

Appendix A Metadata

Project and Sample Metadata

Metadata Category	OF NFLD/3480
Project Leader's Name	Heather Campbell/Chris Finch/Gregory Sparkes
Province/Territory	Newfoundland and Labrador
Project or Activity Name	Geochemical Reanalysis- Avalon and Burin Peninsulas
Funding Source	GSNL regular budget
Datum for Sample Location Coordinates	NAD27 Geographic and UTM Zone 21
Context of Current Work as it Relates to Earlier or Ongoing Work	Geochemical reanalysis of legacy geochemical database
Supporting Publications	Geological Survey of Newfoundland and Labrador Open Files: Pilot study reanalysis- Open File NFLD/3441 Original Analysis: Open File NFLD/2734, Open File NFLD/3043, Open File NFLD/2869, Open File 1M/0573
Sampling Access Method	Helicopter, Truck, ATV
Sampling Design/Pattern	Till sampling, grid- 1 sample every 4 km ² with 1 km line spacing along road
Sampling Method	Shovel, hand dug pits
Sample Medium/Media Number of samples of each medium	1017 samples (925 till sediment samples + 46 standards, 46 lab duplicates)/ (136 till sediment samples+ 7 standards+ 6 lab duplicates (pilot study))
Sample Density	Variable (1 km ² -4 km ²)
Date Range of Sample Collection	2000-2007

Sample Preparation Metadata

Lab Name	Screening – mesh size	Screening – Wentworth scale grain size	Methodology	Number of Samples Prepared	Published Reference(s) for the Preparation Techniques Used	Commercial Lab Preparation Package Code
Geological Survey of Newfoundland and Labrador (GSNL) Laboratory, St. John's NL	230 mesh for geochemistry	<0.063 mm	<0.063 mm: 2-kg split air-dried and dry-sieved using a stainless steel solderless US standard No. 230 mesh screen	all collected samples prepared	Finch et al., 2018	Actlabs 1G: Hg Cold Vapour FIMS

Geochemical Analysis Metadata

Part 1 of 2

Lab Name	Work Order# or Certificate Name (usually a number)	Date Samples Submitted to Lab	Date Sample Data Reported to GSC	Size Fraction Analysed	Analytical Digestion (if applicable): list each digestion on a separate line	Analytical Method / Aliquot Mass	Name and Abbreviation of Laboratory's Analytical Package
name of lab; city; country	as assigned by the analytical lab	day/month/yr	day/month/yr	e.g. < 0.063 mm	be specific about ratio and types of acids e.g. modified Aqua regia 1:1:1 HCl:HNO ₃ :water	e.g. ICP-ES/0.5 g e.g. INAA/30g	e.g. FA300 – Fire Assay AQ250 – aqua regia LF200 – borate fusion
Geological Survey of Newfoundland and Labrador				< 0.063 mm	Aqua Regia 3HCl:1HNO ₃	ICP-OES	“Major” elements
Geological Survey of Newfoundland and Labrador				< 0.063 mm	Aqua Regia 3HCl:1HNO ₃	ICP-MS	“Trace” Elements
Actlabs, Ancaster Ontario	02698	8-March-2024	21-March-24	< 0.063 mm	Aqua Regia	CV-AAS	Actlabs 1G-Hg Cold Vapour FIMS
Actlabs, Ancaster Ontario	03503	27-March-2024	10-April-24	< 0.063 mm	Aqua Regia	CV-AAS	Actlabs 1G-Hg Cold Vapour FIMS
Actlabs, Ancaster Ontario	03507	27-March-2024	15-April-24	< 0.063 mm	Aqua Regia	CV-AAS	Actlabs 1G-Hg Cold Vapour FIMS
Actlabs, Ancaster Ontario	03508	27-March-2024	19-April-24	< 0.063 mm	Aqua Regia	CV-AAS	Actlabs 1G-Hg Cold Vapour FIMS
Actlabs, Ancaster Ontario	03509	27-March-2024	26-April-24	< 0.063 mm	Aqua Regia	CV-AAS	Actlabs 1G-Hg Cold Vapour FIMS

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Upper and Lower Detection Limits (for each element)	PDF of Price Brochure	Deviations from Methods Described in Lab Brochure	List Different Types of QA/QC Samples Inserted
In Appendix 1 and Table 1 in body of the report for CV-AAS	Brochure title: Actlabs Geochemistry Schedule of Services & Fees 2024 1G-Mercury Cold Vapour FIMS on page 16	No deviations.	GSNL laboratory: OREAS 46, OREAS47, TILL-4
In Appendix 1 and Tables 1 and 2 in body of the report for ICP-MS/ICP-OES	PDF of methods in Analytical methods for chemical analysis of geological materials (Finch et al., 2018)	No deviations	GSNL laboratory: CRM's TILL-1, TILL-2, TILL-3 and TILL-4