

Location/Identification

MINFILE Number:	082ESE022	National Mineral Inventory Number:	082E2 Cu2
Name(s):	<u>AETNA (L.978)</u> PHOENIX MINE		
Status:	Past Producer	Mining Division:	Greenwood
Mining Method	Underground, Open Pit	Electoral District:	Boundary-Similkameen
Regions:		Resource District:	Selkirk Natural Resource District
BCGS Map:	082E008		
NTS Map:	082E02E	UTM Zone:	11 (NAD 83)
Latitude:	49 05 35 N	Northing:	5439027
Longitude:	118 35 46 W	Easting:	383476
Elevation:	1319 metres		
Location Accuracy:	Within 500M		
Comments:	Part of the Phoenix mine. The Phoenix pit now covers the Knob Hill (082ESE020), Old Ironsides (082ESE021), Aetna (082ESE022) and Victoria (082ESE023) claims (EMPR Paper 1986-2, Figure 16). Shaft location is on GSC Map 16A. Production is included with Phoenix (Knob Hill).		

Mineral Occurrence

Commodities:	Copper, Gold, Silver		
Minerals	Significant:	Chalcopyrite, Pyrite, Magnetite, Gold	
	Associated:	Quartz, Epidote, Garnet, Chlorite, Amphibole, Specularite, Hematite	
	Mineralization Age:	Jurassic-Cretaceous	
Deposit	Character:	Massive, Disseminated	
	Classification:	Skarn, Replacement	
	Type:	K01: Cu skarn, K04: Au skarn, K03: Fe skarn	

Host Rock

Dominant Host Rock:	Sedimentary		
Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Triassic	Brooklyn	Unnamed/Unknown Formation	-----
Isotopic Age	Dating Method	Material Dated	
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Lithology: Limestone, Sharpstone Conglomerate, Argillite, Tuff, Greenstone

Geological Setting

Tectonic Belt:	Omineca	Physiographic Area:	Okanagan Highland
Terrane:	Quesnel, Plutonic Rocks		

Inventory

No inventory data

Capsule Geology

The Aetna claim (Lot 978) is on the south part of the Phoenix pit (082ESE020), immediately south of the Victoria claim (082ESE023) and east of the Knob Hill claim (082ESE020). The Old Ironsides (082ESE021) lies to the northwest. The Aetna was Crown granted to C.E. Galt in 1898.

Production is included with the Phoenix.

Systematic development, consisting of an extensive system of tunnels and stopes, began in 1895 and comprised three adit levels on the Old Ironsides and Knob Hill claims. To the east, five levels, serviced in part by the Victoria shaft, were developed on the Victoria and Aetna claims.

The area is underlain by chert, cherty argillite, greenstone and a minor amount of limestone of the Upper Paleozoic Knob Hill Group. These rocks are unconformably overlain by limestone, sharpstone conglomerate, argillite and Eholt volcanics of the Triassic Brooklyn Group. Copper ore occurs in mineralized areas of the Brooklyn limestone, which have all the characteristics of metasomatic replacements. These replacements are composed essentially of chlorite-epidote skarn rocks with variable amounts of garnet, calcite and quartz, accompanied by blebs and disseminations of pyrite, chalcopyrite, magnetite and specularite.

The main ore body outcrops on the Old Ironsides and Knob Hill claims; in its downward and eastward extension it passes into the Victoria and Aetna claims. See Phoenix for additional details on development, geology and mineralization.

Bibliography

EMPR AEROMAG MAP 8497G

EMPR AR 1894-map after 758; 1898-1123,1194; 1899-768,848; 1902-174;
1965-170; 1966-194; 1967-227; 1968-231

EMPR BULL 101, p. 236

EMPR GEM 1969-305; 1970-428; 1971-175; 1972-36; 1973-39; 1974-34-35

EMPR MINING 1975-1980, Vol. 1, pp. 9-10

EMPR MR MAP 6 (1932)

EMPR OF 1990-25

EMPR P 1986-2; 1989-3, pp. 41-43, 99

EMPR PF (See Phoenix 082ESE020)

EMPR PRELIM MAP 59

GSC MAP *16A; 828; 45-20A; 6-1957; 10-1967; 1500A; 1736A

GSC MEM *21 pp. 71-74, 15

GSC OF 481; 637; 1969

GSC P 45-20A; 67-42; 79-29

GSC SUM RPT 1902, pp. 90-116

CIM Transactions Vol. 59 (1956), pp. 384-394

Basque, Garnet (1992): Ghost Towns & Mining Camps of the Boundary
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Cowley, P. (2017-06-02): Updated Preliminary Economic Assessment on
the Greenwood Precious Metals Project

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750352, 812143, 812144, 812145, 812216, 886347, 886348

Date Coded: 1985/07/24

Coded By: BC Geological Survey (BCGS)

Field Check: Y

Date Revised: 2020/07/22

Revised By: Karl A. Flower (KAF)

Field Check: Y