Ministry of Energy, Mines and Petroleum Resources
GEOLOGICAL SURVEY BRANCH

001049

MINFILE

NEW [X] REVISION [ ] MODIFIED [ ]

IDENTIFICATION

MINFILE NO. 082ESE224 NAT'L MINERAL INV. NO. _____

CANMINDEX NO. _____

NAME(S) 1. Moonlight

2. _____

3. _____

4. _____

STATUS: [ ] SHOWing [X] PROSpect [ ] DEveloped PRospect [O] [U] PRODucer [O] [U] PAst PRoducer

LOCATION:

NTS MAP: 082E02E

BC MAP: _____

MINING DIVISION: GRWD Greenwood

UTM ZONE: 11 NORTHING: 5449550 EASTING: 381925

LATITUDE: ____ ° ____ ' ____ " LONGITUDE: ____ ° ____ ' ____ "

ELEVATION: 1676 (metres)

LOCATION CERTAINTY: [1] within 500 m [X] within 1 km [3] within 5 km

Comment on Identity: Open cuts and shallow shafts developed on a northern extension of a quartz vein from the Roderick Dhu claim (L.598, Minfile 082ESE125), 750 metres south-southwest from the summit of Mount Roderick Dhu, west of Jewel Lake, 11.75 kilometres north-northeast from the town of Greenwood. EMPR AR 1921-G184 EMPR ASSRPT 1014

MINERAL OCCURRENCE

COMMODITIES: AG AU PB

MINERALOGY:

SIGNIFICANT Minerals: GLEN PYRT TLRD

Comment: _____

ASSOCIATED Minerals: QRTZ

Comment: _____

ALTERATION Minerals: _____

Comment: _____

ALTERATION Type: _____

DEPOSIT CHARACTER

- [X] 01 Vein
- [ ] 02 Stockwork
- [ ] 03 Breccia
- [ ] 04 Pipe
- [ ] 05 Unconsolidated
- [ ] 06 Podiform
- [ ] 07 Layered
- [ ] 08 Stratabound
- [ ] 09 Stratiform
- [ ] 10 Concordant
- [ ] 11 Discordant
- [ ] 12 Massive
- [ ] 13 Disseminated
- [ ] ** Unknown

DEPOSIT CLASSIFICATION

- [ ] 01 Replacement
- [ ] 02 Magmatic
- [ ] 03 Volcanogenic
- [ ] 04 Sedimentary
- [ ] 05 Syngenetic
- (2) [X] 06 Epigenetic
- (1) [X] 07 Hydrothermal
- [ ] 08 Residual
- [ ] 09 Porphyry
- [ ] 10 Igneous-contact
- [ ] 11 Skarn
- [ ] 12 Pegmatite
- [ ] 13 Placer
- [ ] 14 Precipitate
- [ ] 15 Exhalative
- [ ] 16 Diatreme
- [ ] 17 Epithermal
- [ ] 18 Mesothermal
- [ ] 19 Fossil Fuel
- [ ] ** Unknown

AGE OF MINERALIZATION: *** ISOTOPIC AGE: _____

MATERIAL DATED: _____ DATING METHOD: _____

SHAPE OF DEPOSIT: [1] Regular [2] Tabular [3] Cylindrical [4] Bladed [5] Irregular

SHAPE MODIFIER: [1] Folded [2] Faulted [3] Fractured [4] Sheared [5] Other _____

DEPOSIT DIMENSION: _____ X _____ X _____ (metres)

ATTITUDE: STRIKE/DIP _____ _____ TREND/PLUNGE _____ _____

Comment: _____

DATE CODED: Y 89 M 02 D 23 CODED BY GO FIELD CHECKED [ ] YES [X] NO

Y [redacted] M [redacted] D _____ REVISED BY [redacted] [ ] YES [ ] NO

MINFILE NO. 082ESE224

HB-936

HOST ROCK

DOMINANT HOST ROCK: [1] Sedimentary [2] Plutonic [3] Volcanic [X] Metasedimentary [5] Metaplutonic [6] Metavolcanic [7] Metamorphic

FORMAL HOST:

1. Group: 365 Anarchist Group — Formation: _____
   Strat-Age: 329 Pennsylvanian-Mississippian (Carboniferous or older) — Isotopic Age: _____
   Dating Method: _____ — Material Dated: _____
2. Group: _____ — Formation: _____
   Strat-Age: _____ — Isotopic Age: _____
   Dating Method: _____ — Material Dated: _____

INFORMAL HOST:

1. Igneous/Metamorphic/Other: — Name: _____
   Strat-Age: _____ — Isotopic Age: _____
   Dating Method: _____ — Material Dated: _____
2. Igneous/Metamorphic/Other: — Name: _____
   Strat-Age: _____ — Isotopic Age: _____
   Dating Method: _____ — Material Dated: _____

Comment on Host Rock: _____

ROCK TYPE/LITHOLOGY:

	MODIFIER CODE(S)		ROCK CODE	ROCK NAME
	SCTS	QRTZ	WCKE	schistose quartz wacke
	SCTS	QRTZ	WCKE	schistose ~~QRTZ~~ lithic wacke

GEOLOGICAL SETTING

TECTONIC BELT: [IN] INsular [CC] Coast Crystalline [IM] InterMontane [X] OMineca [EA] EAstern

TERRANE: 1. M Undivided Metamorphic Assemblages 2. CPC Plutonic Rocks

PHYSIOGRAPHIC AREA: OKHL Okanagan Highland

METAMORPHISM:

TYPE: [1] Contact [X] Regional

RELATIONSHIP: [X] Pre-Mineralization [2] Syn-Mineralization [3] Post-Mineralization

GRADE: [ZL] Zeolite [X] Greenschist [AM] Amphibolite [HF] Hornfels [GL] Granulite [BS] Blueschist [EC] Eclogite [AN] Anthracite [SA] Semi-Anthracite [LV] Low Vol. Bituminous [MV] Med. Vol. Bituminous [HV] Hi Vol. Bituminous [SB] Sub Bituminous [LI] Lignite

Geological Setting Comment: _____

CAPSULE GEOLOGY

The Jewel Lake area is underlain by a complex of metamorphic rocks mostly of sedimentary and volcanic origin correlative with the Carboniferous or older Anarchist Group, and a large granodiorite pluton, intrusion correlative to the Juro-Cretaceous Nelson Plutonic Rocks. Small dykes and sill-like bodies, feeders to nearby Tertiary lavas, pervade these units.

Locally the metamorphosed volcanic and sedimentary rocks are not always distinguishable, both being fine-grained and medium or dark coloured with primary structures such as bedding and flow banding being confused with foliation or gneissosity. Generally the sedimentary rocks are brittle and quartz-rich, however compositions vary and some pelitic varieties have the same competence as the amphibole-rich volcanic rocks. These rocks are locally called quartzites but few are true quartzites and more appropriate terms would be quartz wacke or lithic wacke. The massive character of the volcanic rocks is due to a combination of intense regional metamorphism and primary structures. Field and petrographic data indicate that at least some of the original rock formed as a result of massive accumulations of lava flows and pillow lava. Crosscutting feeder dykes and sills are significant and contribute to the massive aspect of the volcanic rocks. The metamorphosed schistose volcanic rocks are compositionally basalts. These metasedimentary and metavolcanic rocks form part of the Carboniferous (Pennsylvanian-Mississippian) or older Anarchist Group.

Igneous intrusions in the Jewel Lake camp include a large Lower Cretaceous granodiorite pluton and a host of younger pulaskite and lamprophyre dykes. The granodiorite is correlative with Nelson Plutonic Rocks. It is a homogeneous medium-grained grey body which intrudes the metavolcanic rocks along a northwest trending contact in the southeast part of the camp. The intrusive has produced little effect in both the metavolcanic and metasedimentary rocks. Granodiorite dykes occur and are compositionally similar to the main granodiorite body and are probably offshoots from it. Pulaskite dykes are numerically most important. Several types are evident including both quartz-bearing and undersaturated types. Post-vein lamprophyre dykes as well as the pulaskite dykes are of probable Lower Tertiary age and cut all other major geological units.

The Moonlight claim (former Crown Grant) adjoined the Roderick Ohu claim (L.598, Minfile 082ESE125) to the north. A quartz fissure-vein is hosted in north-northeast striking and east dipping metasedimentary rocks of the Carboniferous (Pennsylvanian-Mississippian) or older Anarchist Group and are comprised of schistose quartz wackes or lithic wackes. The quartz vein appears to be in a fracture zone that roughly parallels the bedding/foliation planes of the host metasedimentary rocks. Open cuts and adits expose a quartz vein ranging in width from 25 ~~centimetres~~ to 61 centimetres ~~sparsely~~ sparsely mineralized with galena, pyrite and telluride.

CAPSULE GEOLOGY

WORK HISTORY

YEAR FROM	YEAR TO	WORK TYPE	AMOUNT (m/km/ha/No.)	COMMENT (Owner/Operator/Results)

RESERVES

ORE ZONE NAME: Moonlight YEAR: 1921

CATEGORY: [MR] Measured Recoverable [MG] Measured Geological [IN] Indicated Ore [IF] Inferred Ore [UN] Unclassified [BA] Best Assay

SAMPLE TYPE: [CHIP] Chip [GRAB] Grab [CHNL] Channel [BULK] Bulk [DIAD] Drill Core [ROCK] Rock

CALCULATION A: QUANTITY: _____ (tonnes)

Commodity	Grade	Commodity	Grade	Commodity	Grade
AU	3.4		.		.
AG	137.1		.		.

(Precious metals in grams, others in per cent)

Comment: _____

Reference: EMPR AR 1921-G184

CALCULATION B: QUANTITY: _____ (tonnes)

Commodity	Grade	Commodity	Grade	Commodity	Grade
	.		.		.
	.		.		.

(Precious metals in grams, others in per cent)

Comment: _____

Reference: _____

PRODUCTION

YEAR: _____ ORE MINED: _____ (tonnes) ORE MILLED: _____ (tonnes)

Commodity	Quantity	Commodity	Quantity	Commodity	Quantity

(Precious metal quantities in grams others in kilograms)

Comment: _____

Reference: _____

BIBLIOGRAPHY

(place * before significant references)

EMPR AR [redacted] 1903-H247; *1921-G184

GSC MAP 828; 6-1957; 10-1967

GSC P 79-29

GSC OF 1969