

Geofile 2014-2

Southern Nicola Arc Project 2013: Geochemical data

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Contents

This document outlines the contents of Geofile 2014-2, which includes 2 files:

- Geofile2014-2 SNAP2013GeochemMihalynuk&Logan.pdf* (this document)
- Geofile2014-2 SNAP2013GeochemMihalynuk&Logan.xls* (Excel format workbook containing five data tables (worksheets))

- Sheet 1 ICP-MS analyses of samples, Acme Analytical Laboratories, includes field Station number and Lab number cross reference, and sample locations given in UTM coordinates (NAD 83, UTM zone 10), as published in Mihalynuk et al. (2014)
- Sheet 2 ICP-MS analyses of samples, Acme (raw)
- Sheet 3 INAA analyses of mineralized samples, Actlabs (raw)
- Sheet 4 Actlabs QC, including variance analysis by Alexei Rukhlov
- Sheet 5 ICP-MS data table with headers stripped for import

Download Size:

<i>Geofile2014-2 SNAP2013GeochemMihalynuk&Logan.pdf</i>	0.2 Mb
<i>Geofile2014-2 SNAP2013GeochemMihalynuk&Logan.xls</i>	0.2 Mb

Geofile 2014-2 synopsis

Geofile 2014-2 contains analytical results from samples collected during fieldwork conducted as part of the Southern Nicola Arc Project (SNAP, Mihalynuk et al., 2014; Mihalynuk and Logan 2013a, b), which is a component of the BC Porphyry Deposit Initiative (Hickin et al., 2014) and augments data released as part of Geofile 2013-5 (Mihalynuk and Logan, 2013c). In 2014, SNAP focused on systematic quadrangle mapping of ~1000km² centered on Allison Creek, in the Princeton area. The area is north of the Copper Mountain mine site and includes developed porphyry Cu±Au-Ag prospects with published resources: Miner Mountain (see Mihalynuk and Logan, 2013a), Axe (see Preto, 1979), and Primer (Dillard Lake, see Mihalynuk and Logan, 2013b). For a

province-wide overview of the prolific Late Triassic – Early Jurassic porphyry copper-gold deposit epoch, see Logan and Mihalynuk (2014).

Samples submitted for analysis typically displayed indications of mineralization. Some are from known showings, others are from localities with no sign of having been previously sampled. A broad suite of elements is reported with samples analyzed by Inductively Coupled Mass Spectroscopy (ICP-MS) following Aqua Regia digestion of a 0.5 g sample (procedure 1F04) at Acme Analytical Laboratories (Vancouver) Ltd. (henceforth Acme) and those analyses were augmented with Instrumental Neutron Activation Analyses (INAA, procedure 1D, enhanced) at Activation Laboratories of Ancaster Ontario (henceforth Actlabs). INAA theoretically provides a complete analysis of all components of a sample, including parts that may not be susceptible to acid attack and missed by the ICP-MS technique. Further details of analytical procedures including limitations such as interferences, can be obtained from the company websites.

All samples (except for commercial standards) were prepared at the BC Geological Survey Branch laboratory facilities in Victoria. Samples were reduced to pea-sized fragments in a jaw crusher using steel plates, and then pulped in a chrome steel disk mill. Both pieces of machinery used in the sample preparation are sources of potential Fe and Cr contamination.

References

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