Ministry of
Energy, Mines and
Petroleum Resources
GEOLOGICAL SURVEY BRANCH

001041

MINFILE

NEW ☐ REVISION ☒ MODIFIED ☐

IDENTIFICATION

MINFILE NO. 082ESE125 NAT'L MINERAL INV. NO.

CANMINDEX NO.

NAME(S) 1. Roderick Dhu (L.598)

2.

3.

4.

STATUS: ☐ SHOWing ☐ PROSpect ☐ DEveloped PRospect ☐ O ☐ U PRODucer ☐ O ☒ PAst PRoducer

LOCATION:

NTS MAP: 082E02E

BC MAP:

MINING DIVISION: GRWD Greenwood

UTM ZONE: 11 NORTHING: 5449175 EASTING: 381925

LATITUDE: ° ' " LONGITUDE: ° ' "

ELEVATION: 1646 (metres)

LOCATION CERTAINTY: ☒ within 500 m ☐ 2 within 1 km ☐ 3 within 5 km

Comment on Identity: Quartz vein exposure, 950 metres south-southwest from the summit of Mount Roderick Dhu, west of Jewel Lake, 11.5 kilometres north-northeast from the town of Greenwood EMPR ASS RPT 1814

MINERAL OCCURRENCE

COMMODITIES: AG AU PB

MINERALOGY:

SIGNIFICANT Minerals: GLEN PYRT TLRD

Comment:

ASSOCIATED Minerals: QRTZ

Comment:

ALTERATION Minerals: LMON

Comment:

ALTERATION Type: OXID

0

DEPOSIT CHARACTER

- ☒ 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 ☒ 06 Epigenetic
- 1 ☒ 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: XXX 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 M D CODED BY FIELD CHECKED ☐ YES ☐ NO

Y 89 M 02 D 22 REVISED BY GO ☐ YES ☒ NO

MINFILE NO. 082ESE125

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: 390 Unknown
   Strat-Age: 120 (Lower) Tertiary — 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	LTHC	WCKE	schistose lithic wacke
		PLSK	DYKE	pulaskite dyke

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 biotitic 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 southwest part of the camp. The intrusion 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.

On the Roderick Dhu claim (L.598) a quartz fissure-vein is hosted in north-northeast striking and east dipping metasedimentary rocks of the Carboniferous (Pennsylvanian-Mississippian) or older Anarchist Group. The rocks are schistose quartz wackes or lithic wackes and are intruded by a Lower Tertiary pulaskite dyke. The quartz vein appears to be in a prominent fracture zone that roughly parallels the bedding/foliation planes of the host metasedimentary rocks. At the southern extremity of the vein, widths range from 5 to 30 centimetres and is mineralized with galena, pyrite and telluride. Limonite occurs in fractures within the quartz. The quartz vein has been traced 152 metres northeast where a second shaft was sunk 7.6 metres and stripping carried out 30 metres south. in the vein, but mineralization is sparse. To the north of this point, the vein has been displaced by a 61 metre wide pulaskite dyke.

CAPSULE GEOLOGY

WORK HISTORY

YEAR FROM	TO	WORK TYPE	AMOUNT (m/km/ha/No.)	COMMENT (Owner/Operator/Results)
1983		SOIL	408	Bay Ann Res. EMPR ASS RPT 11464
1969		GEOL		J. A. Millican EMPR ASS RPT 1814

RESERVES

ORE ZONE NAME: Roderick Dhu YEAR: 1931

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	38.4		.		.
AG	51.4		.		.

(Precious metals in grams, others in per cent)

Comment: Sample from sorted ore.

Reference: EMPR AR 1931-A125

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 1896-563; 1897-590; 1903-H166, H170;
1904-G219; *1921-G184, G347; 1931-A125;
1934-D6; 1967-227; 1968-231
EMPR GEM 1969-304
GSC MAP 828; 6-1957; 10-1967
GSC P 79-29
GSC OF 1969
EMPR BULL 1 (1932), p. 85
EMPR BULL 20, Part III, p. 12
EMPR ASS RPT 1614, 11464
EMPR EXPL 1983-20