



MINFILE Detail Report
BC Geological Survey
Ministry of Energy, Mines and Petroleum Resources

Location/Identification

MINFILE Number: 092JNE055 **National Mineral Inventory Number:** 092J9, 092I12 Mo1

Name(s): INDEX (L.1306)
MOLY

Status: Prospect **Mining Division:** Lillooet

Mining Method: Underground **Electoral District:** Fraser-Nicola

Regions: **Resource District:** Cascades Natural Resource District

BCGS Map: 092J060 **UTM Zone:** 10 (NAD 83)

NTS Map: 092J09E **Northings:** 5597633

Latitude: 50 31 35 N **Easting:** 570586

Longitude: 122 00 15 W

Elevation: 2394 metres

Location Accuracy: Within 500M

Comments: Seventeen kilometres south of Lillooet. Includes Crown Grant lots 1309, 5074, and 5113.

Mineral Occurrence

Commodities: Molybdenum, Gold, Uranium

Minerals **Significant:** Molybdenite, Pyrite, Uraninite

Significant Comments: Very minor pyrite.

Associated: Quartz

Alteration: Sericite, Molybdenite, Kaolinite

Alteration Type: Sericitic, Silicific'n, Oxidation, Argillic

Mineralization Age: Unknown

Deposit **Character:** Stockwork, Disseminated

Classification: Porphyry, Hydrothermal

Type: L08: Porphyry Mo (Climax-type)

Shape: Irregular

Host Rock

Dominant Host Rock: Plutonic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Paleozoic-Mesozoic	Bridge River	Undefined Formation	-----
Cretaceous-Tertiary	-----	-----	Unnamed/Unknown Informal

Isotopic Age	Dating Method	Material Dated
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Lithology: Granodiorite, Argillite, Quartzite, Chert, Andesite, Lamprophyre Dike, Hornfels, Andesite Breccia, Greenstone, Tuff

Comments: Granodiorite and lamprophyre are part of the "Index Stock".

Geological Setting

Tectonic Belt: Coast Crystalline **Physiographic Area:** Pacific Ranges

Terrane: Bridge River, Methow

Metamorphic Type: Contact **Relationship:** Pre-mineralization

Grade: Hornfels

Inventory

Ore Zone: SAMPLE
Category: Assay/analysis

Year: 1916
Report On:
NI 43-101: N

Sample Type: Bulk Sample

Commodity	Grade
Molybdenum	9.1000 per cent

Comments: Test shipment.

Reference: Minister of Mines Annual Report 1949, page 113.

Capsule Geology

The area is underlain by hornfelsed sediments, argillite, quartzite and chert and volcanics, andesite breccia and greenstone tuff of the Mississippian to Jurassic Bridge River Complex (Group). An oblong-shaped stock, 1.5 kilometres by 2 kilometres long, intrudes the sediments and volcanics. The Index stock is mainly granodiorite, grading to biotite granite and quartz monzonite. It is related to a larger Tertiary-Cretaceous intrusion located a kilometre east of the Phair Creek fault. Small andesite dykes and a swarm of biotite lamprophyre dykes cut through the stock.

Molybdenite occurs mainly within the core of the Index Stock, which is fine-grained and aplitic. The molybdenum is seen in northerly trending shears and disseminated on fractures. The highest concentrations are in a 1-metre wide lenticular zone as clots of solid fine-grained crystals or rosettes which assay up to 7 per cent MoS₂ and have low grade (1.3 grams per tonne) gold values. The molybdenum is associated with quartz and sericite with kaolinitized orthoclase. Molybdenite, an oxide of molybdenite, characterizes the surface of enriched zones. In 1916, 7.4 tonnes of material grading 15.01 per cent MoS₂ was extracted (Minister of Mines Annual Report 1949, page 113).

Uraninite has been reported in the mineralized outcrops; however, assays are low, the highest being 0.0085 per cent U₃O₈ (Minister of Mines Annual Report 1949, page 114).

During 2007 through 2010, Galliard Resources Corp. examined the area as the Index and Enterprise properties.

Bibliography

EMPR AR 1916-26,272; 1935-F58; *1949-113-114; 1964-84; 1965-145;
1966-140
EMPR ASS RPT 6213, 15032
EMPR BULL 9, p. 84
EMPR FIELDWORK 1974, p. 35; 1985, pp. 303-310; 1986, pp. 23-29; 1987,
pp. 93-130; 1988, pp. 105-152; 1989, pp. 45-72; 1990, pp. 75-83
EMPR GEM 1970-227; 1977-E162
EMPR MAP 22-41
EMPR OF 1987-11; 1988-3; 1989-4; 1990-10
EMPR PF (Report by N.W. Emmens, 1917; Report by D.L. Hings, 1965;
*Report by J.F.V. Millar, 1964, Texas Creek Mines Ltd.)
GSC EC GEOL #16, p. 45; #16 (2nd Edit.), p. 233; #20, pp. 41,227,
266-267
GSC MEM 262, p. 106
GSC OF 482, 551
CIM TRANS Vol. 53, 1950, p. 285
ECON GEOL Vol. 46, 1951, pp. 353-366
GCNL #81, 1978
Mitchell, M.A. (2009-12-03): Technical Report on the Enterprise Property
Mitchell, M.A. (2010-03-30): Technical Report on the Enterprise Property

EMPR PFD 11430, 11431, 811058, 811056, 811057, 811055, 811059, 811061, 811062, 811060, 811063, 811064, 811026, 826475, 600661, 670053

Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	2020/06/24	Revised By:	Karl A. Flower (KAF)	Field Check:	N