

Location/Identification

MINFILE Number:	092HSE052	National Mineral Inventory Number:	092H8 Zn1
Name(s):	<u>MISSION</u> FLINT, NEWT		
Status:	Prospect	Mining Division:	Osoyoos
		Electoral District:	Yale-Lillooet
Regions:	British Columbia	Resource District:	Cascades Forest District
BCGS Map:	092H040		
NTS Map:	092H08E	UTM Zone:	10 (NAD 83)
Latitude:	49 19 39 N	Northing:	5467894
Longitude:	120 06 20 W	Easting:	710302
Elevation:	1311 metres		
Location Accuracy:	Within 500M		
Comments:	Trench, just east of a showing at the headwaters of Jamieson Creek, 4 kilometres southwest of Hedley (Assessment Report 9222, Figure 2).		

Mineral Occurrence

Commodities:	Silver, Zinc, Gold, Copper		
Minerals	Significant:	Pyrite, Arsenopyrite, Sphalerite, Tetrahedrite, Chalcopyrite	
	Associated:	Quartz	
	Alteration:	Quartz, Sericite, Orthoclase, Chlorite, Epidote, Calcite	
	Alteration Type:	Silicific'n, Sericitic, Propylitic, Potassic	
	Mineralization Age:	Unknown	
Deposit	Character:	Shear, Vein, Discordant, Disseminated	
	Classification:	Hydrothermal, Epigenetic	
	Type:	I05: Polymetallic veins Ag-Pb-Zn+/-Au	
	Dimension:	240x5x0 metres	Strike/Dip: 030/70E
	Comments:	Barnes zone.	

Host Rock

Dominant Host Rock:	Plutonic		
Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Triassic	Nicola	Hedley	-----
Upper Triassic	Nicola	Stemwinder Mountain	-----
Middle Jurassic	-----	-----	Cahill Creek Pluton
Isotopic Age	Dating Method	Material Dated	
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-----	-----	-----	
168 Ma	Uranium/Lead	Zircon	
Lithology:	Biotite Granodiorite, Argillite, Siltstone, Limestone		
Comments:	Shear zones hosted in a northwest-trending tongue of Cahill Creek granodiorite cutting Nicola Group argillite, siltstone and limestone.		

Geological Setting

Tectonic Belt:	Intermontane	Physiographic Area:	Thompson Plateau
Terrane:	Plutonic Rocks, Quesnel		

Inventory

No inventory data

Capsule Geology

The Mission prospect is located on a south-facing slope at the headwaters of Jamieson Creek, 4 kilometres southwest of Hedley.

An elongate mass of medium-grained biotite granodiorite of the Middle Jurassic Cahill Creek pluton extends northwest from the main intrusive body into argillite, siltstone and limestone of the Upper Triassic Hedley and Stemwinder Mountain formations (Nicola Group). The granodiorite is cut by a number of shear zones commonly striking at 030 and 060 degrees. Significant mineralization is contained along three principle shear zones, the Barnes, Walker and Winkler zones. The Barnes zone strikes 030 degrees and dips 70 degrees southeast. The zone has been traced for 240 metres and is between 3 and 5 metres wide. The Walker and Winkler zones extend southwest from the Barnes zone, both striking 060 degrees for 90 and 140 metres respectively, and dipping 80 degrees northwest and 85 degrees southeast respectively.

The granodiorite is altered in the shear zones to a white granular material comprised of quartz, sericite and orthoclase, with minor chlorite (altered biotite) and traces of epidote and calcite. The zones contain disseminations, bands and lenses of sulphides forming between trace and 40 per cent of the altered granodiorite. The sulphides include pyrite, fine-grained arsenopyrite, dark brown sphalerite and minor tetrahedrite and chalcopyrite. A chip sample taken from the Mission pit (Barnes zone?) assayed 0.17 gram per tonne gold and 32.6 grams per tonne silver across 3.0 metres (Assessment Report 9222, drill hole plan, sample 2). A selected grab sample from the Barnes zone contained 6.9 grams per tonne gold, 686 grams per tonne silver and 10.8 per cent zinc (Minster of Mines Annual Report 1936, page D12, sample 4).

Diamond drilling in the vicinity encountered thin stringers and disseminations of pyrite, arsenopyrite and sphalerite in silicified and propylitized granodiorite, in addition to a number of silver-zinc-bearing quartz veins. One drill core sample analysed 0.31 gram per tonne gold, 40.8 grams per tonne silver and 1.75 per cent zinc over 0.61 metres (Assessment Report 9222, Hole 80-2, 214.5-216.5 feet).

Bibliography

EMPR AR *1936-D11,D12; *1968-218,219
EMPR ASS RPT *3904; *9222; 15630; 16916; 18765
EMPR FIELDWORK 1985, pp. 101-105; 1986, pp. 65-79; 1987, pp. 59-80
EMPR GEM 1970-393; 1972-124
EMPR OF 1987-10; 1988-6
EMPR PF (Austro-Can Explorations Ltd. (1972): Prospectus, Vancouver
Stock Exchange (see 082ENW048); Prospectors Report 1999-14 by Grant Crooker)
GSC MAP 568A; 888A; 889A; 41-1989
GSC MEM *243, p. 78
GSC OF 2167, pp. 59-80
GCNL #12,#64, 1981

EMPR PFD 650170, 600327

Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	2014/11/27	Revised By:	Laura deGroot (LDG)	Field Check:	N