

### Location/Identification

<b>MINFILE Number:</b>	092GSE009	<b>National Mineral Inventory Number:</b>	092G7 Cu1
<b>Name(s):</b>	<b>VIKING (L.3177)</b> GOLDEN EARS, PITT LAKE, CROMWELL, GREEDY		
<b>Status:</b>	Past Producer	<b>Mining Division:</b>	New Westminster
<b>Mining Method</b>	Underground	<b>Electoral District:</b>	Maple Ridge-Mission
<b>Regions:</b>	British Columbia	<b>Resource District:</b>	Chilliwack Forest District
<b>BCGS Map:</b>	092G038		
<b>NTS Map:</b>	092G07E	<b>UTM Zone:</b>	10 (NAD 83)
<b>Latitude:</b>	49 21 37 N	<b>Northing:</b>	5467598
<b>Longitude:</b>	122 33 57 W	<b>Easting:</b>	531526
<b>Elevation:</b>	240 metres		
<b>Location Accuracy:</b>	Within 500M		
<b>Comments:</b>	Shaft on the Viking claim (Lot 3177) (Property File - Claim Sheet Map).		

### Mineral Occurrence

<b>Commodities:</b>	Copper, Silver, Gold, Zinc		
<b>Minerals</b>	<b>Significant:</b>	Pyrrhotite, Pyrite, Chalcopyrite, Covellite, Sphalerite	
	<b>Associated:</b>	Quartz, Calcite	
	<b>Mineralization Age:</b>	Unknown	
<b>Deposit</b>	<b>Character:</b>	Vein, Disseminated	
	<b>Classification:</b>	Hydrothermal, Epigenetic	
	<b>Type:</b>	I01: Au-quartz veins	
	<b>Dimension:</b>	46x30x0 metres	<b>Strike/Dip:</b> 270/75S
	<b>Comments:</b>	North vein.	

### Host Rock

<b>Dominant Host Rock:</b>	Metamorphic		
<b>Stratigraphic Age</b>	<b>Group</b>	<b>Formation</b>	<b>Igneous/Metamorphic/Other</b>
Paleozoic-Mesozoic	Twin Island	Undefined Formation	-----
Upper Jurassic	-----	-----	Coast Plutonic Complex
<b>Isotopic Age</b>	<b>Dating Method</b>	<b>Material Dated</b>	
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<b>Lithology:</b>	Amphibolite, Quartzite, Diorite		
<b>Comments:</b>	The Twin Island Group is pre-Jurassic in age and the Coast Plutonic Complex is Jurassic to Tertiary in age.		

### Geological Setting

<b>Tectonic Belt:</b>	Coast Crystalline	<b>Physiographic Area:</b>	Fiord Ranges (Southern)
<b>Terrane:</b>	Undivided Metamorphic Assembl., I		
<b>Metamorphic Type:</b>	Regional		
<b>Grade:</b>	Amphibolite		
<b>Comments:</b>	Hosted in a roof pendant in the southern Coast Plutonic Complex.		

### Inventory

**Ore Zone:** VEIN  
**Category:** Assay/analysis

**Year:** 1927  
**Report On:** N  
**NI 43-101:** N

**Sample Type:** Grab

Commodity	Grade
Silver	146.0000 grams per tonne
Gold	1.9900 grams per tonne
Copper	3.9000 per cent

**Comments:** Average of 900 samples from underground workings.

**Reference:** Minister of Mines Annual Report 1927, page 366.

### Summary Production

		Metric	Imperial
	<b>Mined:</b>	182 tonnes	200 tons
	<b>Milled:</b>	0 tonnes	0 tons
<b>Recovery</b>	Silver	7,216 grams	232 ounces
	Gold	249 grams	8 ounces
	Copper	5,151 kilograms	11,356 pounds

### Capsule Geology

The Viking mine is located at the south end of Pitt Lake on the east shore.

Two mineralized veins are hosted in a roof pendant of pre- Jurassic Twin Island Group amphibolite and quartzite. The pendant occurs within Late Jurassic diorite of the Jurassic to Tertiary Coast Plutonic Complex.

The North vein (#1 vein) is developed in a shear zone striking west and dipping 60 to 90 degrees south. The vein is usually between 0.60 and 1.8 metres in width, but 30 metre widths are reported at shallow depths. The South vein (#2 vein) strikes northeast, dips steeply southeast, and ranges from 0.90 to 1.1 metres in width.

The veins are mineralized with pyrrhotite, pyrite and chalco- pyrite, with minor covellite and a trace of sphalerite in a gangue of white quartz with minor calcite and fragments of wall rock. An adit in the North vein exposes mineralization over a length of 46 metres. The average assay of 900 samples, taken throughout the underground workings on the North vein, was 1.99 grams per tonne gold, 146 grams per tonne silver and 3.9 per cent copper (Minister of Mines Annual Report 1927, page 366).

The Viking Mining Company Ltd., produced 179 tonnes in 1916, with an average grade of 40.3 grams per tonne silver and 2.88 per cent copper. The Pitt Mining Company Ltd. attempted, unsuccessfully, to place the mine back into production between 1927 and 1929.

### Bibliography

EMPR AR 1897-579; 1898-1150,1151; 1899-810; \*1900-937,938; 1901-1121; 1915-301,302; 1916-519; \*1923-260; 1924-257; 1925-293; 1926-324; \*1927-366,367; 1928-389,390,522; 1929-398; 1930-313

EMPR ASS RPT 4862, 7881, \*18897

EMPR FIELDWORK 1980, pp. 165-184

EMPR PF (2 claim sheet maps, 1926; Carmichael, H. (1926): Summary of Viking Group; Assays of raw ore and concentrates, 1926)

EMP MP CORPFILE ("Pitt Mining Company Ltd.")

GSC MAP 8-1956; 1069A; 1151A; 1153A; 1386A

GSC MEM 335, pp. 14-16, 20, 21, 190

GSC P 90-1F, pp. 95-107

CANMET IR 670, 1925, pp. 48-50

Armstrong, J.E. (1990): Vancouver Geology, Geological Association of Canada (Cordilleran Section)

Ditson, G.M. (1978): Metallogeny of the Vancouver-Hope Area, British Columbia, M.Sc. Thesis, University of British Columbia

EMPR PFD 8225, 8226, 8227, 8228, 8229, 8230, 8231, 826134, 826135, 826136, 826137

<b>Date Coded:</b>	1985/07/24	<b>Coded By:</b>	BC Geological Survey (BCGS)	<b>Field Check:</b>	N
<b>Date Revised:</b>	1990/05/29	<b>Revised By:</b>	Peter S. Fischl (PSF)	<b>Field Check:</b>	N