Ministry of Energy, Mines and Petroleum Resources
GEOLOGICAL SURVEY BRANCH

001044

MINFILE

NEW ☐ REVISION ☒ MODIFIED ☐

IDENTIFICATION

MINFILE NO. 082ESE150 NAT'L MINERAL INV. NO.

CANMINDEX NO.

NAME(S) 1. Lakeside Fr. (L.1023)
2. ~~Makenzie~~
3.
4.

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

LOCATION:

NTS MAP: 082E02E
BC MAP:
MINING DIVISION: GRWD Greenwood
UTM ZONE: 11 NORTHING: 5447075 EASTING: 382325
LATITUDE: ° ' " LONGITUDE: ° ' "
ELEVATION: 1155 (metres)
LOCATION CERTAINTY: ☒ within 500 m ☐ 2 within 1 km ☐ 3 within 5 km
Comment on Identity: A tunnel 137 metres ~~east~~ from the lower eastern shore of Jewel Lake, 9.5 kilometres north-northeast from the town of Greenwood. EMPR AR 1933-A159

MINERAL OCCURRENCE

COMMODITIES: AG AU PB CU
MINERALOGY:
SIGNIFICANT Minerals: PYRT GLEN CLCP
Comment:
ASSOCIATED Minerals: QRTZ
Comment:
ALTERATION Minerals:
Comment:
ALTERATION Type:

DEPOSIT CHARACTER			DEPOSIT CLASSIFICATION	
(1) ☒ 01 Vein	08 Stratabound		01 Replacement	11 Skarn
02 Stockwork	09 Stratiform		02 Magmatic	12 Pegmatite
03 Breccia	10 Concordant		03 Volcanogenic	13 Placer
04 Pipe	(2) ☒ 11 Discordant		04 Sedimentary	14 Precipitate
05 Unconsolidated	☒ 12 Massive		05 Syngenetic	15 Exhalative
06 Podiform	13 Disseminated		(2) ☒ 06 Epigenetic	16 Diatreme
07 Layered	** Unknown		(1) ☒ 07 Hydrothermal	17 Epithermal
			08 Residual	18 Mesothermal
			09 Porphyry	19 Fossil Fuel
			10 Igneous-contact	** 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 070 68S TREND/PLUNGE
Comment:

DATE CODED: Y M D CODED BY FIELD CHECKED ☐ YES ☐ NO
Y 89 M 02 D 14 REVISED BY GO ☐ YES ☒ NO

MINFILE NO. 082ESE150

HB-936

HOST ROCK

DOMINANT HOST ROCK: [1] Sedimentary [3] Volcanic [5] Metaplutonic [7] Metamorphic [X] Plutonic [4] Metasedimentary [6] Metavolcanic

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: 283 Nelson Plutonic Rocks
   Strat-Age: 219 Juro-Cretaceous — Isotopic Age: [redacted]
   Dating Method: [redacted] — Material Dated: [redacted]
2. Igneous/Metamorphic/Other: — Name: 390 Unknown
   Strat-Age: 120 Tertiary (Lower) — Isotopic Age: _____
   Dating Method: _____ — Material Dated: _____

Comment on Host Rock: _____

ROCK TYPE/LITHOLOGY:

MODIFIER CODE(S)			ROCK CODE	ROCK NAME
			GRDR	granodiorite
	SCTS	META	BSLT	schistose metabasalt
		QRTZ	WCKE	quartz wacke
		LTHC	WCKE	lithic wacke
		GRDR	DYKE	granodiorite dyke
		PLSK	DYKE	pulaskite dyke
		LMPP	DYKE	lamprophyre 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: _____

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 intrusion correlative to the Juro-Cretaceous Nelson Plutonic Rocks. Small dykes and sill-like bodies, feeders to nearby Tertiary lavas, pervade these units. Four north striking and one northwest striking quartz fissure-vein structures are known in the Jewel Lake camp, all of which have received some development.

Locally the northwest striking and steeply northeast dipping 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 include a large Lower Cretaceous granodiorite pluton and a host of younger pulaskite and lamprophyre dykes. The granodiorite returned a K-Ar Lower Tertiary age date of 128 +/-5 Ma and is correlative with Nelson Plutonic Rocks. The granodiorite is a homogeneous medium-grained grey body which intrudes the metavolcanic rocks along a northwest trending contact in the southwest part of the camp. Alteration is minor with some replacement of amphibole by epidote. 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 probable Lower Tertiary age and cut all other more geological~~

On the Lakeside claim (L.1023), 381 metres northwest of the Dentonia vein structure (Minfile 082ESE055), a quartz vein occurs in a shear zone 0.7 to 1.2 metres wide. The vein ranges in width from 20 to 91 centimetres but averages 25 to 30 centimetres and is mineralized with pyrite and small amounts of galena and sphalerite. The vein attitude varies from 035 to 070 degrees and dips 68 degrees south.

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CAPSULE GEOLOGY

WORK HISTORY

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

RESERVES

ORE ZONE NAME: Lakeside Fr. YEAR: 1941

CATEGORY: [MR] Measured Recoverable [IN] Indicated Ore [UN] Unclassified
[MG] Measured Geological [IF] Inferred Ore [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	41.8		.		.
AG	281.1		.		.

(Precious metals in grams, others in per cent)

Comment: Sample from a pile of sorted material.

Reference: EMPR PF (OBZESE055, Hedley, M.S. (1941): Geology of the Jewel Lake Camp (Eastern Part) and of the Dentonia Mine, Boundary District, 40 pp.)

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

1940-A63; A24

(place * before significant references)

EMPR AR 1933-A159; 1941-A25; 1898-1124; 1899-604, 849; 1939-A36;
GSC MAP 828; 6-1957; 10-1967
GSC P 79-29
GSC OF 1969
EMPR PF (OBZESE150; *OBZESE055, Hedley, M.S. (1941): Geology of the Jewel Lake Camp (Eastern Part) and of the Dentonia Mine, Boundary District, 40 pp.)