, pyrite, pyrrhotite and plagioclase. Coarse biotite bands, up to 20 centimetres wide, are in contact with nepheline syenite. A nepheline syenite body, about 5 by 20 metres in outcrop, appears concordant with the schist/carbonatite complex.

Eighteen semi-quantitative analyses from the carbonatites and associated rocks yielded 0.25 to 0.5 per cent strontium with an average content of 0.35 per cent (Fieldwork 1984, p. 99). Some elements from the carbonatites and their quantities as determined by spectrographic methods and expressed in per cent are: phosphorous, greater than 2.0, strontium 0.2, barium 0.05, zirconium 0.04, chromium 0.01, lanthanum 0.03, cerium 0.03, neodymium 0.03; there are also trace amounts of gallium, tin, yttrium, ytterbium, and niobium (columbium) (Fieldwork 1984). Later chemical analyses of a novite sample returned the following values in per cent: 0.312 strontium, 0.0241 lanthanum, 0.0530 cerium, 0.0223 neodymium and 5.45 P2O5 (Open File 1987-17, p. 42).

BIBLIOGRAPHY

- EMPR AR 1950-223-229; 1952-115-119; 1954-111; 1968-222
EMPR ASS RPT 1630, 6741, 7236, 8216, 9566, 9923, 10274, 10955, 11130
EMPR BULL *88
EMPR EXPL 1978-117; 1979-119; 1980-149; 1981-250; 1982-127-128;
2001-73-82
EMPR FIELDWORK 1979, pp. 118-119; 1980, pp. 111-112; 1981, pp. 68-69;
*1984, pp. 84-94, 95-100
EMPR MAP 22, #33
EMPR OF *1987-17, pp. 41-45
GSC BULL 239, pp. 121-122
GSC EC GEOL No 16 (2nd Edit), pp. 235-236; No. 18, pp. 31-35; No. 29,
pp. 72,134
GSC MAP 15-1967
GSC OF 2324
GCS P 89-1E, pp. 95-100
CJES 1988 Vol. 25, No. 8, pp. 1323-1337
WWW <http://www.infomine.com/>
Canadian Mineralogist 1961, Vol. 6, pp. 610-633
Pell, J. and Hora, Z.D. (1990): Rifting, alkaline rocks and related
magmatic deposits in the southern Canadian Cordillera; Ministry

RUN DATE: 26-Jun-2003
RUN TIME: 08:48:46

MINFILE MASTER REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 1249
REPORT: RGEN0100

BIBLIOGRAPHY

of Energy, Mines and Petroleum Resources, Geological Survey
Branch; 8th IAGOD Paper

DATE CODED: 1989/12/08
DATE REVISED: 1991/12/09

CODED BY: LDJ
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 044**

NATIONAL MINERAL INVENTORY:

NAME(S): **BLUE RIVER LIMESTONE**, BLUE RIVER CARBONATE, BLUE RIVER,
SNO

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 083D03W
BC MAP:

MINING DIVISION: Kamloops
UTM ZONE: 11 (NAD 83)

LATITUDE: 52 07 40 N
LONGITUDE: 119 18 44 W
ELEVATION: 914 Metres

NORTHING: 5777772
EASTING: 341728

LOCATION ACCURACY: Within 500M

COMMENTS: Location centred on main outcrop (Main zone) on top of a hill just northwest of Blue River (Industrial Mineral File - Guillet, 1984).

COMMODITIES: Limestone Marble Building Stone

MINERALS

SIGNIFICANT: Calcite
ASSOCIATED: Dolomite Silica Biotite Mica Pyrite
Tremolite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratabound Massive
CLASSIFICATION: Sedimentary Industrial Min.
TYPE: R09 Limestone R04 Dimension stone - marble
SHAPE: Tabular

DIMENSION: 180 x 120 x 44 Metres STRIKE/DIP: 077/60S TREND/PLUNGE:
COMMENTS: Main zone; attitude of contact between limestone and gneiss.

HOST ROCK

DOMINANT HOSTROCK: Metasedimentary

STRATIGRAPHIC AGE GROUP FORMATION IGNEOUS/METAMORPHIC/OTHER
Hadrynian Horsethief Creek Undefined Formation Shuswap Metamorphic Complex
Proterozoic-Paleoz.

LITHOLOGY: Limestone
Marble
Biotite Gneiss
Quartz Feldspar Porphyry
Pegmatite

GEOLOGICAL SETTING

TECTONIC BELT: Omineca PHYSIOGRAPHIC AREA: Cariboo Mountains
TERRANE: Kootenay
METAMORPHIC TYPE: Regional RELATIONSHIP: GRADE: Amphibolite

INVENTORY

ORE ZONE: MAIN REPORT ON: Y
CATEGORY: Indicated YEAR: 1984
QUANTITY: 1800000 Tonnes
COMMODITY GRADE
Limestone 53.6000 Per cent
COMMENTS: Grade given for CaO from a 35.7-metre long drillhole intersection of the main zone.
REFERENCE: Industrial Mineral File - Guillet, 1984.

CAPSULE GEOLOGY

The Blue River deposit outcrops on a low hill just northwest of the community of Blue River, a kilometre northwest of the Yellowhead Highway (Highway 5).

This deposit has been explored for its calcitic marble since 1983. Blue River Mines Ltd. and Ekaton Industries Inc. have carried out an extensive program of mapping, diamond drilling and bulk sampling since 1984. In 1988, 7800 tonnes of limestone were crushed by Blue River Mines. The property has been inactive since this time because limestone requests were for decorative purposes only. In a reorganization in 1989, Blue River Mines changed its name to Techmin Canada Ltd. (Fischl, 1990).

The limestone (marble) is exposed in three major outcrops over the top of the hill, the largest being 180 by 120 metres in area (Main zone), 230 metres above the valley floor of the North Thompson River. The limestone is hosted in gneiss and pegmatite of the

CAPSULE GEOLOGY

Precambrian-Paleozoic(?) Shuswap Metamorphic Complex. Contacts with the enclosing gneiss strike 077 to 123 degrees and dip 45 to 60 degrees south. Diamond drilling indicated the limestone underlying the Main zone is at least 44 metres thick.

The Main zone is comprised mostly of coarse-grained, white, massive limestone (marble), with some pale grey patches and a few medium-grained, medium grey to blue-grey beds. Only traces of disseminated biotite, white mica and pyrite are evident. Tremolite occurs in some fracture infillings. Several medium-grained, light to medium grey, dolomitic and siliceous beds up to 3.0 metres thick were encountered during drilling. These beds tended to be more micaceous and pyritic than the enclosing limestone. Some inclusions of quartz-feldspar pegmatitic and biotitic gneiss up to 4.6 metres thick were also encountered near surface. Some results from grab sampling and diamond drilling analyzed as follows (in per cent):

	Diamond Drilling	Grab Sampling
CaO	53.60	53.6
MgO	1.78	1.02
SiO2	0.23	0.71
Al2O3	0.23	0.13
Fe2O3	0.09	-
MnO	0.01	-
P2O5	0.04	-
Na2O	0.026	0.026
K2O	0.03	0.020
TiO2	0.01	-
Ig. Loss	41.6	-
Brightness	94.4	-

The drill results represent a 35.7-metre long drill hole intersection of the Main zone (Guillet, 1984). The grab sample results are an average of eight samples taken from the surface of the Main zone (Assessment Report 15725). The Main zone is estimated to contain 1.8 million tonnes of limestone based on diamond drilling (Guillet, 1984).

BIBLIOGRAPHY

EMPR ASS RPT *12789, *15725
EMPR EXPL 1986-A79
EMPR MAP 65 (1989)
EMPR OF 1992-1; 1992-9
EMPR PF (Guillet, G.R. (1984): Report)
GSC MAP 15-1967; 1339A
GSC OF 2324
N MINER Dec.30, 1985; June, July 21,28, Nov.10, 1986; Feb.9, 1987

DATE CODED: 1989/09/22
DATE REVISED: 1991/11/04

CODED BY: PSF
REVISED BY: KJM

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083D 045**

NATIONAL MINERAL INVENTORY:

NAME(S): **DOVE** INGRID 1-4, DOVE 4,
DOVE 1-6

STATUS: Showing
REGIONS: British Columbia
NTS MAP: 083D11E
BC MAP:

LATITUDE: 52 37 26 N
LONGITUDE: 119 07 56 W
ELEVATION: 1065 Metres

LOCATION ACCURACY: Within 500M
COMMENTS: Mineralized zones, near the centre of the Ingrid 1-4 Claims
(Assessment Report 17427).

MINING DIVISION: Cariboo
Kamloops
UTM ZONE: 11 (NAD 83)

NORTHING: 5832567
EASTING: 355674

COMMODITIES: Gold Copper Silver

MINERALS

SIGNIFICANT: Gold Chalcopyrite Bornite
ASSOCIATED: Quartz
ALTERATION: Malachite Hematite Epidote
ALTERATION TYPE: Oxidation
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Stratiform Vein
CLASSIFICATION: Syngenetic
DIMENSION: 3 Metres STRIKE/DIP: TREND/PLUNGE:
COMMENTS: Dimensions of the lower zone.

HOST ROCK

DOMINANT HOSTROCK: Metamorphic

STRATIGRAPHIC AGE

Hadrynian
Upper Proterozoic

GROUP

Horsethief Creek

FORMATION

Undefined Formation

IGNEOUS/METAMORPHIC/OTHER

Unnamed/Unknown Informal

LITHOLOGY: Hornblende Quartz Gneiss
Quartz Biotite Muscovite Schist
Hornblende Biotite Quartz Gneiss
Mica Schist
Biotite Schist
Quartz Mica Schist
Gneiss
Schist
Amphibolite
Quartzite

HOSTROCK COMMENTS: Metamorphic rocks of the Upper Proterozoic Malton Gneiss Complex.

GEOLOGICAL SETTING

TECTONIC BELT: Omineca
TERRANE: Kootenay
METAMORPHIC TYPE: Regional

PHYSIOGRAPHIC AREA: Cariboo Mountains

RELATIONSHIP:

GRADE: Amphibolite

INVENTORY

ORE ZONE: LOWER

REPORT ON: N

CATEGORY: Assay/analysis
SAMPLE TYPE: Grab

YEAR: 1990

COMMODITY

GRADE

Gold	8.6400	Grams per tonne
Silver	51.9000	Grams per tonne
Copper	1.8200	Per cent

COMMENTS: Highest assay values from the lower zone.
REFERENCE: Assessment Report 17427.

CAPSULE GEOLOGY

The Dove showing is located on the Dove 4 claim, 165 metres above the Yellowhead highway (now covered by B.C. Hydro pole 67-1), 24 kilometres southeast of Valemount.

The North Thompson and Albrede River valleys have undergone little exploration since the Cariboo Gold Rush of the 1800s. In the early 1970s, a stream sediment sampling program was done in the area by Hudson's Bay Minerals exploring for copper. The area received some interest in 1977 during exploration of the nearby Lempierre (083D 005) uranium deposit. In 1978, the Ingrid 1-4 claims (formerly

CAPSULE GEOLOGY

WM 1-4 claims) were staked by V. Trarup to cover malachite mineralization discovered while putting in the hydro line. Redbird optioned the Ingrid claims and staked the Dove 1-6 claims in about 1985 and, in 1986, conducted a geochemical survey. Prospecting in 1987 consisted of blasting and trenching a native gold showing, soil sampling on the Dove 3-4 and Ingrid 1-4 claims, geochemistry, 7 diamond drill holes, 7 pack sack holes, cat excavation of mineralized zones, mapping and a magnetometer survey. This work outlined two mineralized zones (upper and lower).

The area is underlain by Upper Proterozoic rocks of the Malton Gneiss Complex. These comprise quartz mica schist, amphibolite, hornblende and/or biotite quartz-feldspathic gneiss, quartzite, granitic orthogneiss and feldspar augen gneiss. The rocks on the property are predominantly quartz mica schist, amphibolite and hornblende gneiss. All rock types contain numerous massive white quartz veins and stringers. There have been several folding episodes resulting in a fold with a west-northwest axis. The North Thompson Valley fault runs from Valemount to Blue River. The strata generally dips south-southwest but is variable.

The Dove occurrence consists of 2 vertically adjacent mineralized zones, containing gold and copper, and 2 mineralized stratiform units. The subsurface stratiform units are indicated by diamond drilling. Mineralization consists of native gold, malachite, bornite, and some hematite and chalcopyrite. Mineralization occurs along fractures and foliation surfaces and in quartz veins associated with biotite schist and hornblende gneiss.

A 70 metre exposure of the lower zone, about 3 metres wide, consists mainly of quartz veins, hornblende-quartz gneiss, quartz-biotite-muscovite gneiss and biotite schist. Assay values from samples ranged from 0.10 to 8.64 grams per tonne gold 0.2 to 51.9 grams per tonne silver and less than 0.01 to 1.82 per cent copper (Assessment Report 17427).

A 20 metre exposure of the upper zone, about 4 to 5 metres wide, consists mainly of quartz veins, hornblende-biotite-quartz gneiss, mica schist and quartz-mica gneiss. Assays values from samples ranged from 0.18 to 7.45 grams per tonne gold, 0.1 to 60.5 grams per tonne silver, and 0.01 to 1.77 per cent copper (Assessment Report 17427).

In general, drilling indicated low grades even in some sections which contain visible native gold. The most encouraging values occurred along trend of slickenside lineations which suggests that the deposit is, to some extent, structurally controlled. Mineralization, proven by drilling, occurs over an area of approximately 200 square metres.

Mineralization occurred relatively late and was associated with zones of deformation that apparently were confined mainly to less competent mafic rich units. Quartz veins, some mica schists and epidote rich layers in hornblende gneiss exhibit the highest degree of gold mineralization.

BIBLIOGRAPHY

EMPR ASS RPT 7597, 12010, *15984, *17427
EMPR FAME FILE (1987, E-119)
GSC MAP 15-1967; 1339A
GSC OF 2324
GSC P 89-1E; 90-1E
Placer Dome File

DATE CODED: 1985/07/24
DATE REVISED: 1993/07/02

CODED BY: GSB
REVISED BY: DEJ

FIELD CHECK: N
FIELD CHECK: N

MINFILE NUMBER: **083E 001**

NATIONAL MINERAL INVENTORY:

NAME(S): **FORGETMENOT**

STATUS: Developed Prospect
REGIONS: British Columbia
NTS MAP: 083E13W
BC MAP:

MINING DIVISION: Cariboo

UTM ZONE: 11 (NAD 83)

LATITUDE: 53 45 00 N
LONGITUDE: 119 53 20 W
ELEVATION: 1981 Metres

NORTHING: 5959581
EASTING: 309526

LOCATION ACCURACY: Within 500M

COMMENTS: Along the British Columbia-Alberta boundary at the headwaters of Forgetmenot and Fetherstonhaugh creeks (Open File 1991-15).

COMMODITIES: Gypsum

MINERALS

SIGNIFICANT: Gypsum
COMMENTS: Trace amounts of pyrite.
MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Layered	Stratabound	Concordant	Massive
CLASSIFICATION: Evaporite	Sedimentary	Industrial Min.	
TYPE: F02 Bedded gypsum			
SHAPE: Tabular			
DIMENSION: 500 x 100	Metres	STRIKE/DIP: 135/30W	TREND/PLUNGE:
COMMENTS: Gypsum beds.			

HOST ROCK

DOMINANT HOSTROCK: Sedimentary

<u>STRATIGRAPHIC AGE</u>	<u>GROUP</u>	<u>FORMATION</u>	<u>IGNEOUS/METAMORPHIC/OTHER</u>
Upper Triassic	Undefined Group	Whitehorse	

LITHOLOGY: Gypsum
Dolomite
Limestone
Brecciated Limestone
Sandstone
Siltstone
Breccia

HOSTROCK COMMENTS: The host Karnian Starlight Evaporite Member has been correlated with the Charlie Lake Formation to the north.

GEOLOGICAL SETTING

TECTONIC BELT: Foreland
TERRANE: Ancestral North America

INVENTORY

ORE ZONE: FORGETMENOT	REPORT ON: Y
CATEGORY: Unclassified	YEAR: 1968
QUANTITY: 2300000 Tonnes	
COMMODITY: Gypsum	GRADE: 90.0000 Per cent
COMMENTS: The gypsum grade varies from 75 to 90 percent. There is a potential of 25 to 30 million tonnes if the deposit persists.	
REFERENCE: Fieldwork 1988, page 504.	

CAPSULE GEOLOGY

Gypsum of Triassic age occurs at a single locality straddling the Alberta boundary at the headwaters of Forgetmenot and Fetherstonhaugh creeks. The occurrence was first described in detail in 1961.

Gypsum intercalated with dolomite and minor limestone is present in several beds of the Upper Triassic Starlight Evaporite member of the Whitehorse Formation. This unit is assigned a Karnian age and is correlated with the Charlie Lake Formation which is host to extensive anhydrite deposits further to the north. The presence of anhydrite is known from oil and gas drilling. The Starlight member, the lowermost unit of the Whitehorse Formation, consists of a recessive buff to light grey weathering sequence of interbedded dolomites, limestones, siltstones and intraformational or solution breccias. In the Forgetmenot Creek area, pale grey and yellowish brown to orange dolomite is intercalated with several gypsum beds. Also present are

CAPSULE GEOLOGY

lenses of dolomitic and calcareous siltstone and pale grey limestone.

Gypsum is present in a minimum of 4 beds ranging in thickness from 2 metres to greater than 26 metres. Locally, it contains solution breccia and lenses of dolomite. The gypsum is typically white to cream to pale pink in colour. It is laminated to thin bedded and locally massive. Trace amounts of pyrite are present.

The beds strike northwest with dips of 25 to 30 degrees southwest. In outcrop, the gypsum can be traced along strike for 500 metres. The presence of sinkholes suggests that the gypsum may extend further south. Gypsum occurs over a minimum stratigraphic thickness of 100 metres and contacts between gypsum and overlying or underlying rocks are invariably marked by sinkholes up to several metres in diameter.

Drilling indicated that the gypsum grade is more variable at depth than in surface exposures. Gypsum content in the subsurface varied between 75 and 80 per cent while surface sampling indicated a purity greater than 90 per cent gypsum (Open File 1991-15). Sampling by Butrenchuk confirmed the high purity, varying from 84 to 98 per cent (Open File 1991-15).

Reserves on the property are estimated to be 2.3 million tonnes with a potential for 25 to 30 million tonnes if the gypsum persists along strike (Open File 1991-15).

BIBLIOGRAPHY

- EMPR BULL 35
EMPR FIELDWORK *1988, pp. 504-505
EMPR OF *1991-15
GSC MAP 1339A; 1499A
CIM Special Volume 29, pp. 230-237
Domtar Chemicals Ltd. (1968): Report on work done on the Fetherstonaugh Creek Gypsum deposit, Alberta Research Council, unpublished report, Economic Minerals File GYP-AF-02, 20 pages
Govett, G.J.S. (1961): *Occurrence and Stratigraphy of some Gypsum and Anhydrite Deposits in Alberta, Alberta Research Council, Bulletin 7, pages 10-15

DATE CODED: 1988/11/22
DATE REVISED: 1991/12/17

CODED BY: SBB
REVISED BY: SBB

FIELD CHECK: Y
FIELD CHECK: N

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: <u>082LNE007</u>		NAME: <u>KINGFISHER</u>		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>	
1976	12		Silver	187		
			Lead		830	
			Zinc		1,157	
1966	4		Silver	5,008		
			Lead		450	
			Zinc		166	

SUMMARY TOTALS: 082LNE007

NAME: KINGFISHER

	<u>Metric</u>	<u>Imperial</u>
Mined:	16 tonnes	18 tons
Milled:	tonnes	tons
Recovery:	Silver: 5,195 grams	167 ounces
	Lead: 1,280 kilograms	2,822 pounds
	Zinc: 1,323 kilograms	2,917 pounds
Comments:	1976: Crude ore.	
	1966: Crude ore.	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	082LNE025		NAME:	REVELSTOKE		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>		
1996	200		Flagstone		200,000		
1995	200		Flagstone		200,000		
1994	200		Flagstone		200,000		
1993	200		Flagstone		200,000		
1992	200		Flagstone		200,000		
1991	200		Flagstone		200,000		
1990	200		Flagstone		200,000		
1989	200		Flagstone		200,000		
1988	161		Aggregate Flagstone		122,000 39,000		
1987	247		Dimension Stone		247,000		
1986	145		Dimension Stone		145,000		

SUMMARY TOTALS: 082LNE025

NAME: **REVELSTOKE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	2,153 tonnes	2,373 tons
Milled:		
Aggregate:	122,000 kilograms	268,964 pounds
Dimension Stone:	392,000 kilograms	864,212 pounds
Flagstone:	1,639,000 kilograms	3,613,375 pounds

Recovery:

Comments: 1994: 1989-1994: Production averages 200 tonnes per year.

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 3
REPORT: RGEN0200

MINFILE NUMBER: 082LNE043	NAME: MARLIME	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1950	561	561	Marl		560,640
1949	2,704	2,704	Marl		2,704,317
1948	767	767	Marl		766,571

SUMMARY TOTALS: 082LNE043

NAME: **MARLIME**

		<u>Metric</u>		<u>Imperial</u>
	Mined:	4,032 tonnes		4,445 tons
	Milled:	4,032 tonnes		4,445 tons
Recovery:	Marl:	4,031,528 kilograms		8,887,995 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LNW001		NAME: FALKLAND		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>
1993	10,215	10,215	Gypsum		10,215,000
1992	21,385	21,385	Gypsum		21,385,000
1991	9,867	9,867	Gypsum		9,867,000
1990	15,252	15,252	Gypsum		15,252,000
1989	13,417	13,417	Gypsum		13,417,000
1988	6,472	6,472	Gypsum		6,472,000
1987	3,885	3,885	Gypsum		3,885,000
1986	3,710	3,710	Gypsum		3,710,000
1982	30,638	30,638	Gypsum		30,638,000
1956	1,250,000	1,250,000	Gypsum		1,250,000,000

SUMMARY TOTALS: 082LNW001

NAME: **FALKLAND**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,364,841 tonnes	1,504,480 tons
Milled:	1,364,841 tonnes	1,504,480 tons
Recovery:	Gypsum: 1,364,841,000 kilograms	3,008,958,495 pounds

Comments: 1956: Continuous production between 1926 and 1956.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LNW026	NAME: QUARTZITE POINT	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1923	90	90
		Commodity
		Silica
		Grams Recovered
		90,000
		Kilograms Recovered

SUMMARY TOTALS: 082LNW026

	NAME: QUARTZITE POINT	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 90 tonnes	99 tons
Recovery:	Milled: 90 tonnes	99 tons
	Silica: 90,000 kilograms	198,416 pounds
Comments:	1923: A shipment of quartzite.	

RUN DATE: 26-Jun-2003
 RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

PAGE: 6
 REPORT: RGEN0200

MINFILE NUMBER: <u>082LNW058</u>		NAME: <u>MCGILLIVRAY CREEK</u>		STATUS: Past Producer	
Production	Tonnes	Tonnes	Commodity	Grams	Kilograms
Year	Mined	Milled		Recovered	Recovered
1945			Gold	124	
1940			Gold	311	

SUMMARY TOTALS: 082LNW058

NAME: **MCGILLIVRAY CREEK**

		<u>Metric</u>		<u>Imperial</u>
	Mined:	tonnes		tons
	Milled:	tonnes		tons
Recovery:	Gold:	435 grams		14 ounces

Comments:

1945:	Production for the period 1941-1945; unknown tonnage.
1940:	Production for the period 1936-1940; unknown tonnage.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSE001		NAME: MONASHEE		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1940	103		Silver	8,865		
			Gold	1,804		
1939	2,090	1,421	Silver	42,051		
			Gold	9,611		
			Lead		706	
			Zinc		190	

SUMMARY TOTALS: 082LSE001

NAME: **MONASHEE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	2,193 tonnes	2,417 tons
Milled:	1,421 tonnes	1,566 tons
Recovery:		
Silver:	50,916 grams	1,637 ounces
Gold:	11,415 grams	367 ounces
Lead:	706 kilograms	1,556 pounds
Zinc:	190 kilograms	419 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSE006		NAME: LUMBY		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	454	454	Silver	206,057		
			Gold	156		
			Copper		654	
			Lead		12,746	
			Zinc		5,485	
1973		5	Silver	8,149		
			Lead		216	
			Zinc		196	
1969	1,240	1,235	Silver	921,271		
			Gold	840		
			Lead		44,104	
1968	297		Zinc		35,970	
			Silver	561,813		
			Gold	218		
			Lead		15,151	
Zinc		9,196				

SUMMARY TOTALS: 082LSE006

NAME: **LUMBY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,991 tonnes	2,195 tons
Milled:	1,694 tonnes	1,867 tons
Recovery:		
Silver:	1,697,290 grams	54,569 ounces
Gold:	1,214 grams	39 ounces
Copper:	654 kilograms	1,442 pounds
Lead:	72,217 kilograms	159,211 pounds
Zinc:	50,847 kilograms	112,098 pounds

Comments:

1976: Pb concentrate - 41 tonnes.
 1973: Mill salvage - 5 tonnes.
 1969: Crude ore - 777 tonnes; Pb and Fe concentrate - 59 tonnes.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082LSE008** NAME: **PALADORA (L.2153)** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1938	45		Silver	2,955	
			Gold	591	
1935	54		Silver	7,340	
			Gold	1,431	

SUMMARY TOTALS: 082LSE008

NAME: **PALADORA (L.2153)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	99 tonnes	109 tons
Milled:		
Recovery:		
Silver:	10,295 grams	331 ounces
Gold:	2,022 grams	65 ounces

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSE010		NAME: ST.PAUL		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	73		Silver	13,188		
			Gold	653		
			Lead			387
			Zinc			69
1971	30		Silver	47,028		
			Gold	560		
			Lead			1,711
			Zinc			107
1966	7		Silver	249		
			Gold	187		
			Lead			37
			Zinc			52
1927	10		Silver	51,475		
			Gold	187		
			Lead			1,585
			Zinc			1,030
1915	136		Gold	2,955		
1914	136		Silver	466		
			Gold	1,088		

SUMMARY TOTALS: 082LSE010

NAME: **ST.PAUL**

	<u>Metric</u>	<u>Imperial</u>
Mined:	392 tonnes	432 tons
Milled:	tonnes	tons
Recovery:		
Silver:	112,406 grams	3,614 ounces
Gold:	5,630 grams	181 ounces
Lead:	3,720 kilograms	8,201 pounds
Zinc:	1,258 kilograms	2,773 pounds

Comments:

1973: Crude ore - 19 tonnes; silver concentrate - 4 tonnes.
 1971: Crude ore - 30 tonnes.
 1966: Siliceous ore - 7 tonnes.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSE011		NAME: SILVER BELL (L.4329)		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>
1978	14		Silver	43,171	
			Gold	311	
			Lead		700
			Zinc		252

SUMMARY TOTALS: 082LSE011

		NAME: SILVER BELL (L.4329)	
		<u>Metric</u>	<u>Imperial</u>
Mined:	14 tonnes	15 tons	
Milled:	tonnes	tons	
Recovery:	Silver: 43,171 grams	1,388 ounces	
	Gold: 311 grams	10 ounces	
	Lead: 700 kilograms	1,543 pounds	
	Zinc: 252 kilograms	556 pounds	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082LSE013** NAME: **CHERRY CREEK PLACER** 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>
1945			Gold	2,799	
1940			Gold	373	
1935			Gold	280	
1930			Gold	93	
1925			Gold	9,392	
1895			Gold	29,732	
1890			Gold	49,884	
1885			Gold	32,904	
1880			Gold	29,701	

SUMMARY TOTALS: 082LSE013

NAME: **CHERRY CREEK PLACER**

	<u>Metric</u>	<u>Imperial</u>
Mined:	tonnes	tons
Milled:	tonnes	tons
Recovery:	Gold: 155,158 grams	4,988 ounces

Comments:

- 1945: Tonnage unknown; period 1941-1945 (Bulletin 28, page 63).
- 1940: Tonnage unknown; period 1936-1940 (Bulletin 28, page 63).
- 1935: Tonnage unknown; period 1931-1935 (Bulletin 28, page 63).
- 1930: Tonnage unknown; period 1926-1930 (Bulletin 28, page 63).
- 1925: Tonnage unknown; period 1921-1925 (Bulletin 28, page 63).
- 1895: Tonnage unknown; period 1891-1895 (Bulletin 28, page 63).
- 1890: Tonnage unknown; period 1886-1890 (Bulletin 28, page 63).
- 1885: Tonnage unknown; period 1881-1885 (Bulletin 28, page 63).
- 1880: Tonnage unknown; period 1876-1880 (Bulletin 28, page 63).

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082LSE031** NAME: **HARRIS 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>
1945			Gold	3,483	
1940			Gold	10,667	

SUMMARY TOTALS: 082LSE031

NAME: **HARRIS CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	tonnes	tons
Milled:	tonnes	tons
Gold:	14,150 grams	455 ounces

Recovery:

Comments:

1945: Tonnage unknown; period 1941-1945 (Bulletin 28, page 63).
 1940: Tonnage unknown; period 1936-1940 (Bulletin 28, page 63).

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 14
REPORT: RGEN0200

MINFILE NUMBER: **082LSE033** NAME: **HECKMAN 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>
1940			Gold	124	

SUMMARY TOTALS: 082LSE033

NAME: **HECKMAN CREEK**

Metric Imperial

Mined: tonnes tons
Milled: tonnes tons

Recovery:

Gold: 124 grams 4 ounces

Comments:

1940: Tonnage unknown; period 1936-1940 (Bulletin 28, page 63).

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082LSE046** NAME: **EUREKA 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>
1945			Gold	622	
1940			Gold	62	
1935			Gold	187	

SUMMARY TOTALS: 082LSE046

NAME: **EUREKA CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	tonnes	tons
Milled:	tonnes	tons
Gold:	871 grams	28 ounces

Recovery:

Comments:

1945: Tonnage unknown; period 1941-1945 (Bulletin 28, page 14).
 1940: Tonnage unknown; period 1936-1940 (Bulletin 28, page 14).
 1935: Tonnage unknown; period 1931-1935 (Bulletin 28, page 14).

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 16
REPORT: RGEN0200

MINFILE NUMBER: 082LSE053	NAME: BARNES CREEK	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1945			Gold	1,648	
1940			Gold	373	
1935			Gold	560	

SUMMARY TOTALS: 082LSE053

NAME: **BARNES CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	tonnes	tons
Milled:	tonnes	tons
Recovery:		
Gold:	2,581 grams	83 ounces

Comments:

1945: Tonnage unknown; period 1941-1945 (Bulletin 28, page 14).
1940: Tonnage unknown; period 1935-1940 (Bulletin 28, page 14).
1935: Tonnage unknown; period 1931-1935 (Bulletin 28, page 14).

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 17
REPORT: RGEN0200

MINFILE NUMBER:	082LSE059	NAME:	MONASHEE CREEK PLACER	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1945			Gold	3,017	
1940			Gold	3,732	

SUMMARY TOTALS: 082LSE059

NAME: **MONASHEE CREEK PLACER**
Metric Imperial

Mined: tonnes tons
Milled: tonnes tons
Recovery: Gold: 6,749 grams 217 ounces

Comments:

1945: Tonnage unknown; period 1941-1945 (Bulletin 28, page 63).
1940: Tonnage unknown; period 1936-1940 (Bulletin 28, page 63).

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 18
REPORT: RGEN0200

MINFILE NUMBER: **082LSE069** NAME: **PUTNAM 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>
1940			Gold	155	

SUMMARY TOTALS: 082LSE069

NAME: **PUTNAM CREEK**

Metric Imperial

Mined:	tonnes	tons
Milled:	tonnes	tons
Gold:	155 grams	5 ounces

Recovery:

Comments:

1940: Tonnage unknown; period 1936-1940 (Bulletin 28, page 63).

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW008		NAME: MOUNT VERNON		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>	
1969	54		Silver	5,319		
			Gold	31		
			Lead			1,150
			Zinc			444
1950	10		Silver	6,812		
			Gold	93		
			Lead			1,261
			Zinc			63

SUMMARY TOTALS: 082LSW008

NAME: **MOUNT VERNON**

	<u>Metric</u>	<u>Imperial</u>
Mined:	64 tonnes	71 tons
Milled:	tonnes	tons
Recovery:		
Silver:	12,131 grams	390 ounces
Gold:	124 grams	4 ounces
Lead:	2,411 kilograms	5,315 pounds
Zinc:	507 kilograms	1,118 pounds

Comments: 1969: Minister of Mines Annual Report 1969 page 429.
 1950: Minister of Mines Annual Report 1950, page 115.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW010		NAME: SILVER QUEEN (L. 1182)		STATUS: Prospect	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1950	2		Silver	2,395	
			Lead		364
			Zinc		31
1948	2		Silver	560	
			Lead		80
			Zinc		18

SUMMARY TOTALS: 082LSW010

NAME: **SILVER QUEEN (L. 1182)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	4 tonnes	4 tons
Milled:	tonnes	tons
Recovery:		
	Silver: 2,955 grams	95 ounces
	Lead: 444 kilograms	979 pounds
	Zinc: 49 kilograms	108 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082LSW013** NAME: **SKOOKUM** 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>
1969	130		Silver	33,871	
1951	11		Silver	14,090	
			Gold	249	
			Copper		45
			Lead		99
1941	2		Silver	2,022	
			Gold	31	
1937	50		Silver	30,636	
			Gold	840	
			Lead		183
1936	1		Silver	3,795	
			Gold	62	
			Lead		33

SUMMARY TOTALS: 082LSW013

NAME: **SKOOKUM**

	<u>Metric</u>	<u>Imperial</u>
Mined:	194 tonnes	214 tons
Milled:	tonnes	tons
Recovery:	Silver: 84,414 grams	2,714 ounces
	Gold: 1,182 grams	38 ounces
	Copper: 45 kilograms	99 pounds
	Lead: 315 kilograms	694 pounds
Comments:	1969: Crude ore.	

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 22
REPORT: RGEN0200

MINFILE NUMBER: 082LSW015	NAME: OCTAGON	STATUS: Prospect			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1923	2		Silver Gold	2,550 62	

SUMMARY TOTALS: 082LSW015

	NAME: OCTAGON		
	<u>Metric</u>	<u>Imperial</u>	
	2 tonnes	2 tons	
Recovery:	Mined:		
	Milled:		
	Silver:	2,550 grams	82 ounces
	Gold:	62 grams	2 ounces

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 23
REPORT: RGEN0200

MINFILE NUMBER: 082LSW024	NAME: JUMBO (L. 4882)	STATUS: Prospect			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1940	49		Silver Gold	373 342	

SUMMARY TOTALS: 082LSW024

NAME: **JUMBO (L. 4882)**

		<u>Metric</u>		<u>Imperial</u>	
	Mined:	49 tonnes		54 tons	
	Milled:			tons	
Recovery:	Silver:	373 grams		12 ounces	
	Gold:	342 grams		11 ounces	

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 24
REPORT: RGEN0200

MINFILE NUMBER: 082LSW027	NAME: BON DIABLE (L. 1179)	STATUS: Showing			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1899	1		Silver	498	

SUMMARY TOTALS: 082LSW027

	NAME: BON DIABLE (L. 1179)	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 1 tonnes	1 tons
	Milled: tonnes	tons
Recovery:	Silver: 498 grams	16 ounces

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW029		NAME: OPHIR		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1928	33		Silver	3,484		
			Gold	62		
			Copper			360
			Lead			756

SUMMARY TOTALS: 082LSW029

		NAME: OPHIR	
		<u>Metric</u>	<u>Imperial</u>
Recovery:	Mined:	33 tonnes	36 tons
	Milled:	tonnes	tons
	Silver:	3,484 grams	112 ounces
	Gold:	62 grams	2 ounces
	Copper:	360 kilograms	794 pounds
	Lead:	756 kilograms	1,667 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW030		NAME: ROYAL AND PEERLESS		STATUS: Prospect	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1952	4		Silver	2,519	
			Lead		69
			Zinc		249
1942	1		Silver	31	
			Lead		20
			Zinc		29

SUMMARY TOTALS: 082LSW030

NAME: **ROYAL AND PEERLESS**

	<u>Metric</u>	<u>Imperial</u>
Mined:	5 tonnes	6 tons
Milled:	tonnes	tons
Recovery:	Silver: 2,550 grams	82 ounces
	Lead: 89 kilograms	196 pounds
	Zinc: 278 kilograms	613 pounds

Comments: 1952: From the Royal, crude ore.
 1942: From the Peerless.

RUN DATE: 26-Jun-2003
 RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

PAGE: 28
 REPORT: RGEN0200

MINFILE NUMBER: **082LSW042** NAME: **WHITE ELEPHANT (L. 4880)** 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	1,667	1,668	Silver	622	
			Gold	9,362	
1934	2,861	2,812	Silver	3,110	
			Gold	36,639	
1933	354	353	Silver	560	
			Gold	3,701	
1922	264		Silver	5,257	
			Gold	13,468	

SUMMARY TOTALS: 082LSW042

NAME: **WHITE ELEPHANT (L. 4880)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	5,146 tonnes	5,672 tons
Milled:	4,833 tonnes	5,327 tons
Recovery:		
Silver:	9,549 grams	307 ounces
Gold:	63,170 grams	2,031 ounces

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW049		NAME: WESTWOLD		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>
1970	1		Building Stone		907
			Limestone		16,783
1969	4,536		Aggregate		58,060
			Building Stone		45,359
			Limestone		530,703
1968	272		Building Stone		45,359
			Limestone		226,796

SUMMARY TOTALS: 082LSW049

NAME: **WESTWOLD**

	<u>Metric</u>	<u>Imperial</u>
Mined:	4,809 tonnes	5,301 tons
Milled:	tonnes	tons
Recovery: Aggregate:	58,060 kilograms	128,000 pounds
Building Stone:	91,625 kilograms	201,998 pounds
Limestone:	774,282 kilograms	1,706,999 pounds

Comments:

1970: Production from stock pile.
 1968: 1968-70: Geology, Exploration & Mining 1969, page 398.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW050		NAME: KALAMALKA		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>	
1944	29		Silver	995		
			Gold	311		
1943	34		Silver	249		
			Gold	311		
1942	393		Silver	5,381		
			Gold	4,417		
1941	832		Silver	7,838		
			Gold	15,614		
1940	464		Silver	5,754		
			Gold	5,225		
1939	1,066		Silver	12,223		
			Gold	13,716		
1938	1,158		Silver	40,434		
			Gold	11,757		
			Lead			420
			Zinc			172
1937	2,555		Silver	33,187		
			Gold	36,422		
1936	34		Silver	871		
			Gold	1,431		
			Copper			27
1935	27		Silver	1,120		
			Gold	933		
			Copper			181

SUMMARY TOTALS: 082LSW050

NAME: **KALAMALKA**

	<u>Metric</u>	<u>Imperial</u>
Mined:	6,592 tonnes	7,266 tons
Milled:		
Recovery:		
Silver:	108,052 grams	3,474 ounces
Gold:	90,137 grams	2,898 ounces
Copper:	208 kilograms	459 pounds
Lead:	420 kilograms	926 pounds
Zinc:	172 kilograms	379 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW064	NAME: BRETT-BIRD	STATUS: Prospect
Production Year	Tonnes Mined	Tonnes Milled
1950	1	
		Commodity
		Mica
		Grams Recovered
		Kilograms Recovered
		1,000

SUMMARY TOTALS: 082LSW064

	NAME: BRETT-BIRD	
	<u>Metric</u>	<u>Imperial</u>
Mined:	1 tonnes	1 tons
Milled:	tonnes	tons
Recovery:		
	Mica: 1,000 kilograms	2,205 pounds
Comments:		
	1950: For period 1932-1950. Minister of Mines Annual Report 1950.	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW066	NAME: MOUNT ROSE (L. 2683)	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
		Commodity
		Grams Recovered
		Kilograms Recovered
1975	800	Silica
1973	4,234	Silica

SUMMARY TOTALS: 082LSW066

NAME: **MOUNT ROSE (L. 2683)**

		<u>Metric</u>		<u>Imperial</u>
Mined:	5,034	tonnes	5,549	tons
Milled:		tonnes		tons
Recovery:	Silica:	5,034,000	kilograms	11,098,067
Comments:	1973:	Total is for 1968, 1969 and 1973 (Ann. Rpt 1968; GEM 1969,1973).		

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082LSW080** NAME: **SIWASH 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>
1935	1		Gold	1,000	
1918	1		Gold	19,000	
1895	1		Gold	15,000	

SUMMARY TOTALS: 082LSW080

NAME: **SIWASH CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	3 tonnes	3 tons
Milled:	tonnes	tons
Gold:	35,000 grams	1,125 ounces

Recovery:

Comments:

1935: From period 1924-1935. Tonnage mined unknown.
 1918: From period 1915-1918. Tonnage mined unknown.
 1895: From period 1889-1895. Tonnage mined unknown.

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082LSW091** NAME: **HARRIS 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>
1945	1		Gold	14,150	

SUMMARY TOTALS: 082LSW091

NAME: **HARRIS CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1 tonnes	1 tons
Milled:	tonnes	tons
Recovery:		
Gold:	14,150 grams	455 ounces
Comments:		
1945:	From period 1936-1945 from 800 cubic metres of material.	

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 37
REPORT: RGEN0200

MINFILE NUMBER: 082LSW099	NAME: KENDRY CREEK	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1921	308		Limestone		308,442
SUMMARY TOTALS: 082LSW099		NAME: KENDRY CREEK			
	Mined:	<u>Metric</u>		<u>Imperial</u>	
	Milled:	308 tonnes		340 tons	
Recovery:	Limestone:	308,442 kilograms		679,998 pounds	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082LSW111		NAME: ZUMAR		STATUS: Prospect	
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1980	55		Silver	2,324	
			Gold	261	
			Lead		55
			Zinc		55

SUMMARY TOTALS: 082LSW111

NAME: **ZUMAR**

	<u>Metric</u>	<u>Imperial</u>
Mined:	55 tonnes	61 tons
Milled:	tonnes	tons
Silver:	2,324 grams	75 ounces
Gold:	261 grams	8 ounces
Lead:	55 kilograms	121 pounds
Zinc:	55 kilograms	121 pounds

Recovery:

Comments: 1980: Bulk sample is hand-cobbed mineralization.

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 39
REPORT: RGEN0200

MINFILE NUMBER:	082M 002	NAME:	MOUNT COPELAND	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1973	19,701	19,584	Molybdenum		136,744
1972	55,989	46,989	Molybdenum		316,727
1971	59,058	54,282	Molybdenum		448,258
1970	56,378	48,874	Molybdenum		288,984
SUMMARY TOTALS: 082M 002		NAME:	MOUNT COPELAND		
		<u>Metric</u>		<u>Imperial</u>	
	Mined:	191,126 tonnes		210,680 tons	
	Milled:	169,729 tonnes		187,094 tons	
Recovery:	Molybdenum:	1,190,713 kilograms		2,625,072 pounds	

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082M 005** NAME: **MASTODON** 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>
1960	14,090	14,090	Silver	93,620	
			Gold	249	
			Cadmium		5,507
			Lead		44,351
			Zinc		1,124,191
1953			Cadmium		443
1952	14,877	14,877	Silver	91,847	
			Cadmium		5,704
			Lead		35,142
			Zinc		1,557,260
1926	8		Silver	4,665	
			Lead		2,305

SUMMARY TOTALS: 082M 005

NAME: **MASTODON**

	<u>Metric</u>	<u>Imperial</u>
Mined:	28,975 tonnes	31,939 tons
Milled:	28,967 tonnes	31,931 tons
Recovery:		
Silver:	190,132 grams	6,113 ounces
Gold:	249 grams	8 ounces
Cadmium:	11,654 kilograms	25,693 pounds
Lead:	81,798 kilograms	180,334 pounds
Zinc:	2,681,451 kilograms	5,911,586 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 012		NAME: LUCKY COON (L. 5231)		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>
1977			Silver	228,669	
			Gold	274	
			Cadmium		114
			Lead		62,033
			Zinc		41,367
1975			Silver	316	
			Gold	439	
			Cadmium		3,708
			Lead		69,705
			Zinc		7,416
1956	30		Silver	35,146	
			Gold	31	
			Lead		8,330
			Zinc		2,393

SUMMARY TOTALS: 082M 012

NAME: **LUCKY COON (L. 5231)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	30 tonnes	33 tons
Milled:	tonnes	tons
Recovery:		
Silver:	264,131 grams	8,492 ounces
Gold:	744 grams	24 ounces
Cadmium:	3,822 kilograms	8,426 pounds
Lead:	140,068 kilograms	308,797 pounds
Zinc:	51,176 kilograms	112,824 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 016		NAME: MOSQUITO KING		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>
1979			Silver	35,645	
			Gold	218	
			Lead		14,804
			Zinc		12,256
1973	200		Silver	22,581	
			Cadmium		42
			Lead		7,917
			Zinc		6,072
1972	219	212	Silver	173,928	

SUMMARY TOTALS: 082M 016

NAME: **MOSQUITO KING**

	<u>Metric</u>	<u>Imperial</u>
Mined:	419 tonnes	462 tons
Milled:	212 tonnes	234 tons
Recovery:		
Silver:	232,154 grams	7,464 ounces
Gold:	218 grams	7 ounces
Cadmium:	42 kilograms	93 pounds
Lead:	22,721 kilograms	50,091 pounds
Zinc:	18,328 kilograms	40,406 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 017		NAME: EX 1		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			Silver	91,567		
			Gold	62		
			Copper			291
			Lead			5,667
			Zinc			2,438
1955	36		Silver	16,453		
			Lead			489,654
			Zinc			257,191
1953	185		Silver	106,403		
			Gold	373		
			Lead			3,157,328
			Zinc			306,862
1952	53		Silver	34,960		
			Lead			1,300,945
			Zinc			325,275

SUMMARY TOTALS: 082M 017

NAME: **EX 1**

	<u>Metric</u>	<u>Imperial</u>
Mined:	274 tonnes	302 tons
Milled:	tonnes	tons
Recovery:		
Silver:	249,383 grams	8,018 ounces
Gold:	435 grams	14 ounces
Copper:	291 kilograms	642 pounds
Lead:	4,953,594 kilograms	10,920,802 pounds
Zinc:	891,766 kilograms	1,966,007 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 025		NAME: HOMESTAKE (L.827)		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1941	29	29	Silver	28,055		
			Gold	31		
			Lead			715
			Zinc			1,287
1937	3	3	Silver	14,836		
			Gold	31		
			Lead			434
1936	1,001	1,001	Silver	608,375		
			Gold	809		
			Copper			4,529
1935	3,317	3,295	Lead			16,391
			Zinc			13,595
			Silver	957,008		
1927	1,002	1,002	Gold	2,270		
			Copper			4,609
			Lead			29,030
			Zinc			16,449
1926	1,610	1,610	Silver	2,770,406		
			Gold	4,261		
			Lead			33,731
			Zinc			78,491
1926	1,610	1,610	Silver	4,372,149		
			Gold	3,857		
			Lead			60,994
			Zinc			93,136

SUMMARY TOTALS: 082M 025

NAME: **HOMESTAKE (L.827)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	6,962 tonnes	7,674 tons
Milled:	6,940 tonnes	7,650 tons
Recovery:		
Silver:	8,750,829 grams	281,345 ounces
Gold:	11,259 grams	362 ounces
Copper:	9,138 kilograms	20,146 pounds
Lead:	141,295 kilograms	311,502 pounds
Zinc:	203,310 kilograms	448,222 pounds

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 46
REPORT: RGEN0200

MINFILE NUMBER: **082M 029** NAME: **FOGHORN** STATUS: Past Producer

<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>
1917	28		Silver Lead	28,553	5,332
1916	45		Silver Lead	59,811	20,648

SUMMARY TOTALS: 082M 029

NAME: **FOGHORN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	73 tonnes	80 tons
Milled:		
Recovery:		
Silver:	88,364 grams	2,841 ounces
Lead:	25,980 kilograms	57,276 pounds

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 47
REPORT: RGEN0200

MINFILE NUMBER: 082M 055	NAME: BECA	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1926	5		Silver	2,395	
			Gold	31	
			Lead		1,498

SUMMARY TOTALS: 082M 055

	NAME: BECA	
	<u>Metric</u>	<u>Imperial</u>
Mined:	5 tonnes	6 tons
Milled:	tonnes	tons
Recovery:		
Silver:	2,395 grams	77 ounces
Gold:	31 grams	1 ounces
Lead:	1,498 kilograms	3,303 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 065		NAME: ENERGITE		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>	
1972	5		Silver	3,452		
			Lead		1,341	
			Zinc		651	
1954	31		Silver	280		
			Copper			1,581

SUMMARY TOTALS: 082M 065

NAME: **ENERGITE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	36 tonnes	40 tons
Milled:	tonnes	tons
Recovery:		
Silver:	3,732 grams	120 ounces
Copper:	1,581 kilograms	3,486 pounds
Lead:	1,341 kilograms	2,956 pounds
Zinc:	651 kilograms	1,435 pounds

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 49
REPORT: RGEN0200

MINFILE NUMBER:	082M 123	NAME:	DIMAC	STATUS:	Past Producer
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1982	18,350	18,350	Tungsten		104,730

SUMMARY TOTALS: 082M 123

		NAME:	DIMAC		
		<u>Metric</u>		<u>Imperial</u>	
	Mined:	18,350 tonnes		20,227 tons	
	Milled:	18,350 tonnes		20,227 tons	
Recovery:	Tungsten:	104,730 kilograms		230,890 pounds	
Comments:	1982:	Total production 1981-1982 (Open File 1991-17).			

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 135	NAME: SAN	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1982	6	
		Commodity
		Silver
		Lead
		Zinc
		Grams Recovered
		22,768
		Kilograms Recovered
		582
		333

SUMMARY TOTALS: 082M 135

	NAME: SAN	
	<u>Metric</u>	<u>Imperial</u>
Mined:	tonnes	tons
Milled:	6 tonnes	7 tons
Recovery:		
Silver:	22,768 grams	732 ounces
Lead:	582 kilograms	1,283 pounds
Zinc:	333 kilograms	734 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 141		NAME: GOLDSTREAM		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>	
1996	21,553	21,553	Silver Copper Zinc	237,512	690,067 140,790	
1995	312,633	312,633	Silver Cadmium Copper Antimony Zinc	3,834,000	4,315 10,941,221 215 2,426,521	
1994	348,663	348,663	Silver Gold Copper Zinc	4,531,997 5,723	13,102,193 2,427,540	
1993	419,627	419,627	Silver Gold Copper Zinc	5,297,171 6,252	15,133,852 2,488,085	
1992	431,151	431,151	Silver Gold Copper	5,470,200 16,049	16,322,607	
1991	262,874	249,715	Silver Gold Copper	3,037,255 14,339	10,230,612	
1984	134,255	134,255	Silver Copper Zinc	1,175,711	3,645,850 318,390	
1983	293,631	293,631	Silver Copper Zinc	2,644,604	8,202,987 186,786	

SUMMARY TOTALS: 082M 141

NAME: **GOLDSTREAM**

	<u>Metric</u>	<u>Imperial</u>
Mined:	2,224,387 tonnes	2,451,967 tons
Milled:	2,211,228 tonnes	2,437,462 tons
Recovery:		
Silver:	26,228,450 grams	843,263 ounces
Gold:	42,363 grams	1,362 ounces
Cadmium:	4,315 kilograms	9,513 pounds
Copper:	78,269,389 kilograms	172,554,417 pounds
Antimony:	215 kilograms	474 pounds
Zinc:	7,988,112 kilograms	17,610,767 pounds

Comments:
 1996: Closed in January 1996.
 1991: Includes 2833 tonnes of pre-production.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082M 244		NAME: SAMATOSUM		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>	
1992	71,950	129,374	Silver	66,346,000		
			Gold	100,977		
			Copper			594,597
			Lead			571,995
			Zinc			1,624,135
1991	78,229	177,615	Silver	142,704,089		
			Gold	166,160		
			Copper			1,158,895
			Lead			1,167,141
1990	174,738	169,152	Silver	166,154,000		
			Gold	279,907		
			Copper			1,462,819
			Lead			2,050,850
			Zinc			3,220,028
1989	28,212	78,732	Silver	54,152,687		
			Gold	92,074		
			Copper			461,705
			Lead			1,279,141
			Antimony			97,620
			Zinc			2,178,417

SUMMARY TOTALS: 082M 244

NAME: **SAMATOSUM**

	<u>Metric</u>	<u>Imperial</u>
Mined:	353,129 tonnes	389,258 tons
Milled:	554,873 tonnes	611,643 tons
Recovery:		
Silver:	429,356,776 grams	13,804,121 ounces
Gold:	639,118 grams	20,548 ounces
Copper:	3,678,016 kilograms	8,108,635 pounds
Lead:	5,069,127 kilograms	11,175,509 pounds
Antimony:	97,620 kilograms	215,215 pounds
Zinc:	9,538,263 kilograms	21,028,264 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	082N 001		NAME:	MOBERLY		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	80,000	80,000	Silica		80,000,000		
2001	120,000	120,000	Silica		120,000,000		
2000	120,000	120,000	Silica		120,000,000		
1998	150,000	150,000	Silica		150,000,000		
1997	140,000	140,000	Silica		140,000,000		
1996	140,000	140,000	Silica		140,000,000		
1995	80,000	80,000	Silica		80,000,000		
1994	80,000	80,000	Silica		80,000,000		
1993	80,000	80,000	Silica		80,000,000		
1992	59,000	59,000	Silica		59,000,000		
1991	60,000	60,000	Silica		60,000,000		
1990	49,611	49,611	Silica		49,611,000		
1989	50,000	50,000	Silica		50,000,000		
1988	50,347	50,347	Silica		50,347,000		
1987	63,591	63,591	Silica		63,591,000		
1986	53,354	53,354	Silica		53,354,000		
1985	90,000	90,000	Silica		90,000,000		
1984	90,000	90,000	Silica		90,000,000		
1983	90,000	90,000	Silica		90,000,000		
1982	90,000	90,000	Silica		90,000,000		
1981	90,000	90,000	Silica		90,000,000		
1980	90,000	90,000	Silica		90,000,000		

SUMMARY TOTALS: 082N 001

NAME: **MOBERLY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,915,903 tonnes	2,111,922 tons
Milled:	1,915,903 tonnes	2,111,922 tons
Recovery:	Silica: 1,915,903,000 kilograms	4,223,841,904 pounds

Comments:

- 1997: Approximate annual rate.
- 1996: Approximate annual rate.
- 1995: Approximate annual rate (Information Circular 1995-1, page 9).
- 1994: Approximate annual rate (Information Circular 1995-1, page 9).
- 1993: Approximate annual rate (Information Circular 1995-1, page 9).
- 1985: 1980-1985: Estimated annual production.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: **082N 002** NAME: **PARSON** 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>
1992	28,222		Barite		28,222,000
1991	43,928		Barite		43,928,000
1990	42,768		Barite		42,768,000
1989	41,407		Barite		41,407,000
1988	40,476		Barite		40,476,000
1987	25,237		Barite		25,237,000
1986	30,615		Barite		30,615,000
1985	33,060		Barite		33,060,000
1984	26,938		Barite		26,938,000
1983	37,122		Barite		37,122,000
1982	4,224		Barite		4,224,000
1978	7,668		Barite		7,668,000
1976	2,273		Barite		2,273,000
1973	2,155		Barite		2,155,000
1972	3,628		Barite		3,628,000
1971	390		Barite		390,000
1970	122		Barite		122,000
1969	124		Barite		124,000
1968	421		Barite		421,000
1966	1,228		Barite		1,228,000
1965	986		Barite		986,000
1964	816		Barite		816,000
1963	2,294		Barite		2,294,000
1962	747		Barite		747,000
1961	859		Barite		859,000
1960	462		Barite		462,000
1959	3,190		Barite		3,190,000
1958	662		Barite		662,000
1957	385		Barite		385,000
1956	1,333		Barite		1,333,000
1955	10,035		Barite		10,035,000
1954	674		Barite		674,000
1953	879		Barite		879,000
1952	769		Barite		769,000
1951	1,132		Barite		1,132,000
1950	1,306		Barite		1,306,000
1949	906		Barite		906,000
1948	1,480		Barite		1,480,000
1947	2,539		Barite		2,539,000
1946	2,438		Barite		2,438,000
1945	28,263		Barite		28,263,000
1944	13,002		Barite		13,002,000

SUMMARY TOTALS: 082N 002

NAME: **PARSON**

	<u>Metric</u>	<u>Imperial</u>
Mined:	447,163 tonnes	492,913 tons
Milled:		
Recovery:	Barite: 447,163,000 kilograms	985,825,387 pounds

Comments:

1992: 1982-1992: Mountain Minerals, personal communication, 1993.
 1973: 2155 tonnes mined; 1386 tonnes shipped from stockpile.
 1971: Shipped from stockpile.
 1970: Shipped from stockpile.
 1969: Shipped from stockpile.
 1968: Shipped from stockpile.
 1965: Shipped from stockpile.
 1964: Shipped from stockpile.
 1963: 1361 tonnes stockpiled.
 1949: 453 tonnes mined and 453 tonnes shipped from stockpile.
 1947: 453 tonnes stockpiled.

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 55
REPORT: RGEN0200

MINFILE NUMBER: **082N 002**

NAME: **PARSON**

STATUS: Past Producer

Comments:

1945: Mountain Minerals Limited, data from fiche.
1944: 2200 tonnes stockpiled.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082N 003		NAME: SNOWFLAKE		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1929	27	27	Silver	16,453		
			Copper			464
			Lead			1,999
			Zinc			2,790
1928	40	40	Silver	57,385		
			Gold	31		
			Lead			21,108
1927	31	31	Silver	60,215		
			Lead			18,497
			Zinc			2,135

SUMMARY TOTALS: 082N 003

NAME: **SNOWFLAKE**

	<u>Metric</u>	<u>Imperial</u>
Mined:	98 tonnes	108 tons
Milled:	98 tonnes	108 tons
Recovery:		
Silver:	134,053 grams	4,310 ounces
Gold:	31 grams	1 ounces
Copper:	464 kilograms	1,023 pounds
Lead:	41,604 kilograms	91,721 pounds
Zinc:	4,925 kilograms	10,858 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082N 004		NAME: WOOLSEY		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	33	33	Silver Lead Zinc	38,817	14,299	2,815
1953	4,717	4,717	Silver Copper Lead	72,937	110	22,045
1950	332	332	Silver Gold Lead Zinc	178,034 31	52,449	19,595
1949	34	34	Silver Lead Zinc	21,274	7,200	2,653
1942	318	318	Tungsten			733
1930	22	22	Silver Gold Lead Zinc	36,608 31	12,627	1,418

SUMMARY TOTALS: 082N 004

NAME: **WOOLSEY**

	<u>Metric</u>	<u>Imperial</u>
Mined:	5,456 tonnes	6,014 tons
Milled:	5,456 tonnes	6,014 tons
Recovery:		
Silver:	347,670 grams	11,178 ounces
Gold:	62 grams	2 ounces
Copper:	110 kilograms	243 pounds
Lead:	108,620 kilograms	239,466 pounds
Tungsten:	733 kilograms	1,616 pounds
Zinc:	26,481 kilograms	58,381 pounds

Comments: 1953: Includes 2540 tonnes yielding 9 tonnes of tungsten concentrate.
 1942: Tungsten concentrate: 0.7 tonne.

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 58
REPORT: RGEN0200

MINFILE NUMBER: 082N 009	NAME: CROWN POINT	STATUS: Past Producer			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1929	1	1	Silver Lead	1,493	785
1909	4	4	Silver Lead	6,718	3,023

SUMMARY TOTALS: 082N 009

NAME: **CROWN POINT**

	<u>Metric</u>	<u>Imperial</u>
Mined:	5 tonnes	6 tons
Milled:	5 tonnes	6 tons
Recovery:		
Silver:	8,211 grams	264 ounces
Lead:	3,808 kilograms	8,395 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082N 011	NAME: DONALD	STATUS: Prospect
Production Year	Tonnes Mined	Tonnes Milled
1927	5	5
		Commodity
		Silver
		Lead
		Zinc
		Grams Recovered
		5,878
		Kilograms Recovered
		1,642
		89

SUMMARY TOTALS: 082N 011

	NAME: DONALD	
	<u>Metric</u>	<u>Imperial</u>
Mined:	5 tonnes	6 tons
Milled:	5 tonnes	6 tons
Recovery:		
Silver:	5,878 grams	189 ounces
Lead:	1,642 kilograms	3,620 pounds
Zinc:	89 kilograms	196 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082N 012		NAME: LANARK (L.1592A)		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1922	48	48	Silver	84,880		
			Gold	62		
			Lead		26,702	
1920	54	54	Silver	89,825		
			Lead		30,208	
1919	25	25	Silver	46,157		
			Gold	31		
			Lead		14,313	
1917	189	189	Silver	345,368		
			Lead		118,680	
1916	371	371	Silver	273,520		
			Lead		66,825	
1915	55	55	Silver	63,077		
			Lead		18,788	
1914	59	59	Silver	135,547		
			Gold	124		
			Lead		17,265	

SUMMARY TOTALS: 082N 012

NAME: **LANARK (L.1592A)**

	<u>Metric</u>	<u>Imperial</u>
Mined:	801 tonnes	883 tons
Milled:	801 tonnes	883 tons
Recovery:		
Silver:	1,038,374 grams	33,384 ounces
Gold:	217 grams	7 ounces
Lead:	292,781 kilograms	645,471 pounds

RUN DATE: 26-Jun-2003
 RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

PAGE: 61
 REPORT: RGEN0200

MINFILE NUMBER: 082N 013		NAME: DUNVEGAN		STATUS: Prospect		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1925	6	6	Silver Lead Zinc	15,427	3,701	508
1896	44	44	Silver Lead	134,365	31,352	

SUMMARY TOTALS: 082N 013

NAME: **DUNVEGAN**

	<u>Metric</u>	<u>Imperial</u>
Mined:	50 tonnes	55 tons
Milled:	50 tonnes	55 tons
Recovery:		
Silver:	149,792 grams	4,816 ounces
Lead:	35,053 kilograms	77,279 pounds
Zinc:	508 kilograms	1,120 pounds

RUN DATE: 26-Jun-2003
 RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

PAGE: 62
 REPORT: RGEN0200

MINFILE NUMBER: 082N 016		NAME: ALLCO		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	103	103	Silver	137,040		
			Gold	156		
			Lead			24,385
			Zinc			13,209
1936	90	90	Silver	213,988		
			Gold	187		
			Lead			41,310

SUMMARY TOTALS: 082N 016

NAME: **ALLCO**

	<u>Metric</u>	<u>Imperial</u>
Mined:	193 tonnes	213 tons
Milled:	193 tonnes	213 tons
Recovery:		
Silver:	351,028 grams	11,286 ounces
Gold:	343 grams	11 ounces
Lead:	65,695 kilograms	144,833 pounds
Zinc:	13,209 kilograms	29,121 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082N 018	NAME: QUARTZ CREEK PLACER	STATUS: Past Producer
Production Year	Tonnes Mined	Tonnes Milled
1940	1	Gold
		Commodity
		Grams Recovered
		7,992
		Kilograms Recovered

SUMMARY TOTALS: 082N 018

	NAME: QUARTZ CREEK PLACER
	<u>Metric</u>
Mined:	1 tonnes
Milled:	1 tons
	<u>Imperial</u>
Recovery:	Gold: 7,992 grams
	257 ounces
Comments:	1940: Intermittent production from 1881 to 1940; unknown tonnage.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	<u>082N 019</u>	NAME:	<u>MONARCH</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>		
1957		2,640	Silver	22,021			
			Cadmium			77	
			Lead			43,346	
			Zinc			48,901	
1953		41	Silver	1,866			
			Cadmium			21	
			Lead			293	
			Zinc			23,621	
1952	13,503	13,503	Silver	96,855			
			Cadmium			1,456	
			Lead			108,615	
			Zinc			757,765	
1951	22,504	22,504	Silver	458,831			
			Cadmium			1,866	
			Lead			467,929	
			Zinc			1,923,705	
1950	41,122	41,122	Silver	656,024			
			Lead			1,754,172	
			Zinc			2,339,908	
1949	46,085	45,013	Silver	699,102			
			Cadmium			5,596	
			Lead			2,114,610	
			Zinc			2,258,343	
1948	31,202	31,202	Silver	737,421			
			Lead			929,838	
			Zinc			2,808,463	
1947	7,261	7,261	Silver	251,406			
			Lead			60,127	
			Zinc			869,856	
1946	14,223	14,223	Silver	383,656			
			Lead			404,526	
			Zinc			1,296,447	
1945	43,342	43,342	Silver	2,304,110			
			Lead			1,027,504	
			Zinc			5,007,896	
1944	22,558	22,675	Silver	330,314			
			Lead			420,511	
			Zinc			2,724,631	
1943	56,217	56,037	Silver	607,224			
			Lead			1,781,454	
			Zinc			3,338,412	
1942	79,202	78,513	Silver	795,086			
			Lead			2,377,326	
			Zinc			4,916,961	
1941	89,221	87,767	Silver	2,420,995			
			Lead			2,943,866	
			Zinc			7,323,714	
1940	75,272	75,403	Silver	3,002,155			
			Lead			5,620,714	
			Zinc			9,336,158	
1935	52,358	50,728	Silver	1,445,356			
			Lead			2,992,449	
			Zinc			5,021,817	
1934	87,271	86,073	Silver	5,327,415			
			Lead			9,043,890	
			Zinc			11,769,807	
1933	33,467	32,306	Silver	1,708,954			
			Lead			3,871,391	
			Zinc			3,282,177	
1930	68,087	68,087	Silver	1,942,880			
			Lead			5,769,694	
			Zinc			5,955,572	
1929	1,569	1,569	Silver	45,037			
			Lead			189,186	
1924	90	90	Silver	12,628			
			Lead			60,649	
1922	177	177	Silver	28,335			
			Lead			100,584	
			Zinc			1,285	
1920	4,536	4,536	Silver	48,116			

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082N 019		NAME: MONARCH		STATUS: Past Producer		
<u>Production Year</u>	<u>Tonnes Mined</u>	<u>Tonnes Milled</u>	<u>Commodity</u>	<u>Grams Recovered</u>	<u>Kilograms Recovered</u>	
1920	4,536	4,536	Lead		248,345	
1919	848	848	Silver Lead	332,118	101,786	
1918	704	704	Silver Lead	44,322	369,034	
1917		285	Silver Lead Zinc	464,648	175,236 8,165	
1916	1,119	1,119	Silver Lead Zinc	52,253	20,865 95,254	
1915	5,033	5,033	Silver Lead Zinc	19,253	95,077 141,393	
1913	9,072	9,072	Silver Lead	147,926	1,131,868	
1912	18,506	18,506	Silver Lead Zinc	230,318	1,020,231 64,701	
1910	48	48	Silver Lead	7,558	29,941	
1908	161	161	Silver Lead	26,904	95,867	
1900	61	61	Silver Lead	6,127	30,198	
1890	1,361	1,361	Silver Lead	466,545	816,462	

SUMMARY TOTALS: 082N 019

NAME: **MONARCH**

	<u>Metric</u>	<u>Imperial</u>
Mined:	826,180 tonnes	910,708 tons
Milled:	822,010 tonnes	906,111 tons
Recovery:		
Silver:	25,123,759 grams	807,746 ounces
Cadmium:	9,016 kilograms	19,877 pounds
Lead:	46,217,584 kilograms	101,892,302 pounds
Zinc:	71,314,952 kilograms	157,222,512 pounds

Comments:

1957: Pb conc.-2051 t, Zn conc.-589 t; salvaged and shipped to Trail.
 1953: Operations suspended, bin clean-up; zinc concentrates.
 1917: Clean-up.
 1890: In 1888, 544 tonnes of ore was shipped to Vancouver.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	082N 043	NAME:	HORSE 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>
1997	70,000	70,000	Silica		70,000,000
1996	70,000	70,000	Silica		70,000,000
1995	60,000	60,000	Silica		60,000,000
1994	50,000	50,000	Silica		50,000,000
1993	50,000	50,000	Silica		50,000,000
1992	40,000	40,000	Silica		40,000,000
1991	40,000	40,000	Silica		40,000,000
1990	40,823	40,823	Silica		40,823,000
1989	81,647	81,647	Silica		81,647,000
1988	90,722	90,722	Silica		90,722,000
1987	74,000	74,000	Silica		74,000,000
1986	67,000	67,000	Silica		67,000,000
1985	80,000	80,000	Silica		80,000,000
1984	45,000	45,000	Silica		45,000,000
1980	2,000	2,000	Silica		2,000,000

SUMMARY TOTALS: 082N 043

NAME: **HORSE CREEK**

	<u>Metric</u>	<u>Imperial</u>
Mined:	861,192 tonnes	949,302 tons
Milled:	861,192 tonnes	949,302 tons
Recovery:	Silica: 861,192,000 kilograms	1,898,602,829 pounds

Comments:

- 1997: Approximate annual rate.
- 1996: Approximate annual rate.
- 1995: Approximate annual rate.
- 1994: Approximate annual rate (Information Circular 1995-1, page 9).
- 1993: Approximate annual rate (Information Circular 1995-1, page 9).
- 1992: Estimate.

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 67
REPORT: RGEN0200

MINFILE NUMBER: 082N 048	NAME: JUMBO	STATUS: Prospect			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1900	3	3	Silver Lead	3,110	863

SUMMARY TOTALS: 082N 048

	NAME: JUMBO	
	<u>Metric</u>	<u>Imperial</u>
	Mined: 3 tonnes	3 tons
	Milled: 3 tonnes	3 tons
Recovery:	Silver: 3,110 grams	100 ounces
	Lead: 863 kilograms	1,903 pounds

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 68
REPORT: RGEN0200

MINFILE NUMBER: 082N 050	NAME: GOOD LUCK	STATUS: Developed Prospect			
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1905	24	24	Copper		3,126

SUMMARY TOTALS: 082N 050

	NAME: GOOD LUCK		
	<u>Metric</u>	<u>Imperial</u>	
	24 tonnes	26 tons	
	24 tonnes	26 tons	
Recovery:	Copper:	3,126 kilograms	6,892 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 082N 051	NAME: TENNESSEE	STATUS: Prospect
Production Year	Tonnes Mined	Tonnes Milled
1917	1	1
		Commodity
		Copper
		Grams Recovered
		82
		Kilograms Recovered

SUMMARY TOTALS: 082N 051

	NAME: TENNESSEE	
	<u>Metric</u>	<u>Imperial</u>
Mined:	1 tonnes	1 tons
Milled:	1 tonnes	1 tons
Recovery:		
Copper:	82 kilograms	181 pounds
Comments:		
1917:	A small trial shipment of ore from a portal (unknown tonnage).	

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 70
REPORT: RGEN0200

MINFILE NUMBER:	082N 052	NAME:	PORPHERY AND IRON HILL (L.268)	STATUS:	Prospect
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1901	5	5	Silver Copper	311	658

SUMMARY TOTALS: 082N 052

		NAME:	PORPHERY AND IRON HILL (L.268)
		<u>Metric</u>	<u>Imperial</u>
	Mined:	5 tonnes	6 tons
	Milled:	5 tonnes	6 tons
Recovery:	Silver:	311 grams	10 ounces
	Copper:	658 kilograms	1,451 pounds

RUN DATE: 26-Jun-2003
RUN TIME: 08:58:08

MINFILE PRODUCTION REPORT
GEOLOGICAL SURVEY BRANCH
ENERGY AND MINERALS DIVISION

PAGE: 71
REPORT: RGEN0200

MINFILE NUMBER:	082N 053	NAME:	SUNDAY	STATUS:	Prospect
Production Year	Tonnes Mined	Tonnes Milled	Commodity	Grams Recovered	Kilograms Recovered
1901	6	6	Silver Copper Lead	3,826	137 3,169

SUMMARY TOTALS: 082N 053

	NAME:	SUNDAY
	<u>Metric</u>	<u>Imperial</u>
	Mined:	6 tonnes 7 tons
	Milled:	6 tonnes 7 tons
Recovery:	Silver:	3,826 grams 123 ounces
	Copper:	137 kilograms 302 pounds
	Lead:	3,169 kilograms 6,986 pounds

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER: 083D 012		NAME: CANOE NORTH MICA			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>	
1961	1,043	113	Mica		113,400	
1960	91	33	Mica		32,659	

SUMMARY TOTALS: 083D 012

NAME: **CANOE NORTH MICA**

	<u>Metric</u>	<u>Imperial</u>
Mined:	1,134 tonnes	1,250 tons
Milled:	146 tonnes	161 tons
Mica:	146,059 kilograms	322,005 pounds

Recovery:

Comments:

1961: 125 tonnes of mica product were produced for market (EMPR AR 1961)
 1960: Georgian Mineral Industries Ltd.; production fiche.

MINFILE PRODUCTION REPORT
 GEOLOGICAL SURVEY BRANCH
 ENERGY AND MINERALS DIVISION

MINFILE NUMBER:	083D 017		NAME:	CANOE SOUTH MICA		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>		
1960	58	23	Mica		22,680		
1954	121	121	Mica		120,656		
1953	145	145	Mica		145,150		
1952	142	142	Mica		142,156		
1951	275	275	Mica		275,331		
1950	206	206	Mica		206,838		
1949	262	262	Mica		262,176		
1948	376	405	Mica		405,512		
1947	746	820	Mica		820,095		
1946	764	732	Mica		732,779		
1945	544	582	Mica		582,413		
1944	356	295	Mica		294,835		
1914	4		Mica		1,815		

SUMMARY TOTALS: 083D 017

NAME: **CANOE SOUTH MICA**

	<u>Metric</u>	<u>Imperial</u>
Mined:	3,999 tonnes	4,408 tons
Milled:	4,008 tonnes	4,418 tons
Recovery:	Mica: 4,012,436 kilograms	8,845,905 pounds

Comments:

1960: Operated by H.E. Reid.
 1954: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1953: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1952: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1951: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1950: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1949: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1948: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1947: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1946: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1945: Operated by G. Campbell; milled by Fairey & Co.; fiche.
 1944: Operated by G. Campbell, milled by Fairey & Co.; fiche.
 1914: 1815 kilograms were packed out and used in Vancouver for roofing.