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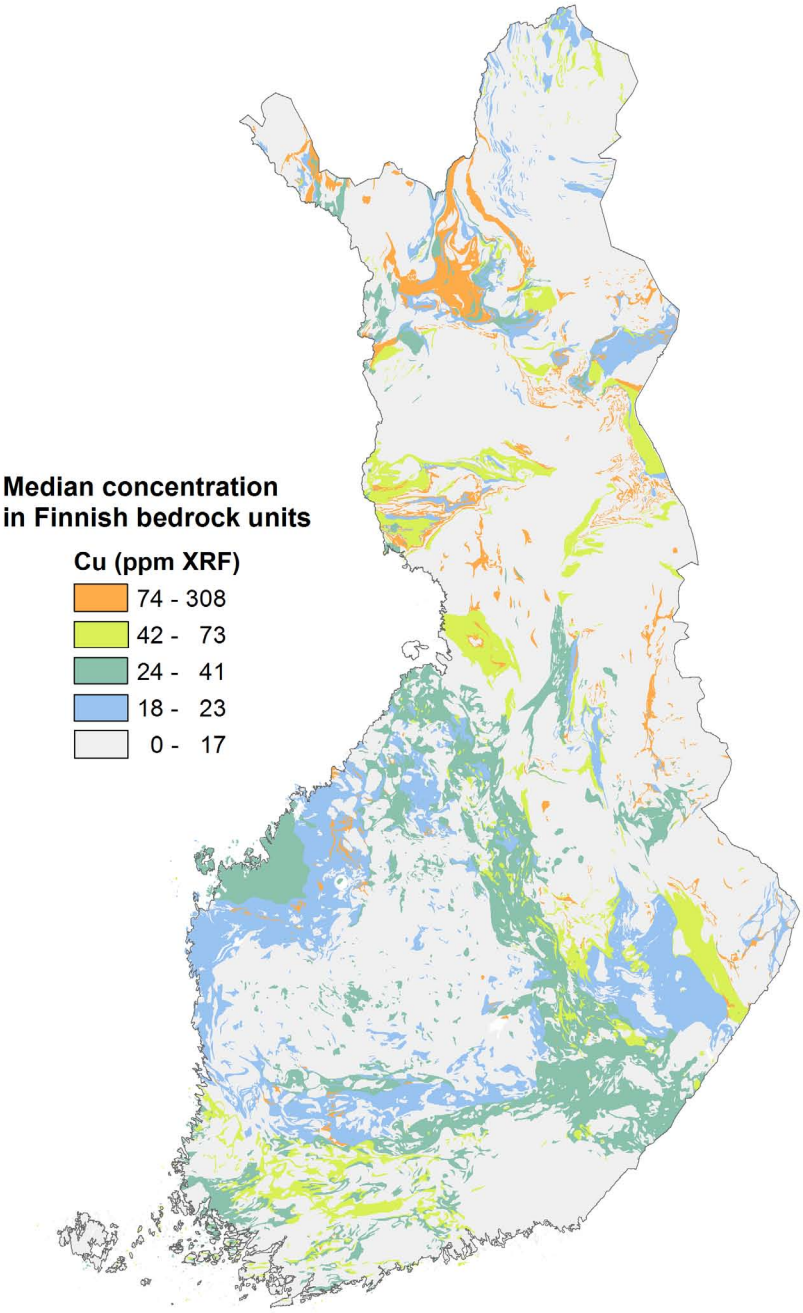

Chemical Characteristics of Finnish Bedrock – 1:1,000,000 Scale Bedrock Map Units

Rasilainen, K., Lahtinen, R. & Bornhorst, T.J.

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CHEMICAL CHARACTERISTICS OF FINNISH BEDROCK – 1:1 000 000 SCALE BEDROCK MAP UNITS

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The Rock Geochemical Database of Finland contains analytically consistent whole-rock geochemical data representing the diversity of rock types from throughout Finland. This Report of Investigation provides average chemical compositions of map units and their regional combinations as presented on the 1:1 000 000 Bedrock Map of Finland. These summary data provide useful background and reference values for a wide variety of research topics such as crustal evolution, metallogeny and the environment.

Key words: (GeoRef Thesaurus, AGI): bedrock, rocks, geochemistry, chemical composition, Precambrian, Finland

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Suomen kalliogeokemian tietokanta sisältää analyyttisesti yhdenmukaista geokemiallista kokokivianalyysitietoa, joka kuvastaa Suomen kallioperän kivilajivaihtelua. Tässä tutkimusraportissa julkaistaan 1:1 000 000 -mittakaavaisen Suomen kallioperäkartan mukaisten yksiköiden ja niiden yhdistelmien kemialliset keskipitoisuudet. Tämä aineisto sopii taustapitoisuus- ja vertailuarvoiksi monenlaisiin esimerkiksi kuoren kehitystä, metallogeniaa ja ympäristöä koskeviin tutkimuksiin.

Asiasanat: (GeoRef Thesaurus, AGI): kallioperä, kivilajit, geokemia, kemiallinen koostumus, prekambri, Suomi

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INTRODUCTION

The purpose of this paper is to summarize the chemical composition of Finnish bedrock using analytically consistent data. The summary data presented here is based on the geochemical data set termed the Rock Geochemical Database of Finland (Geological Survey of Finland 2007) and described by Rasilainen et al. (2007). The database contains whole-rock geochemical data for 6544 bedrock samples from throughout Finland. This data enables the estimation of the chemical composition of major units of Finnish bedrock as presented on the 1:1 000 000 scale Bedrock Map of Finland (Korsman et al. 1997). The estimated average compositions of bedrock units and their combinations are tabulated in the Appendix of this report. The tables are available in Microsoft Excel 2003 format at: http://www.gtk.fi/publ/RGDB/Mapunitsummaries/.

BEDROCK OF FINLAND

Outline of the Finnish bedrock

The bedrock of Finland is composed mainly of Precambrian crystalline rocks and it forms a central part of the Fennoscandian shield. Korsman et al. (1997) divided the bedrock of Finland into the Karelian, Svecofennian and Caledonian domains and a north-eastern area composed of the Lapland Granulite Belt and the Inari Complex. The Karelian domain is composed of Archean rocks, Paleoproterozoic cover and Paleoproterozoic plutonic rocks. The Svecofennian domain consists of Paleoproterozoic rocks. The Caledonian domain includes a small area of Caledonian allochthons in the north-western corner of Finland. The Lapland Granulite Belt is Paleoproterozoic in age and the Inari complex includes both Archean and Paleoproterozoic rocks. Postorogenic small intrusions (c 1.8 Ga) occur in southern and northern Finland and 1.65 – 1.54 Ga rapakivi granites have intruded along the southern and south-western coast. Small areas of Mesoproterozoic and Neoproterozoic metasedimentary rocks are also found along the western coast and some Precambrian and Phanerozoic alkaline rocks and carbonatites occur in eastern Finland. The latest comprehensive description of the bedrock of Finland is found in Lehtinen et al. (2005) and references therein.

Map units on the 1:1 000 000 scale Bedrock Map of Finland

The Finnish bedrock is divided into domains on the 1:1 000 000 scale bedrock map of Finland (Korsman et al. 1997). The domains are divided into complexes, sequences and intrusions and these are further divided into map units (Figure 1 and Table 1). This division is dominantly based on the interpreted tectonic history of the rocks, but many map units are described only with an age interval and rock type. A map unit may consist of a single rock type or many rock types of either similar origin (e.g., intrusive rocks) or different origin. For example, map unit 56 includes carbonate and calc-silicate rocks, black schists, metavolcanic rocks and banded iron formations.

Each sample in the Rock Geochemical Database of Finland is assigned to one of the map units shown on the 1:1 000 000 scale bedrock map. The assignment is based on the location of the sampling point when plotted on the digitized map using GIS software. The scale of the bedrock map prohibits fine details to be shown. Hence, samples that fall within a certain map unit on the map may actually belong to another unit due to simplifications that are a necessary part of creating the 1:1 000 000 scale map. Samples near lithologic contacts or with rock names not suitable for the particular map unit were investigated, and, when appropriate, reassigned to the correct map unit (Rasilainen et al. 2007).

During the compilation of the database, some changes were made in the configuration of map units. These changes are partly based on updated

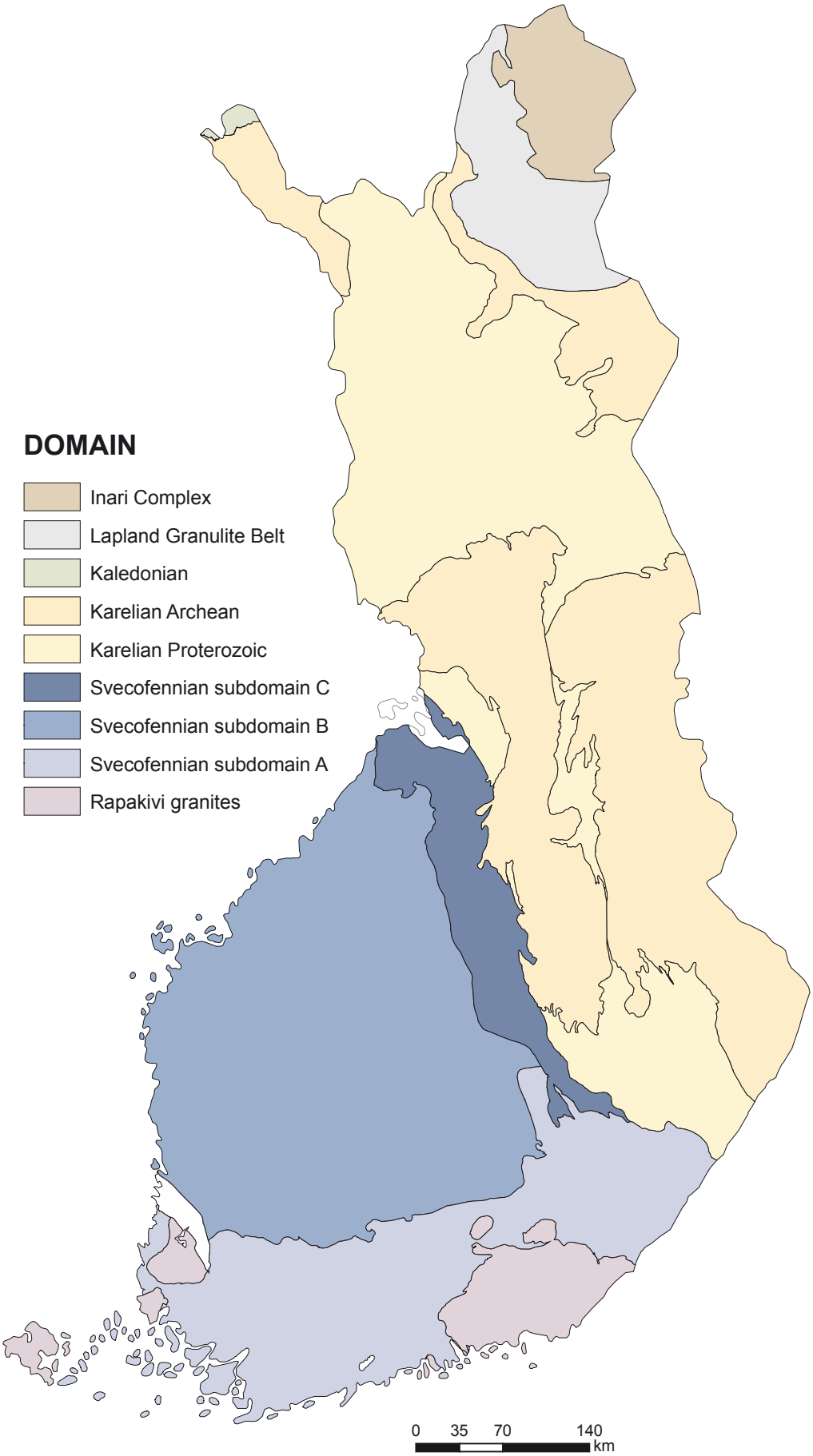

Figure 1. Domains on the 1:1 000 000 scale Bedrock Map of Finland (Korsman et al. 1997). The Rapakivi granites are included here because element concentrations were summarised for them, too.

Table 1. Number of samples in the Rock Geochemical Database of Finland for the map units of the 1:1 000 000 scale bedrock map of Finland.

Domain	Age	Sequence	Map unit	N	Rock types
	Paleozoic	Cambrian sedimentary sequences	1	4	Sandstone and shale
	Neo-proterozoic	Vendian sedimentary sequences	2	0	Siltstone and shale
			3	1	Sandstone and conglomerate
	Meso-proterozoic	Intracratonic sedimentary sequences and intrusions	4	1	Siltstone and shale
			5	18	Olivine diabase
			6	5	Sandstone and conglomerate
		Anorogenic or postorogenic bimodal intrusive complexes	7	3	Quartz porphyry (1.65–1.62 Ga)
			8	95	Rapakivi granite (1.65–1.62 Ga)
			9	49	Rapakivi granite (1.59–1.57 Ga)
			10	9	Gabbro-anorthosite (1.65–1.62 Ga)
			11	1	Gabbro-anorthosite (1.59–1.57 Ga)
	Paleo-proterozoic	Postorogenic intrusions	12	29	Granite; northern Finland (1.80–1.77 Ga)
			13	3	Granite and associated rocks; southern Finland (1.81–1.77 Ga)
SVECOFENNIAN DOMAIN A Accretionary arc complex of southern Finland (1.90–1.82 Ga)	Paleo-proterozoic	Intrusions post-dating the main stage of crustal thickening	14	209	Microcline granite (1.84–1.82 Ga)
		Collision-related intrusions	15SA	236	Granodiorite, tonalite and quartz diorite (1.89–1.87 Ga)
			16SA	72	Gabbro and diorite (1.89–1.87 Ga)
		Supracrustal sequences (1.90–1.88 Ga)	17	2	Quartzite
			18	348	Mica schist and mica gneiss
			19	85	Intermediate and felsic metavolcanic rocks and metasediments
			20	178	Mafic metavolcanic rocks
			21	3	Ultramafic metavolcanic rocks
SVECOFENNIAN DOMAIN B Accretionary arc complex of central and western Finland (1.90–1.87 Ga)	Paleo-proterozoic	Intrusions post-dating main stage of crustal thickening	22	13	Pyroxene granitoid (1.88–1.87 Ga)
			23	26	Granite (1.88–1.87 Ga)
			24SB	205	Granite (~1.88 Ga)
		Collision-related intrusions	15SB	485	Granodiorite, tonalite and quartz diorite (1.89–1.88 Ga)
			16SB	137	Gabbro, diorite and peridotite (1.89–1.88 Ga)
		Supracrustal sequences	25	47	Mica schists, intercalated arkosites and conglomerates
			26	81	Intermediate and felsic metavolcanic rocks with metasedimentary intercalations (1.89–1.88 Ga)
			27	107	Mafic metavolcanic rocks (1.89–1.88 Ga)
			28	319	Mica gneisses and mica schists with black schist intercalations
			281	71	Granitic and granodioritic rocks formed by melting of unit 28 sedimentary rocks
			29	0	Felsic to intermediate metavolcanic and metasedimentary rocks (~1.90 Ga)
			30	41	Mafic metavolcanic rocks (~1.90 Ga)
			31	0	Ultramafic metavolcanic rocks (~1.90 Ga)
SVECOFENNIAN DOMAIN C Primitive arc complex of central Finland (1.93–1.87 Ga)	Paleo-proterozoic	Intrusions post-dating main stage of crustal thickening	24SC	39	Granite (~1.88 Ga)
			32	20	Pyroxene granitoid and mafic dykes (1.885 Ga)
		Collision-related intrusions	15SC	74	Granodiorite, tonalite and quartz diorite (1.89–1.87 Ga)
			16SC	31	Gabbro, diorite and peridotite (1.89–1.87 Ga)
		Supracrustal sequences	33	1	Intermediate and felsic metavolcanic rocks with metasedimentary intercalations (1.90–1.88 Ga)
			34	2	Mafic metavolcanic rocks (1.90–1.88 Ga)
			35	113	Mica gneiss and mica schist with intercalated carbonate rocks
			36	16	Felsic and intermediate metavolcanic rocks (~1.92 Ga)
			37	56	Mafic metavolcanic rocks (~1.92 Ga)
		Pre-collisional intrusions	38	19	Gneissic tonalite and granodiorite (1.93–1.91 Ga)

Continued

knowledge concerning the geology of certain areas and partly they reflect features that are marked as overprints on the bedrock map.

Map unit 28 on the 1:1 000 000 scale bedrock map is composed of mica gneisses and mica schists with black schist intercalations. On the west coast of Finland, in the area between Vaasa and Kokkola, the central part of this unit consists mostly of granitic and granodioritic rocks that have formed by melting of the sedimentary mica gneisses (Sipilä et al. 2008). The area containing the granitoid samples was digitized as a separate map unit, 281, using GIS software.

Table 1. Continued

Domain	Age	Sequence	Map unit	N	Rock types
KARELIAN DOMAIN	Paleo-proterozoic	Intrusions post-dating crustal thickening in northern Finland (~1.8 Ga)	39	277	Granite and granodiorite with gneissic inclusions
		Supracrustal unit	391	42	Mica gneisses and migmatites intruded by unit 39
		Post-collisional foreland sequence, molasse	40	10	Quartzite and conglomerate
		Post-collisional intrusions in southeastern Finland	41	37	Granite and granodiorite (~1.86 Ga)
			24K	16	Granite (~1.88 Ga)
		Early foreland sequences	42	6	Quartzite and conglomerate
			43	3	Mafic and felsic metavolcanic rocks (~1.88 Ga)
		Collision-related intrusions	44	8	Granite (1.89–1.88 Ga)
			45	16	Quartzmonzodiorite, quartz monzonite and granodiorite (1.90-1.86 Ga)
			46	14	Gabbro
		Allochthonous sequences emplaced onto the craton margin	47	116	Mica schists and intercalated black schists
			48	1	Banded iron formations (BIF)
			49	34	Mafic metavolcanic rocks with metasedimentary intercalations
		Ophiolites and related tectonic complexes (1.96–1.95 Ga)	50	6	Gneissic alkaline granite
			51	16	Serpentinites and other rocks of ophiolitic origin
		Intracratonic to craton margin sequences and mafic intrusions	52	19	Gabbro (2.15–2.00 Ga)
			53	173	Mica schist, black schist, conglomerate and arkosite
			54	27	Ultramafic metavolcanic rocks
			55	9	Arkosite, mica schist and conglomerate
			56	78	Carbonate- and calc-silicate rocks, black schists and metavolcanic rocks, BIF
			57	144	Mafic and felsic metavolcanic rocks
			58	71	Quartzite
		Intracratonic sequences and mafic intrusions	59	26	Gabbro (2.2 Ga)
			60	253	Quartzite, arkosite and mica schist
			61	3	Conglomerate, arkosite and diamictite
			62	88	Mafic and ultramafic metavolcanic rocks
		Layered intrusions and other intracratonic igneous complexes (2.5–2.3 Ga)	63	5	Granite (2.45–2.3 Ga)
			64	34	Gabbro and peridotite (2.44 Ga)
			65	14	Intermediate and felsic metavolcanic rocks
	Archean	Syn- to late orogenic intrusive complexes (2.74–2.65 Ga)	66	1	Orthopyroxene diorite
			67	124	Granodiorite, tonalite, quartz diorite, granite and syenite
			68	35	Leucocratic granite and granodiorite
		Greenstone belts (3.0–2.7 Ga)	69	4	Gabbro
			70	7	Metaperidotite, serpentinite and soapstone
			71	12	Ultramafic metavolcanic rocks
			72	133	Mafic metavolcanic rocks
			73	15	Intermediate and felsic metavolcanic rocks
			74	59	Metasedimentary rocks
		Gneiss complexes (3.1–2.6 Ga)	75	53	Paragneiss
			76	735	Tonalite-trondhjemite-granodioritic gneiss and migmatite
LAPLAND GRANULITE BELT AND INARI COMPLEX	Paleo-proterozoic		77	168	Garnet-bearing paragneiss
			78	34	Orthopyroxene diorite
			79	9	Anorthosite
			80	32	Gneissic granite, granite gneiss and hornblende gneiss
			81	24	Foliated gabbro and granodiorite (1.95–1.93 Ga)
			82	38	Paleoproterozoic mafic and felsic metavolcanic rocks
			83	31	Paleoproterozoic metasedimentary rocks
	Archean		84	9	Granite (2.6–2.5 Ga)
			85	58	Gneisses and migmatites
CALEDONIAN DOMAIN	Paleozoic		86	2	Ordovician mafic-ultramafic complex of the Upper Allochthon
			87	4	Metamorphic rocks of the Middle Allochthon
			88	6	Cambrian sedimentary rocks of the Lower Allochthon
	Paleozoic		89	2	Alkaline intrusions: Iivaara (365 Ma)
	Paleozoic – Archean		90	4	Carbonatite: Sokli (365 Ma), Halpanen (1.8 Ga), Laivajoki, Kortejärvi (2.0 Ga), Siilinjärvi (2.61 Ga)
	Mesozoic – Proterozoic		91	1	Impact melt rocks
			92	0	Suevite
	Paleo-proterozoic		–	98	Diabase dykes (2.50 – 1.97 Ga)

N: Number of samples in the Rock Geochemical Database of Finland

Map unit 39 on the 1:1 000 000 scale bedrock map is composed of granite and granodiorite with gneissic inclusions. Mica gneisses occur along the margins of the large granitic area composed of this unit north of Rovaniemi in northern Finland. Within this area, the small tracts defined by the mica gneiss samples were separated as map unit 391 using GIS software.

Fourteen granitic samples in north-western Lapland plotting on or near the Archean gneissic map unit 76 or the granitic map unit 84 on the bedrock map were reclassified as belonging to map unit 39 based on the data in Koistinen et al. (2001).

The area covered by each map unit on the 1:1 000 000 scale bedrock map was measured using GIS software. Diabase dykes are expressed on the 1:1 000 000 scale bedrock map as line features and for this reason their surface area could not be calculated from the map. The area covered by diabase dykes was estimated based on studies at two tracts within the Archean bedrock in eastern Finland, at Romuvaara and Veitsivaara. The detailed bedrock maps covering about 26 km^2 at Romuvaara (Saksa et al. 1992) and 30 km^2 at Veitsivaara (Saksa et al. 1993) were digitized and the area of diabases was calculated using GIS software. Diabase dykes covered 4.7 % of the map area at Romuvaara and 5.3 % at Veitsivaara (H. Salmirinne, pers. comm. 2006). Based on these figures, diabase dykes were estimated to cover five percent of the surface area of the Archean bedrock in Finland. Consequently, the estimated area covered by each Archean map unit (units 66–76) was decreased by five percent to acquire the area covered by Archean rocks only.

CHEMICAL CONCENTRATION OF BEDROCK MAP UNITS

The map units were used as the smallest entities when estimating the average concentrations of elements in the Finnish bedrock. A stratified sampling procedure was used to collect samples for the Rock Geochemical Database of Finland, rather than a systematic randomized grid (Rasilainen et al. 2007). This ensured that the diversity of rocks types is well represented in the database, but the number of samples for a particular rock type does not represent the map area covered by that rock type. The sampling procedure applied for a particular map unit at the scale of 1:1 000 000 was internally consistent. Thus, using average concentrations for map units is an appropriate approach to study the geographic variation of element concentrations throughout Finland.

The samples in the Rock Geochemical Database of Finland were analyzed by several different methods (Rasilainen et al. 2007). In the following tables, both total and partial element concentration data are reported. Total element content in samples is provided by X-ray fluorescence spectroscopy (XRF) for major elements and some trace elements and by inductively coupled plasma mass spectrometry (ICP-MS) for trace elements. In contrast, inductively coupled plasma atomic emission spectrometry (ICP-AES) using aqua regia leach for trace elements and graphite furnace atomic absorption spectrometry (GFAAS) for Au, Pd and some semi-metals provide partial compositions depending on the solubility of the host minerals for the elements.

Chemical concentration summaries for the elements are reported for each map unit on the 1:1 000 000 Bedrock Map of Finland for which at least five samples exist in the database. The database contains less than five samples for 24 different map units, which occur as small isolated areas and altogether cover about 0.7 percent of the area of Finland (Table 2). For these units, chemical concentrations of elements are not given. The Caledonian rocks covering a small area at north-westernmost Finland (map units 86 – 88) have been excluded due to the small number of available samples.

The summary tables include the minimum and maximum concentration, the arithmetic mean concentration and its standard deviation, and several percentile values for each map unit and several combinations of map units (Tables 3 – 79). The 50th percentile represents the median, which is a nonparametric estimator of the central tendency. Confidence intervals for the means are not given because the standard statistical confidence interval of the mean assumes that the individual values have no precision error. Rasilainen et al. (2007) give estimates of analytical precision for individual elemental determinations. These estimates should be considered when evaluating the summary statistics. A frequency histogram of weight percent SiO_2 in each table gives an indication of the diversity of rock types within the map units. The geographic area of the map unit and its relative area as percent of Finnish bedrock are also given.

The lowest reliable concentration obtained by the analytical technique has been rigorously determined for each element (Rasilainen et al. 2007). These data and the percentage of observations below the lowest reliable concentration are provided for each map unit. For most of the elements, there are at least some samples in the database with concentrations that are below the lowest reliable concentration. These censored data can cause errors in the estimation of the mean concentrations if not properly handled. The

Table 2. Map units for which element concentrations are not reported.

Map unit	Number of samples	Area covered km²	Area covered % of Finland	Map unit	Number of samples	Area covered km²	Area covered % of Finland
1	4	118.7	0.04	43	3	48.7	0.01
2	0	220.9	0.07	48	1	160.5	0.05
3	1	72.4	0.02	61	3	125.0	0.04
4	1	650.9	0.19	66	1	85.9	0.03
7	3	8.2	0.00	69	4	17.0	0.01
11	1	4.7	0.00	86	2	13.8	0.00
13	3	33.5	0.01	87	4	158.8	0.05
17	2	35.3	0.01	88	6	202.9	0.06
21	3	26.1	0.01	89	2	16.8	0.00
29	0	255.5	0.08	90	4	61.0	0.02
31	0	0.9	0.00	91	1	20.5	0.01
33	1	42.1	0.01	92	0	91.2	0.03
34	2	104.4	0.03				
				Total	52	2575.7	0.76

mean and standard deviation were estimated using methods developed for censored data (Hesel 2005). When less than 50 % of the concentration values were below the lowest reliable concentration, the mean and standard deviation were estimated by the Kaplan-Meier method (Lopaka & Hesel 2007). When 50 – 80 % of the observations were below the lowest reliable concentration, the ROS method (Lopaka & Hesel 2005) was used. The robust version of ROS was preferred over maximum likelihood estimation (MLE) because the distribution of the data is often poorly defined by the small number of samples available in the data set or the data does not visually follow a normal, lognormal or square-root normal distribution.

The mean and standard deviation were not estimated when more than 50 % of the observations were below the lowest reliable concentration and the total number of observations was between 5 and 9, or when more than 80 % of the observations were below the lowest reliable concentration and the total number of observations was greater than 9. The mean and standard deviation could not be estimated in a few cases, when the number of observations below the lowest reliable concentration was between 50 % and 80 % and all valid observations above the lowest reliable concentration had the same value.

The percentiles were calculated using the Cleveland method (Wilkinson & Engelman 2004) after substituting zero for values below the lowest reliable concentration. When the number of observations was at least 20, the 5th, 10th, 25th, 50th, 75th, 90th and 95th percentiles were estimated. Only the 50th percentile (median) was estimated when the number of observations was smaller than 10. For 10 to 19 observations, the 25th, 50th and 75th percentiles were estimated.

Combinations of map units

Average concentrations of elements were estimated for various combinations of map units. Table 80 contains chemical concentration summaries for all of Finland, the Karelian and Svecofennian Domains, the Lapland-Inari combination and the rapakivi association (see Korsman et al. 1997). The Caledonian Domain was not included due to too few samples. The Svceofennian Domain has been further subvided into arc complexes as shown in Table 81. Within the Karelian Domain the concentrations have been estimated separately for the Archean and Paleoproterozoic bedrock areas, both with and without the Paleoproterozoic diabases (Table 82). Table 83 shows the data for the Lapland Granulite Belt and the Inari Complex.

Because the number of samples per unit area varies between the map units, the mean concentration of an element in a combination of map units can only be reliably estimated by using the volumes of the individual units as weighting factors in the calculation. The surface area of a map unit was used as a surrogate for unit volume. To calculate the weighted arithmetic mean concentrations the following procedure was used.

Let unit combination U consist of m map units:

$$U = \{U_1, \ldots, U_m\}. \quad (1)$$

Let the number of samples in U be:

$$N_U = N_{U_1} + N_{U_2} + \ldots + N_{U_m} = \sum_{i=1}^{m} N_{U_i} \quad (2)$$

and let the area covered by U be:

$$A_U = A_{U_1} + A_{U_2} + ... + A_{U_m} = \sum_{i=1}^{m} A_{U_i} \quad (3)$$

where N_{U_i} and A_{U_i} are the number of samples in map unit U_i and the area covered by it, respectively. The area-weighted mean concentration of an element for unit combination U can be calculated using the mean concentrations for individual map units and weighting them according to the following formula:

$$\overline{C}_U = \sum_{i=1}^{m} \left(\frac{A_{U_i}}{A_U} \overline{C}_{U_i}\right) \quad (4)$$

where $\overline{C}_{U_i}$ is the mean concentration of the element for map unit U_i. The mean concentrations of several elements are below the lowest reliable concentration for many map units (Tables 3 – 79). To enable the use of the estimation methods for the mean developed for censored data, equation (4) can be modified into the equation of the arithmetic mean as follows:

$$\overline{C}_U = \frac{1}{m} \sum_{i=1}^{m} \left(\frac{mA_{U_i}}{A_U} \overline{C}_{U_i}\right) \quad (5)$$

The area-weighted mean concentrations of elements for each map unit combination were calculated according to equation (5), using the methods developed for censored data as described above for individual map units. Most of the map unit combinations contain at least some units for which there are less than five samples in the database (Table 2). For these individual map units, the average element concentrations are not reported in Tables 3 to 79, but they were calculated and used when estimating element mean concentrations for unit combinations.

The mean concentration of an element for an individual map unit was not estimated when a large percentage of observations were below the lowest reliable concentration. These mean concentrations were assumed to be under the lowest reliable concentration when estimating the area-weighted mean concentrations of the elements for the unit combinations.

The Lapland Granulite Belt contains only three map units and the Rapakivi association contains four map units. In spite of the small number of units in these combinations, weighted mean concentrations of elements were calculated for them.

It is not meaningful to calculate percentile values of element concentrations for the map unit combinations. However, area-weighted means of the median concentrations of elements for individual map units are reported for the unit combinations. This is done to help identify strongly positively skewed frequency distributions of some elements for the map unit combinations. In these cases, the mean concentration is much higher than the median concentration.

Significant digits in summary tables

The standard convention in the literature is to list major elements in weight percent with two decimal places except for MnO and P_2O_5, which are often listed with three decimal places. This standard convention is used also in this report even though it is not necessarily justified based on the precision of the analytical determinations.

For the trace elements, the precision at the different analytical ranges as given in Tables 2 – 7 in Rasilainen et al. (2007) was used to estimate the maximum number of digits to the right of the decimal point. Instead of strict cut-offs based on the precision, order of magnitude groupings of <0.1, 0.1 – 1.0, 1.0 – 10, and >10 are used in this report. For each of these intervals, the number of digits shown in the decimal fraction was selected according to the minimum precision value within the interval. Hence, too many digits may be listed for part of an interval to avoid loosing information. Trace elements are never rounded to more than one whole digit regardless of the precision of the analytical determination.

DISCUSSION

The diversity of map units in the 1: 1 000 000 scale Finnish Bedrock Map includes units containing various numbers of different rock types as well as units with a small range of quite similar rock types. Most of the map units contain a mixture of several rock types. Consequently, for most map units, the mean and median concentrations of elements do not accurately represent any specific rock type within the unit. This characteristic of the summary data limits their usage to large-scale general purposes.

The average concentration values given in the summary tables must be used with careful consideration of the precision and accuracy reported for the original data in the Rock Geochemical Database of Finland

(Rasilainen et al. 2007). The worst case of confidence limits for a particular average value can be estimated from the analytical precision of the individual element determinations. A difference between average values that falls within the limits of precision should not be considered statistically significant. The accuracy of individual element determinations, while less rigorously determined than precision, is important for comparison with other data.

The summary tables include both data that represent the total abundance of elements in the bedrock samples and data that represent only a partial extraction of the element content of the samples. Total element concentrations produced by the XRF and ICP-MS analytical methods are required for most geological studies concerned with the genesis and evolution of the bedrock. The ICP-AES method, using aqua regia digestion, results in total or near total dissolution of base metals in sulphides and oxides, and base metals and silicate forming elements in some ferromagnesian minerals (e.g., biotite). Silicate mineral-forming elements and metals in mineral lattices of many other minerals (e.g., feldspars, amphiboles and pyroxenes) are either partially or almost totally undissolved by aqua regia digestion. However, aqua regia digestion has been widely accepted in environmental sciences as giving a good estimate of the maximum potential soluble concentration of toxic elements in soils (Niskavaara 1995). Thus, the summary data of elemental concentrations produced by ICP-AES may provide an upper limit to the quantity of elements that can be dissolved from the bedrock by surface and ground water.

The summaries provided here are regional scale background values that can be the basis for a wide variety of future research. For example, the summaries can be used to investigate the connection between the composition of map units and metallogeny. The data can also be used to study the availability of elements to the surface environment on a crustal scale. Used individually or together the summaries of the chemical composition of map units and the individual data in the Rock Geochemical Database of Finland will result in a better understanding of the bedrock of Finland.

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APPENDIX

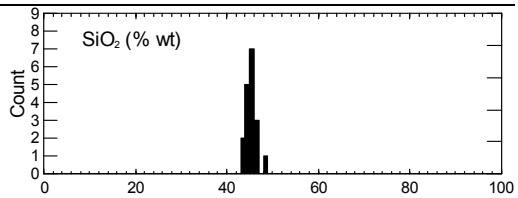
Chemical concentration summary tables for the map units of the 1:1 000 000 Bedrock Map of Finland (Korsman et al. 1997): Tables 3 – 79.

Chemical concentration summary tables for combinations of map units of the 1:1 000 000 Bedrock Map of Finland (Korsman et al. 1997): Tables 80 – 83.

Table 3. Chemical concentration summary statistics for map unit 5.

Map unit	**5**	**Olivine diabase**
Number of samples	18	
Unit area	479.5	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

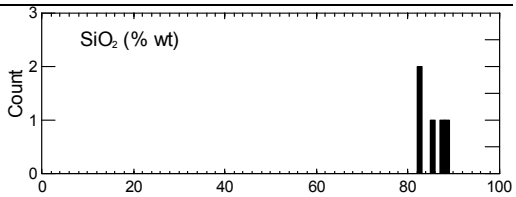


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**45.39**	1.24	43.30	48.70	-	-	44.60	**45.45**	45.80	-	-
TiO_2	XRF	%	**0.005**	0	**2.66**	1.11	1.55	4.86	-	-	1.95	**2.23**	2.65	-	-
Al_2O_3	XRF	%	**0.02**	0	**16.11**	2.29	11.60	19.20	-	-	14.50	**16.65**	17.80	-	-
FeO	XRF	%	**0.01**	0	**12.64**	1.67	10.35	15.84	-	-	11.79	**12.28**	12.78	-	-
MnO	XRF	%	**0.012**	0	**0.200**	0.023	0.160	0.236	-	-	0.185	**0.198**	0.221	-	-
MgO	XRF	%	**0.09**	0	**5.78**	1.09	4.18	7.91	-	-	4.64	**5.96**	6.33	-	-
CaO	XRF	%	**0.004**	0	**8.83**	0.49	8.07	10.30	-	-	8.48	**8.80**	9.03	-	-
Na_2O	XRF	%	**0.05**	0	**3.15**	0.25	2.71	3.70	-	-	3.00	**3.17**	3.30	-	-
K_2O	XRF	%	**0.003**	0	**1.00**	0.27	0.67	1.63	-	-	0.79	**0.98**	1.24	-	-
P_2O_5	XRF	%	**0.024**	0	**0.390**	0.101	0.256	0.616	-	-	0.290	**0.376**	0.459	-	-
C_{tot}	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	61.1	***0.05***	*0.02*	<	0.09	<	<	<	**<**	0.06	-	-
Al	XRF	ppm	**106**	0	**85201**	12104	61364	101568	-	-	76705	**88079**	94162	-	-
Al	ICP-AES	ppm partial	**1100**	0	**26168**	10861	8520	41200	-	-	13300	**29800**	35900	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	66.7	***6***	*7*	<	27	<	<	<	**<**	8	-	-
Ba	XRF	ppm	**21**	0	**480**	115	290	723	-	-	397	**474**	586	-	-
Ba	ICP-AES	ppm partial	**10**	0	**60**	18	39	110	-	-	48	**57**	69	-	-
Bi	GFAAS	ppm partial	**0.04**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ca	XRF	ppm	**29**	0	**63106**	3525	57701	73645	-	-	60632	**62920**	64565	-	-
Ca	ICP-AES	ppm partial	**50**	0	**18116**	5392	9820	25300	-	-	13700	**19350**	23100	-	-
Ce	ICP-MS	ppm	**0.22**	0	**33**	8.1	22	53	-	-	26	**32**	38	-	-
Cl	XRF	ppm	**45**	0	**123**	66	63	343	-	-	88	**104**	146	-	-
Co	ICP-MS	ppm	**2**	0	**55**	9.5	43	87	-	-	52	**53**	56	-	-
Co	ICP-AES	ppm partial	**0.9**	0	**43**	6.3	29	56	-	-	39	**45**	47	-	-
Cr	XRF	ppm	**19**	16.7	**78**	46	<	198	<	<	52	**74**	90	-	-
Cr	ICP-AES	ppm partial	**5**	0	**53**	41	7.0	158	-	-	16	**47**	68	-	-
Cu	XRF	ppm	**17**	0	**88**	42	53	220	-	-	65	**71**	84	-	-
Cu	ICP-AES	ppm partial	**3**	0	**77**	38	40	199	-	-	59	**65**	75	-	-
Dy	ICP-MS	ppm	**0.55**	0	**5.0**	1.2	3.1	6.9	-	-	4.4	**4.7**	5.9	-	-
Er	ICP-MS	ppm	**0.3**	0	**2.8**	0.7	1.8	3.8	-	-	2.4	**2.6**	3.2	-	-
Eu	ICP-MS	ppm	**0.09**	0	**1.8**	0.34	1.3	2.5	-	-	1.5	**1.8**	2.1	-	-
Fe	XRF	ppm	**78**	0	**98189**	13007	80404	123053	-	-	91593	**95431**	99277	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**95228**	7976	82800	108000	-	-	90400	**94500**	104000	-	-
Ga	XRF	ppm	**10**	0	**26**	3	21	31	-	-	24	**26**	28	-	-
Gd	ICP-MS	ppm	**0.5**	0	**5.6**	1.4	3.5	7.8	-	-	4.7	**5.2**	6.6	-	-
Hf	ICP-MS	ppm	**0.12**	0	**3.38**	0.74	2.07	5.15	-	-	2.99	**3.18**	3.97	-	-
Ho	ICP-MS	ppm	**0.09**	0	**1.00**	0.23	0.63	1.4	-	-	0.88	**0.93**	1.2	-	-
K	XRF	ppm	**25**	0	**8333**	2233	5536	13529	-	-	6516	**8126**	10292	-	-
K	ICP-AES	ppm partial	**100**	0	**2295**	670	1310	4140	-	-	1770	**2310**	2460	-	-
La	ICP-MS	ppm	**0.55**	0	**14**	3.5	9.2	23	-	-	11	**14**	16	-	-
La	ICP-AES	ppm partial	**1.3**	0	**11**	3.6	5.8	20	-	-	8.2	**10**	13	-	-
Li	ICP-AES	ppm partial	**3.5**	0	**8.5**	3.1	4.1	14.9	-	-	6.1	**8.2**	11.6	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.38**	0.08	0.24	0.54	-	-	0.32	**0.36**	0.44	-	-
Mg	XRF	ppm	**543**	0	**34829**	6549	25205	47697	-	-	27979	**35909**	38170	-	-
Mg	ICP-AES	ppm partial	**50**	0	**24043**	12503	4500	40500	-	-	9870	**28700**	34400	-	-
Mn	XRF	ppm	**93**	0	**1550**	178	1240	1829	-	-	1434	**1535**	1713	-	-
Mn	ICP-AES	ppm partial	**50**	0	**1010**	116	816	1220	-	-	943	**982**	1080	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**23358**	1833	20108	27454	-	-	22260	**23521**	24486	-	-
Na	ICP-AES	ppm partial	**150**	0	**3549**	1626	942	5490	-	-	1980	**4185**	4790	-	-
Nb	XRF	ppm	**7**	11.1	**10**	3	<	15	<	<	8	**10**	14	-	-
Nb	ICP-MS	ppm	**0.16**	0	**7.2**	1.6	4.7	10	-	-	6.3	**6.7**	8.8	-	-
Nd	ICP-MS	ppm	**0.2**	0	**21**	5.1	14	31	-	-	17	**21**	25	-	-
Ni	XRF	ppm	**14**	0	**74**	39	17	139	-	-	33	**78**	94	-	-
Ni	ICP-AES	ppm partial	**3.5**	0	**58**	33	14	118	-	-	19	**63**	81	-	-
P	XRF	ppm	**105**	0	**1700**	440	1116	2686	-	-	1264	**1639**	2001	-	-
P	ICP-AES	ppm partial	**6**	0	**1506**	393	987	2350	-	-	1080	**1500**	1810	-	-
Pb	XRF	ppm	**14**	0	**19**	3	15	25	-	-	16	**19**	21	-	-
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	94.4	**-**	-	<	5	<	<	<	**<**	<	<	-
Pr	ICP-MS	ppm	**0.74**	0	**4.7**	1.1	3.2	7.0	-	-	3.7	**4.6**	5.4	-	-
Rb	XRF	ppm	**5.5**	0	**20**	10	10	57	-	-	15	**17**	22	-	-
Rb	ICP-MS	ppm	**0.6**	0	**19**	8.7	10	47	-	-	14	**17**	19	-	-
S	XRF	ppm	**70**	0	**844**	282	289	1420	-	-	687	**780**	953	-	-
S	ICP-AES	ppm partial	**14.3**	0	**922**	275	359	1480	-	-	750	**887**	1030	-	-
Sc	ICP-MS	ppm	**2.8**	0	**36**	18	18	85	-	-	27	**29**	41	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**3.1**	0.98	2.1	5.4	-	-	2.4	**2.6**	3.6	-	-
Se	GFAAS	ppm partial	**0.055**	0	**0.12**	0.03	0.06	0.20	-	-	0.10	**0.12**	0.14	-	-
Sm	ICP-MS	ppm	**0.5**	0	**5.1**	1.2	3.1	7.1	-	-	4.1	**4.9**	5.8	-	-
Sr	XRF	ppm	**4**	0	**400**	69	250	489	-	-	332	**416**	455	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**87**	45	17	136	-	-	40	**109**	121	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.44**	0.10	0.28	0.61	-	-	0.37	**0.43**	0.48	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.87**	0.21	0.54	1.2	-	-	0.74	**0.82**	1.0	-	-
Te	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Th	ICP-MS	ppm	**0.13**	0	**1.1**	0.72	0.64	3.9	-	-	0.74	**0.89**	1.1	-	-
Th	ICP-AES	ppm partial	**5.6**	0	**9**	2	6	12	-	-	7	**8**	10	-	-
Ti	XRF	ppm	**30**	0	**15972**	6672	9300	29160	-	-	11700	**13380**	15900	-	-
Ti	ICP-MS	ppm	**10**	0	**15624**	6635	8850	30400	-	-	11700	**13250**	15800	-	-
Ti	ICP-AES	ppm partial	**2**	0	**7455**	5531	2630	19700	-	-	3580	**4750**	8040	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.39**	0.09	0.25	0.57	-	-	0.33	**0.37**	0.46	-	-
U	ICP-MS	ppm	**0.08**	0	**0.25**	0.12	0.13	0.67	-	-	0.17	**0.21**	0.28	-	-
V	XRF	ppm	**6**	0	**377**	188	207	918	-	-	263	**312**	389	-	-
V	ICP-MS	ppm	**2**	0	**312**	166	157	821	-	-	202	**262**	323	-	-
V	ICP-AES	ppm partial	**0.6**	0	**235**	141	101	646	-	-	148	**183**	229	-	-
Y	XRF	ppm	**2.8**	0	**28**	8	17	43	-	-	24	**26**	31	-	-
Y	ICP-MS	ppm	**0.1**	0	**29**	6.9	18	44	-	-	25	**27**	33	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**14**	3.3	8.8	22	-	-	13	**14**	16	-	-
Yb	ICP-MS	ppm	**0.22**	0	**2.5**	0.61	1.6	3.7	-	-	2.2	**2.4**	3.0	-	-
Zn	XRF	ppm	**4**	0	**128**	22	92	167	-	-	118	**122**	147	-	-
Zn	ICP-AES	ppm partial	**2**	0	**95**	16	72	124	-	-	84	**90**	103	-	-
Zr	XRF	ppm	**6**	0	**152**	38	97	245	-	-	125	**142**	174	-	-
Zr	ICP-MS	ppm	**3**	0	**131**	29	90	199	-	-	114	**125**	155	-	-

Table 4. Chemical concentration summary statistics for map unit 6.

Map unit	**6**	**Sandstone and conglomerate**
Number of samples	5	
Unit area	909.2	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

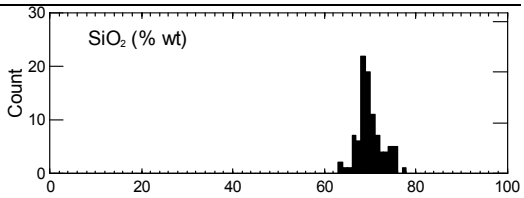


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**85.40**	2.49	82.80	88.30	-	-	-	**85.80**	-	-	-
TiO_2	XRF	%	**0.005**	0	**0.11**	0.06	0.03	0.18	-	-	-	**0.11**	-	-	-
Al_2O_3	XRF	%	**0.02**	0	**7.88**	1.39	6.11	9.30	-	-	-	**8.01**	-	-	-
FeO	XRF	%	**0.01**	0	**0.70**	0.13	0.50	0.85	-	-	-	**0.71**	-	-	-
MnO	XRF	%	**0.012**	0	**0.019**	0.004	0.014	0.025	-	-	-	**0.018**	-	-	-
MgO	XRF	%	**0.09**	0	**0.22**	0.08	0.13	0.33	-	-	-	**0.23**	-	-	-
CaO	XRF	%	**0.004**	0	**0.07**	0.04	0.05	0.13	-	-	-	**0.05**	-	-	-
Na_2O	XRF	%	**0.05**	20	**0.38**	0.40	<	0.97	<	<	-	**0.17**	-	-	-
K_2O	XRF	%	**0.003**	0	**4.11**	0.53	3.59	4.81	-	-	-	**4.13**	-	-	-
P_2O_5	XRF	%	**0.024**	20	**0.032**	0.003	<	0.035	<	<	-	**0.033**	-	-	-
C_{tot}	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Al	XRF	ppm	**106**	0	**41696**	7374	32322	49197	-	-	-	**42373**	-	-	-
Al	ICP-AES	ppm partial	**1100**	0	**2786**	830	1690	3710	-	-	-	**2780**	-	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	80	**-**	-	<	3.4	<	<	<	**<**	<	-	-
B	ICP-AES	ppm partial	**4.5**	60	**-**	-	<	5	<	<	<	**<**	5	-	-
Ba	XRF	ppm	**21**	0	**511**	43	455	555	-	-	-	**497**	-	-	-
Ba	ICP-AES	ppm partial	**10**	0	**30**	11	21	50	-	-	-	**25**	-	-	-
Bi	GFAAS	ppm partial	**0.04**	80	**-**	-	<	0.05	<	<	<	**<**	<	-	-
Ca	XRF	ppm	**29**	0	**529**	272	329	951	-	-	-	**358**	-	-	-
Ca	ICP-AES	ppm partial	**50**	0	**366**	55	310	425	-	-	-	**341**	-	-	-
Ce	ICP-MS	ppm	**0.22**	0	**32**	9.2	18	41	-	-	-	**36**	-	-	-
Cl	XRF	ppm	**45**	0	**61**	4	55	64	-	-	-	**62**	-	-	-
Co	ICP-MS	ppm	**2**	20	**3.8**	3.7	<	10	<	<	-	**2.2**	-	-	-
Co	ICP-AES	ppm partial	**0.9**	40	**1.1**	0.4	<	1.8	<	<	<	**0.9**	-	-	-
Cr	XRF	ppm	**19**	0	**22**	2	19	25	-	-	-	**21**	-	-	-
Cr	ICP-AES	ppm partial	**5**	0	**7.5**	1.8	6.2	11	-	-	-	**6.6**	-	-	-
Cu	XRF	ppm	**17**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Cu	ICP-AES	ppm partial	**3**	20	**4.1**	0.5	<	4.7	<	<	-	**3.8**	-	-	-
Dy	ICP-MS	ppm	**0.55**	0	**1.7**	0.5	0.9	2.1	-	-	-	**1.8**	-	-	-
Er	ICP-MS	ppm	**0.3**	0	**0.8**	0.2	0.5	1.0	-	-	-	**1.0**	-	-	-
Eu	ICP-MS	ppm	**0.09**	0	**0.37**	0.05	0.31	0.43	-	-	-	**0.35**	-	-	-
Fe	XRF	ppm	**78**	0	**5400**	1033	3854	6581	-	-	-	**5509**	-	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**5526**	380	5050	5890	-	-	-	**5600**	-	-	-
Ga	XRF	ppm	**10**	0	**15**	3	11	18	-	-	-	**15**	-	-	-
Gd	ICP-MS	ppm	**0.5**	0	**2.1**	0.5	1.2	2.6	-	-	-	**2.2**	-	-	-
Hf	ICP-MS	ppm	**0.12**	0	**2.63**	0.76	1.67	3.39	-	-	-	**2.84**	-	-	-
Ho	ICP-MS	ppm	**0.09**	0	**0.32**	0.09	0.17	0.38	-	-	-	**0.36**	-	-	-
K	XRF	ppm	**25**	0	**34113**	4382	29797	39923	-	-	-	**34279**	-	-	-
K	ICP-AES	ppm partial	**100**	0	**1842**	444	1280	2400	-	-	-	**1790**	-	-	-
La	ICP-MS	ppm	**0.55**	0	**15**	5.0	9.4	21	-	-	-	**17**	-	-	-
La	ICP-AES	ppm partial	**1.3**	0	**15**	5.2	9.9	22	-	-	-	**16**	-	-	-
Li	ICP-AES	ppm partial	**3.5**	80	**-**	-	<	5.8	<	<	<	**<**	<	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.12**	0.03	0.08	0.15	-	-	-	**0.12**	-	-	-
Mg	XRF	ppm	**543**	0	**1321**	452	760	1960	-	-	-	**1375**	-	-	-
Mg	ICP-AES	ppm partial	**50**	0	**657**	545	195	1580	-	-	-	**481**	-	-	-
Mn	XRF	ppm	**93**	0	**147**	31	109	194	-	-	-	**140**	-	-	-
Mn	ICP-AES	ppm partial	**50**	0	**93**	25	79	137	-	-	-	**82**	-	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	20	**2790**	2931	<	7183	<	<	-	**1239**	-	-	-
Na	ICP-AES	ppm partial	**150**	0	**223**	53	162	287	-	-	-	**219**	-	-	-
Nb	XRF	ppm	**7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Nb	ICP-MS	ppm	**0.16**	0	**2.4**	0.87	1.2	3.5	-	-	-	**2.6**	-	-	-
Nd	ICP-MS	ppm	**0.2**	0	**13**	3.8	8.9	17	-	-	-	**15**	-	-	-
Ni	XRF	ppm	**14**	80	**-**	-	<	15	<	<	<	**<**	<	-	-
Ni	ICP-AES	ppm partial	**3.5**	0	**5.1**	0.9	4.1	6.1	-	-	-	**5.5**	-	-	-
P	XRF	ppm	**105**	0	**140**	13	<	153	<	<	-	**144**	-	-	-
P	ICP-AES	ppm partial	**6**	0	**106**	26	83	144	-	-	-	**91**	-	-	-
Pb	XRF	ppm	**14**	0	**23**	4	16	28	-	-	-	**24**	-	-	-
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**3.7**	1.3	2.2	5.0	-	-	-	**4.3**	-	-	-
Rb	XRF	ppm	**5.5**	0	**145**	38	110	204	-	-	-	**141**	-	-	-
Rb	ICP-MS	ppm	**0.6**	0	**133**	33	97	178	-	-	-	**125**	-	-	-
S	XRF	ppm	**70**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
S	ICP-AES	ppm partial	**14.3**	80	**-**	-	<	18	<	<	<	**<**	<	-	-
Sc	ICP-MS	ppm	**2.8**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Sc	ICP-AES	ppm partial	**0.4**	80	**-**	-	<	0.43	<	<	<	**<**	<	-	-
Se	GFAAS	ppm partial	**0.055**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Sm	ICP-MS	ppm	**0.5**	0	**2.5**	0.69	1.6	3.1	-	-	-	**2.9**	-	-	-
Sr	XRF	ppm	**4**	0	**81**	39	45	138	-	-	-	**75**	-	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**3.6**	0.8	2.7	4.5	-	-	-	**3.8**	-	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.34**	0.15	0.10	0.48	-	-	-	**0.41**	-	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.32**	0.09	0.17	0.39	-	-	-	**0.36**	-	-	-
Te	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Th	ICP-MS	ppm	**0.13**	0	**8.7**	3.9	3.2	12	-	-	-	**11**	-	-	-
Th	ICP-AES	ppm partial	**5.6**	20	**12**	4	<	18	<	<	-	**12**	-	-	-
Ti	XRF	ppm	**30**	0	**684**	342	198	1068	-	-	-	**636**	-	-	-
Ti	ICP-MS	ppm	**10**	0	**587**	260	212	907	-	-	-	**565**	-	-	-
Ti	ICP-AES	ppm partial	**2**	0	**41**	15	17	56	-	-	-	**45**	-	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.13**	0.04	0.06	0.15	-	-	-	**0.14**	-	-	-
U	ICP-MS	ppm	**0.08**	0	**2.01**	0.86	0.84	2.92	-	-	-	**2.17**	-	-	-
V	XRF	ppm	**6**	20	**15**	4	<	19	<	<	-	**13**	-	-	-
V	ICP-MS	ppm	**2**	0	**4.7**	1.6	2.3	6.5	-	-	-	**4.3**	-	-	-
V	ICP-AES	ppm partial	**0.6**	0	**1.9**	0.9	0.9	2.9	-	-	-	**1.6**	-	-	-
Y	XRF	ppm	**2.8**	0	**11**	4	4	15	-	-	-	**12**	-	-	-
Y	ICP-MS	ppm	**0.1**	0	**9.2**	2.5	5.3	11	-	-	-	**10**	-	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**5.5**	1.9	3.3	7.4	-	-	-	**6.4**	-	-	-
Yb	ICP-MS	ppm	**0.22**	0	**0.84**	0.25	0.43	1.1	-	-	-	**0.93**	-	-	-
Zn	XRF	ppm	**4**	0	**11**	2	10	14	-	-	-	**11**	-	-	-
Zn	ICP-AES	ppm partial	**2**	60	**-**	-	<	3.6	<	<	<	**<**	3.3	-	-
Zr	XRF	ppm	**6**	0	**98**	31	51	127	-	-	-	**114**	-	-	-
Zr	ICP-MS	ppm	**3**	0	**91**	29	58	118	-	-	-	**105**	-	-	-

Table 5. Chemical concentration summary statistics for map unit 8.

Map unit	**8**	**Rapakivi granite (1.65 - 1.62 Ga)**
Number of samples	95	
Unit area	9523.8	km^2
Percent of bedrock	2.8	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

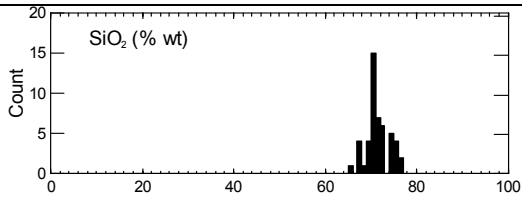


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**69.90**	2.75	63.20	77.00	66.15	66.70	68.38	**69.40**	71.48	74.40	75.38
TiO_2	XRF	%	**0.005**	0	**0.46**	0.20	0.01	1.12	0.19	0.22	0.30	**0.49**	0.55	0.72	0.80
Al_2O_3	XRF	%	**0.02**	0	**13.37**	0.75	11.10	15.70	11.93	12.30	13.00	**13.40**	13.88	14.10	14.30
FeO	XRF	%	**0.01**	0	**3.44**	1.15	0.84	7.25	1.72	1.95	2.51	**3.58**	3.92	4.70	5.43
MnO	XRF	%	**0.012**	0	**0.055**	0.018	0.021	0.113	0.026	0.030	0.041	**0.056**	0.064	0.075	0.085
MgO	XRF	%	**0.09**	4.2	**0.29**	0.16	<	0.84	0.09	0.11	0.19	**0.27**	0.37	0.48	0.63
CaO	XRF	%	**0.004**	0	**1.74**	0.59	0.66	3.56	0.81	0.93	1.25	**1.81**	2.02	2.52	2.63
Na_2O	XRF	%	**0.05**	0	**2.90**	0.21	2.36	3.57	2.51	2.58	2.80	**2.93**	3.03	3.12	3.18
K_2O	XRF	%	**0.003**	0	**5.43**	0.42	3.57	6.44	4.69	4.87	5.26	**5.47**	5.66	5.83	5.97
P_2O_5	XRF	%	**0.024**	8.4	**0.123**	0.080	<	0.479	<	0.030	0.055	**0.131**	0.147	0.215	0.253
C_{tot}	Leco	%	**0.05**	98.9	**-**	-	<	0.10	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	97.9	**-**	-	<	0.05	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	2.1	**0.23**	0.17	<	1.5	0.10	0.13	0.16	**0.19**	0.25	0.40	0.43
Al	XRF	ppm	**106**	0	**70711**	3957	58719	83053	63083	65067	68770	**70886**	73399	74589	75647
Al	ICP-AES	ppm partial	**1100**	0	**6871**	1471	2490	11100	4813	5220	5925	**6580**	7820	9060	9583
As	GFAAS	ppm partial	**3**	76.8	***2.0***	*2.2*	<	14	<	<	<	**<**	<	4.2	5.5
Au	GFAAS	ppb partial	**2.5**	98.9	**-**	-	<	3.1	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	81.1	**-**	-	<	7	<	<	<	**<**	<	5	5
Ba	XRF	ppm	**21**	1.1	**1016**	339	<	2080	385	545	875	**1040**	1170	1350	1578
Ba	ICP-AES	ppm partial	**10**	1.1	**70**	26	<	179	30	44	56	**69**	81	92	114
Bi	GFAAS	ppm partial	**0.04**	5.3	**0.22**	0.30	<	2.7	<	0.05	0.09	**0.16**	0.23	0.33	0.60
Ca	XRF	ppm	**29**	0	**12455**	4233	4733	25454	5820	6635	8902	**12942**	14429	18018	18819
Ca	ICP-AES	ppm partial	**50**	0	**5239**	1359	1990	11600	3058	3630	4478	**5170**	5890	6580	7455
Ce	ICP-MS	ppm	**0.22**	0	**200**	73	102	554	142	145	159	**177**	211	291	350
Cl	XRF	ppm	**45**	0	**387**	107	55	727	195	250	350	**393**	450	517	552
Co	ICP-MS	ppm	**2**	26.3	**3.7**	2.0	<	11	<	<	<	**3.2**	4.4	6.7	7.8
Co	ICP-AES	ppm partial	**0.9**	5.3	**3.0**	1.4	<	6.9	<	1.3	1.8	**3.0**	3.7	4.5	6.0
Cr	XRF	ppm	**19**	72.6	***18***	*2*	<	24	<	<	<	**<**	19	21	22
Cr	ICP-AES	ppm partial	**5**	77.9	***3.7***	*2.1*	<	16	<	<	<	**<**	<	6.0	6.6
Cu	XRF	ppm	**17**	98.9	**-**	-	<	24	<	<	<	**<**	<	<	<
Cu	ICP-AES	ppm partial	**3**	14.7	**7.6**	3.8	<	31	<	<	5.2	**7.9**	9.5	11	12
Dy	ICP-MS	ppm	**0.55**	0	**12**	3.0	6.6	23	7.9	9.5	10	**12**	13	16	20
Er	ICP-MS	ppm	**0.3**	0	**7.0**	1.9	3.7	17	4.6	5.5	6.0	**6.7**	7.3	9.4	10
Eu	ICP-MS	ppm	**0.09**	1.1	**2.0**	0.74	<	5.2	1.0	1.2	1.8	**2.1**	2.3	2.6	2.8
Fe	XRF	ppm	**78**	0	**26713**	8920	6519	56348	13372	15175	19526	**27824**	30466	36496	42214
Fe	ICP-AES	ppm partial	**2300**	0	**25731**	5810	9280	45900	17325	18700	22075	**25400**	28775	33500	35950
Ga	XRF	ppm	**10**	0	**32**	4	25	62	27	29	30	**32**	35	36	37
Gd	ICP-MS	ppm	**0.5**	0	**14.3**	3.9	7.9	32.3	10.3	11.3	12.4	**13.6**	14.9	17.7	20.5
Hf	ICP-MS	ppm	**0.12**	0	**11.7**	2.18	4.14	15.8	8.00	8.56	10.4	**11.8**	13.1	14.6	15.1
Ho	ICP-MS	ppm	**0.09**	0	**2.4**	0.59	1.3	4.7	1.6	1.9	2.1	**2.3**	2.5	3.1	3.7
K	XRF	ppm	**25**	0	**45052**	3453	29631	53452	38886	40421	43683	**45401**	46953	48389	49534
K	ICP-AES	ppm partial	**100**	0	**4012**	1119	1530	7950	2078	2720	3258	**3900**	4740	5500	5988
La	ICP-MS	ppm	**0.55**	0	**100**	38	51	288	66	70	79	**88**	109	149	172
La	ICP-AES	ppm partial	**1.3**	0	**89**	45	44	315	50	54	64	**74**	99	144	178
Li	ICP-AES	ppm partial	**3.5**	1.1	**29.9**	16.6	<	153	15.0	17.6	22.3	**27.7**	33.2	42.0	48.6
Lu	ICP-MS	ppm	**0.03**	0	**1.01**	0.69	0.43	7.26	0.60	0.76	0.82	**0.93**	1.01	1.21	1.38
Mg	XRF	ppm	**543**	4.2	**1761**	935	<	5071	561	651	1116	**1616**	2225	2888	3817
Mg	ICP-AES	ppm partial	**50**	0	**1491**	660	100	3740	731	807	1095	**1310**	1850	2390	2820
Mn	XRF	ppm	**93**	0	**426**	140	163	876	202	233	318	**434**	496	581	659
Mn	ICP-AES	ppm partial	**50**	0	**284**	65	161	501	181	206	242	**283**	321	351	393
Mo	XRF	ppm	**2.6**	95.8	**-**	-	<	7	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	72.6	***2***	*1*	<	8	<	<	<	**<**	3	3	4
Na	XRF	ppm	**371**	0	**21511**	1551	17511	26489	18624	19144	20798	**21741**	22460	23150	23596
Na	ICP-AES	ppm partial	**150**	0	**917**	206	407	1510	551	675	790	**913**	1060	1150	1205
Nb	XRF	ppm	**7**	0	**32**	10	11	81	22	23	27	**30**	33	40	49
Nb	ICP-MS	ppm	**0.16**	0	**27**	7.9	11	66	19	21	23	**26**	29	34	42
Nd	ICP-MS	ppm	**0.2**	0	**84**	29	45	216	62	65	71	**77**	85	111	136
Ni	XRF	ppm	**14**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ni	ICP-AES	ppm partial	**3.5**	66.3	***3.1***	*0.9*	<	6.5	<	<	<	**<**	3.6	4.3	4.7
P	XRF	ppm	**105**	0	**536**	349	<	2088	<	131	240	**571**	641	937	1103
P	ICP-AES	ppm partial	**6**	0	**500**	342	28	1880	65	115	216	**527**	621	910	1053
Pb	XRF	ppm	**14**	0	**54**	10	32	107	41	44	49	**53**	57	63	69
Pb	ICP-AES	ppm partial	**8.7**	17.9	**14**	6	<	41	<	<	10	**12**	17	22	27
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**23.3**	8.1	12.0	63.2	16.9	17.4	18.9	**20.9**	24.1	32.5	38.8
Rb	XRF	ppm	**5.5**	0	**253**	87	104	882	154	189	214	**239**	270	334	364
Rb	ICP-MS	ppm	**0.6**	0	**243**	86	103	861	149	181	207	**230**	251	315	359
S	XRF	ppm	**70**	65.3	***92***	*72*	<	294	<	<	<	**<**	115	218	258
S	ICP-AES	ppm partial	**14.3**	3.2	**125**	107	<	436	17	19	35	**82**	193	285	325
Sc	ICP-MS	ppm	**2.8**	3.2	**8.2**	3.1	<	18	3.7	4.5	5.7	**8.6**	9.9	12	14
Sc	ICP-AES	ppm partial	**0.4**	0	**4.1**	1.0	1.3	8.5	2.4	2.8	3.5	**4.1**	4.6	5.1	5.6
Se	GFAAS	ppm partial	**0.055**	95.8	**-**	-	<	0.10	<	<	<	**<**	<	<	<
Sm	ICP-MS	ppm	**0.5**	0	**15**	4.5	8.2	36	12	12	13	**14**	16	20	23
Sr	XRF	ppm	**4**	0	**138**	49	12	333	52	74	115	**137**	166	182	219
Sr	ICP-AES	ppm partial	**1.2**	0	**8.4**	3.0	3.5	26	5.2	5.7	6.6	**8.0**	9.4	11	13
Ta	ICP-MS	ppm	**0.06**	0	**1.9**	1.8	0.40	19	1.00	1.3	1.5	**1.6**	1.9	2.2	2.5
Tb	ICP-MS	ppm	**0.08**	0	**2.2**	0.57	1.2	4.7	1.5	1.7	1.9	**2.1**	2.3	2.7	3.4
Te	GFAAS	ppb partial	**5**	83.2	**-**	-	<	13	<	<	<	**<**	<	6	10
Th	ICP-MS	ppm	**0.13**	0	**24**	11	8.4	80	12	14	18	**21**	29	38	47
Th	ICP-AES	ppm partial	**5.6**	0	**37**	15	16	106	20	22	26	**34**	46	54	65
Ti	XRF	ppm	**30**	0	**2784**	1212	36	6720	1158	1314	1800	**2934**	3306	4332	4776
Ti	ICP-MS	ppm	**10**	0	**2596**	1132	48	6300	1088	1290	1638	**2670**	3120	3940	4295
Ti	ICP-AES	ppm partial	**2**	0	**1062**	374	32	2150	561	640	816	**1030**	1200	1610	1820
Tm	ICP-MS	ppm	**0.03**	0	**1.04**	0.46	0.52	4.72	0.66	0.77	0.86	**0.97**	1.10	1.33	1.53
U	ICP-MS	ppm	**0.08**	0	**5.72**	2.18	1.83	15.7	2.55	3.36	4.20	**5.51**	6.81	8.12	9.49
V	XRF	ppm	**6**	4.2	**23**	13	<	71	6	9	14	**21**	28	33	48
V	ICP-MS	ppm	**2**	16.8	**7.2**	6.4	<	39	<	<	3.1	**5.8**	7.9	14	19
V	ICP-AES	ppm partial	**0.6**	11.6	**5.4**	5.7	<	34	<	<	2.3	**4.3**	5.7	11	16
Y	XRF	ppm	**2.8**	0	**72**	18	35	157	48	57	63	**67**	75	95	111
Y	ICP-MS	ppm	**0.1**	0	**72**	18	39	160	47	56	63	**70**	77	93	108
Y	ICP-AES	ppm partial	**0.15**	0	**47**	17	23	148	30	33	36	**43**	51	72	83
Yb	ICP-MS	ppm	**0.22**	0	**7.0**	4.4	3.2	46	4.2	5.1	5.7	**6.5**	7.2	8.6	9.8
Zn	XRF	ppm	**4**	0	**105**	27	46	177	63	70	84	**108**	118	135	157
Zn	ICP-AES	ppm partial	**2**	0	**76**	21	30	165	45	53	62	**74**	85	97	117
Zr	XRF	ppm	**6**	0	**496**	104	42	724	316	354	444	**512**	560	608	636
Zr	ICP-MS	ppm	**3**	0	**438**	93	52	615	288	323	393	**444**	495	545	578

Table 6. Chemical concentration summary statistics for map unit 9.

Map unit	**9**	**Rapakivi granite (1.59 - 1.57 Ga)**
Number of samples	49	
Unit area	3089.7	km^2
Percent of bedrock	0.9	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

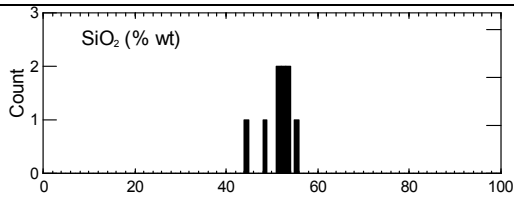


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**71.46**	2.50	65.60	76.20	67.29	68.24	70.10	**70.90**	72.83	75.36	75.91
TiO_2	XRF	%	**0.005**	0	**0.42**	0.16	0.02	0.89	0.16	0.19	0.32	**0.42**	0.51	0.60	0.68
Al_2O_3	XRF	%	**0.02**	0	**12.77**	0.56	11.50	14.00	11.70	11.84	12.50	**12.80**	13.13	13.36	13.61
FeO	XRF	%	**0.01**	0	**3.26**	1.11	1.37	7.08	1.52	1.82	2.52	**3.23**	3.87	4.42	5.01
MnO	XRF	%	**0.012**	0	**0.054**	0.018	0.018	0.095	0.027	0.029	0.041	**0.058**	0.068	0.072	0.085
MgO	XRF	%	**0.09**	10.2	**0.29**	0.14	<	0.67	<	<	0.19	**0.27**	0.38	0.47	0.59
CaO	XRF	%	**0.004**	0	**1.50**	0.50	0.52	3.15	0.59	0.82	1.16	**1.55**	1.80	1.95	2.30
Na_2O	XRF	%	**0.05**	0	**2.78**	0.28	2.14	3.28	2.29	2.42	2.58	**2.73**	3.05	3.13	3.18
K_2O	XRF	%	**0.003**	0	**5.24**	0.38	3.92	5.87	4.46	4.87	5.04	**5.26**	5.54	5.72	5.77
P_2O_5	XRF	%	**0.024**	10.2	**0.100**	0.056	<	0.285	<	<	0.057	**0.102**	0.124	0.169	0.217
C_{tot}	Leco	%	**0.05**	98	**-**	-	<	0.05	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	98	**-**	-	<	0.05	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	0	**0.27**	0.20	0.13	1.5	0.14	0.15	0.18	**0.23**	0.28	0.36	0.59
Al	XRF	ppm	**106**	0	**67559**	2973	60835	74060	61867	62634	66125	**67712**	69431	70674	71970
Al	ICP-AES	ppm partial	**1100**	0	**7257**	2304	2960	14400	3975	4210	5380	**7230**	8785	9760	10935
As	GFAAS	ppm partial	**3**	85.7	**-**	-	<	7.5	<	<	<	**<**	<	3.2	3.9
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	81.6	**-**	-	<	12	<	<	<	**<**	<	6	8
Ba	XRF	ppm	**21**	0	**939**	349	28	1400	286	341	718	**1060**	1200	1296	1312
Ba	ICP-AES	ppm partial	**10**	0	**57**	31	10	131	15	19	32	**47**	84	98	109
Bi	GFAAS	ppm partial	**0.04**	8.2	**0.32**	1.3	<	9.1	<	0.04	0.06	**0.09**	0.20	0.29	0.32
Ca	XRF	ppm	**29**	0	**10739**	3575	3697	22523	4197	5856	8294	**11083**	12834	13928	16459
Ca	ICP-AES	ppm partial	**50**	0	**5394**	1454	661	9820	3071	3980	4563	**5320**	5925	7216	7593
Ce	ICP-MS	ppm	**0.22**	0	**180**	56	84	394	134	136	151	**164**	183	249	312
Cl	XRF	ppm	**45**	0	**327**	171	48	972	84	109	254	**309**	386	547	655
Co	ICP-MS	ppm	**2**	20.4	**4.9**	5.5	<	34	<	<	2.2	**3.3**	4.5	8.1	17
Co	ICP-AES	ppm partial	**0.9**	6.1	**2.8**	1.0	<	6.1	<	1.2	2.0	**2.7**	3.3	3.8	4.5
Cr	XRF	ppm	**19**	61.2	***18***	*2*	<	24	<	<	<	**<**	20	21	22
Cr	ICP-AES	ppm partial	**5**	30.6	**6.0**	1.3	<	12	<	<	<	**5.6**	6.3	7.8	8.4
Cu	XRF	ppm	**17**	81.6	**-**	-	<	33	<	<	<	**<**	<	19	21
Cu	ICP-AES	ppm partial	**3**	4.1	**8.8**	9.7	<	71	3.0	3.7	5.1	**6.9**	9.9	12	14
Dy	ICP-MS	ppm	**0.55**	0	**13**	2.8	8.1	24	10	11	11	**12**	14	17	20
Er	ICP-MS	ppm	**0.3**	0	**7.7**	2.0	4.7	16	5.8	6.0	6.5	**7.3**	7.9	9.5	11
Eu	ICP-MS	ppm	**0.09**	0	**1.6**	0.53	0.12	2.6	0.53	0.85	1.3	**1.8**	2.0	2.1	2.2
Fe	XRF	ppm	**78**	0	**25330**	8594	10629	55027	11818	14165	19596	**25097**	30078	34343	38943
Fe	ICP-AES	ppm partial	**2300**	0	**26082**	7363	12800	49700	15400	16120	21850	**26000**	29875	32940	36080
Ga	XRF	ppm	**10**	0	**31**	6	23	65	25	26	28	**30**	33	35	37
Gd	ICP-MS	ppm	**0.5**	0	**14.3**	3.2	11.2	27.6	11.5	11.8	12.6	**13.4**	14.7	18.6	20.4
Hf	ICP-MS	ppm	**0.12**	0	**12.5**	3.13	5.08	21.7	8.33	8.88	10.9	**12.3**	13.5	16.8	19.0
Ho	ICP-MS	ppm	**0.09**	0	**2.6**	0.61	1.6	5.1	2.0	2.1	2.2	**2.5**	2.7	3.3	4.0
K	XRF	ppm	**25**	0	**43509**	3162	32536	48721	36977	40388	41807	**43658**	45941	47443	47891
K	ICP-AES	ppm partial	**100**	0	**3666**	2020	842	7550	874	1104	1463	**4370**	5173	6152	6383
La	ICP-MS	ppm	**0.55**	0	**89**	30	37	216	61	65	75	**82**	94	116	151
La	ICP-AES	ppm partial	**1.3**	0	**83**	27	28	171	47	57	68	**78**	89	116	144
Li	ICP-AES	ppm partial	**3.5**	0	**32.6**	51.2	7.3	375	9.4	11.6	16.8	**25.2**	32.8	44.1	50.3
Lu	ICP-MS	ppm	**0.03**	0	**1.10**	0.46	0.70	3.70	0.78	0.83	0.89	**1.01**	1.12	1.41	1.59
Mg	XRF	ppm	**543**	10.2	**1767**	838	<	4010	<	<	1122	**1622**	2273	2858	3564
Mg	ICP-AES	ppm partial	**50**	0	**1625**	740	111	3900	542	769	1200	**1600**	1910	2622	2886
Mn	XRF	ppm	**93**	0	**419**	140	140	736	209	225	318	**450**	527	558	659
Mn	ICP-AES	ppm partial	**50**	0	**286**	81	117	621	182	196	247	**282**	315	360	402
Mo	XRF	ppm	**2.6**	91.8	**-**	-	<	13	<	<	<	**<**	<	<	4
Mo	ICP-AES	ppm partial	**2.6**	69.4	***2***	*3*	<	15	<	<	<	**<**	3	3	7
Na	XRF	ppm	**371**	0	**20591**	2100	15879	24338	16977	17956	19166	**20257**	22631	23195	23625
Na	ICP-AES	ppm partial	**150**	0	**825**	189	368	1380	529	583	688	**834**	943	1040	1072
Nb	XRF	ppm	**7**	0	**26**	11	16	75	17	18	21	**24**	27	29	45
Nb	ICP-MS	ppm	**0.16**	0	**22**	9.9	14	70	15	16	18	**20**	22	26	41
Nd	ICP-MS	ppm	**0.2**	0	**80**	21	38	152	62	65	71	**74**	82	110	133
Ni	XRF	ppm	**14**	95.9	**-**	-	<	16	<	<	<	**<**	<	<	<
Ni	ICP-AES	ppm partial	**3.5**	32.7	**3.9**	0.5	<	5.3	<	<	<	**3.7**	4.2	4.6	5.2
P	XRF	ppm	**105**	0	**436**	244	<	1243	<	<	249	**445**	541	737	946
P	ICP-AES	ppm partial	**6**	0	**389**	242	23	1090	44	75	188	**398**	509	691	877
Pb	XRF	ppm	**14**	0	**53**	12	31	107	40	44	47	**50**	56	66	71
Pb	ICP-AES	ppm partial	**8.7**	10.2	**16**	7	<	34	<	<	10	**15**	20	24	29
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**21.3**	6.2	10.5	42.3	16.2	17.1	18.3	**19.3**	21.7	29.0	37.4
Rb	XRF	ppm	**5.5**	0	**249**	115	148	955	179	185	197	**221**	272	314	342
Rb	ICP-MS	ppm	**0.6**	0	**241**	116	141	957	170	179	190	**210**	263	311	330
S	XRF	ppm	**70**	75.5	***60***	*74*	<	420	<	<	<	**<**	<	137	208
S	ICP-AES	ppm partial	**14.3**	18.4	**80**	95	<	463	<	<	17	**47**	95	183	278
Sc	ICP-MS	ppm	**2.8**	8.2	**9.6**	4.5	<	26	<	4.5	7.1	**9.0**	11	14	21
Sc	ICP-AES	ppm partial	**0.4**	0	**5.4**	2.8	1.7	13	2.2	2.5	3.3	**4.4**	7.0	9.0	11
Se	GFAAS	ppm partial	**0.055**	87.8	**-**	-	<	0.09	<	<	<	**<**	<	0.06	0.06
Sm	ICP-MS	ppm	**0.5**	0	**15**	3.6	11	30	12	12	13	**14**	16	20	22
Sr	XRF	ppm	**4**	0	**119**	43	19	247	33	63	97	**125**	138	169	193
Sr	ICP-AES	ppm partial	**1.2**	0	**9.2**	3.7	2.8	21	3.5	4.6	7.0	**8.5**	12	15	16
Ta	ICP-MS	ppm	**0.06**	0	**1.6**	1.7	0.76	13	0.84	0.94	1.0	**1.4**	1.5	1.9	2.4
Tb	ICP-MS	ppm	**0.08**	0	**2.2**	0.48	1.6	4.3	1.8	1.9	2.0	**2.1**	2.3	2.8	3.2
Te	GFAAS	ppb partial	**5**	71.4	***4***	*3*	<	14	<	<	<	**<**	5	8	12
Th	ICP-MS	ppm	**0.13**	0	**25**	10	13	52	13	15	18	**21**	28	40	50
Th	ICP-AES	ppm partial	**5.6**	0	**34**	12	19	72	21	21	28	**30**	40	54	59
Ti	XRF	ppm	**30**	0	**2538**	966	138	5352	984	1146	1908	**2520**	3060	3582	4098
Ti	ICP-MS	ppm	**10**	0	**2327**	887	127	5020	937	1010	1718	**2340**	2775	3274	3840
Ti	ICP-AES	ppm partial	**2**	0	**1165**	444	38	2010	351	749	895	**1200**	1425	1776	1911
Tm	ICP-MS	ppm	**0.03**	0	**1.15**	0.38	0.69	2.96	0.84	0.86	0.96	**1.08**	1.18	1.45	1.73
U	ICP-MS	ppm	**0.08**	0	**5.04**	2.29	2.01	11.2	2.18	2.50	3.30	**4.61**	6.22	7.78	10.2
V	XRF	ppm	**6**	2	**22**	8	<	42	9	13	15	**21**	25	33	37
V	ICP-MS	ppm	**2**	10.2	**7.5**	3.8	<	20	<	<	4.7	**7.4**	9.6	12	14
V	ICP-AES	ppm partial	**0.6**	10.2	**6.4**	3.5	<	18	<	<	4.4	**6.7**	8.5	10	11
Y	XRF	ppm	**2.8**	0	**80**	22	52	189	63	65	68	**74**	85	100	123
Y	ICP-MS	ppm	**0.1**	0	**79**	21	51	183	61	63	67	**74**	84	102	115
Y	ICP-AES	ppm partial	**0.15**	0	**55**	20	6.3	153	35	39	44	**52**	61	73	77
Yb	ICP-MS	ppm	**0.22**	0	**7.6**	3.0	4.8	24	5.5	5.6	6.2	**7.0**	7.7	9.8	11
Zn	XRF	ppm	**4**	0	**114**	45	48	341	65	72	94	**106**	127	146	170
Zn	ICP-AES	ppm partial	**2**	0	**88**	44	35	312	47	50	63	**81**	99	124	154
Zr	XRF	ppm	**6**	0	**489**	137	56	962	260	322	438	**508**	561	602	656
Zr	ICP-MS	ppm	**3**	0	**443**	129	47	864	242	262	378	**456**	524	572	616

Table 7. Chemical concentration summary statistics for map unit 10.

Map unit	**10**	**Gabbro-anorthosite (1.65 - 1.62 Ga)**	
Number of samples	9		
Unit area	123.4	km^2	
Percent of bedrock	0.04	%	

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

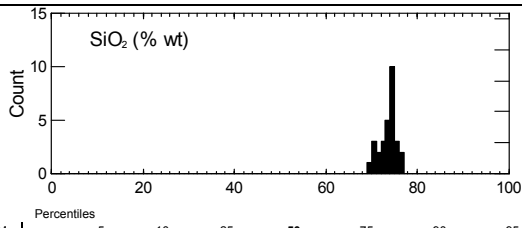


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**51.34**	3.22	44.30	55.70	-	-	-	**52.00**	-	-	-
TiO_2	XRF	%	**0.005**	0	**1.85**	1.06	0.81	4.29	-	-	-	**1.46**	-	-	-
Al_2O_3	XRF	%	**0.02**	0	**20.57**	3.34	13.60	24.50	-	-	-	**21.60**	-	-	-
FeO	XRF	%	**0.01**	0	**7.03**	2.74	3.53	12.06	-	-	-	**6.40**	-	-	-
MnO	XRF	%	**0.012**	0	**0.105**	0.035	0.059	0.168	-	-	-	**0.098**	-	-	-
MgO	XRF	%	**0.09**	0	**2.26**	1.20	1.03	4.87	-	-	-	**1.91**	-	-	-
CaO	XRF	%	**0.004**	0	**7.89**	1.54	4.72	9.69	-	-	-	**8.19**	-	-	-
Na_2O	XRF	%	**0.05**	0	**3.61**	0.48	2.66	4.34	-	-	-	**3.67**	-	-	-
K_2O	XRF	%	**0.003**	0	**1.57**	0.69	1.06	3.30	-	-	-	**1.49**	-	-	-
P_2O_5	XRF	%	**0.024**	0	**0.485**	0.292	0.157	1.020	-	-	-	**0.472**	-	-	-
C_{tot}	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	44.4	**0.09**	0.04	<	0.19	<	<	<	**0.07**	-	-	-
Al	XRF	ppm	**106**	0	**108799**	17669	71944	129605	-	-	-	**114264**	-	-	-
Al	ICP-AES	ppm partial	**1100**	0	**21978**	4700	15000	29800	-	-	-	**23000**	-	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	77.8	**-**	-	<	7	<	<	<	**<**	<	-	-
Ba	XRF	ppm	**21**	0	**584**	159	426	957	-	-	-	**591**	-	-	-
Ba	ICP-AES	ppm partial	**10**	0	**103**	106	17	373	-	-	-	**64**	-	-	-
Bi	GFAAS	ppm partial	**0.04**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ca	XRF	ppm	**29**	0	**56442**	11040	33748	69284	-	-	-	**58559**	-	-	-
Ca	ICP-AES	ppm partial	**50**	0	**14844**	3569	10400	19700	-	-	-	**14900**	-	-	-
Ce	ICP-MS	ppm	**0.22**	0	**63**	40	28	163	-	-	-	**57**	-	-	-
Cl	XRF	ppm	**45**	0	**135**	79	70	338	-	-	-	**108**	-	-	-
Co	ICP-MS	ppm	**2**	0	**23**	11	13	46	-	-	-	**18**	-	-	-
Co	ICP-AES	ppm partial	**0.9**	0	**13**	8.5	3.3	29	-	-	-	**10.0**	-	-	-
Cr	XRF	ppm	**19**	0	**33**	11	21	57	-	-	-	**32**	-	-	-
Cr	ICP-AES	ppm partial	**5**	11.1	**13**	6.2	<	22	<	<	-	**15**	-	-	-
Cu	XRF	ppm	**17**	66.7	**-**	-	<	33	<	<	<	**<**	20	-	-
Cu	ICP-AES	ppm partial	**3**	0	**17**	6.3	9.3	31	-	-	-	**15**	-	-	-
Dy	ICP-MS	ppm	**0.55**	0	**4.6**	2.4	2.2	10	-	-	-	**4.1**	-	-	-
Er	ICP-MS	ppm	**0.3**	0	**2.5**	1.2	1.3	5.4	-	-	-	**2.1**	-	-	-
Eu	ICP-MS	ppm	**0.09**	0	**1.9**	0.48	1.3	3.0	-	-	-	**1.8**	-	-	-
Fe	XRF	ppm	**78**	0	**54592**	21305	27405	93683	-	-	-	**49712**	-	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**31310**	20738	6990	67100	-	-	-	**26000**	-	-	-
Ga	XRF	ppm	**10**	0	**29**	3	25	34	-	-	-	**29**	-	-	-
Gd	ICP-MS	ppm	**0.5**	0	**6.2**	3.4	2.7	14.6	-	-	-	**6.2**	-	-	-
Hf	ICP-MS	ppm	**0.12**	0	**3.61**	2.25	1.79	9.23	-	-	-	**2.68**	-	-	-
Ho	ICP-MS	ppm	**0.09**	0	**0.89**	0.43	0.45	1.9	-	-	-	**0.82**	-	-	-
K	XRF	ppm	**25**	0	**13023**	5686	8798	27390	-	-	-	**12367**	-	-	-
K	ICP-AES	ppm partial	**100**	0	**3237**	3509	473	11600	-	-	-	**1400**	-	-	-
La	ICP-MS	ppm	**0.55**	0	**30**	19	13	78	-	-	-	**27**	-	-	-
La	ICP-AES	ppm partial	**1.3**	0	**21**	13	4.3	52	-	-	-	**20**	-	-	-
Li	ICP-AES	ppm partial	**3.5**	11.1	**11.6**	6.3	<	21.7	<	<	-	**7.7**	-	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.32**	0.15	0.16	0.65	-	-	-	**0.26**	-	-	-
Mg	XRF	ppm	**543**	0	**13652**	7224	6211	29366	-	-	-	**11517**	-	-	-
Mg	ICP-AES	ppm partial	**50**	0	**6066**	4867	896	15800	-	-	-	**4120**	-	-	-
Mn	XRF	ppm	**93**	0	**814**	271	457	1302	-	-	-	**760**	-	-	-
Mn	ICP-AES	ppm partial	**50**	0	**190**	113	85	459	-	-	-	**166**	-	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**26816**	3584	19737	32203	-	-	-	**27231**	-	-	-
Na	ICP-AES	ppm partial	**150**	0	**3163**	1047	1090	4520	-	-	-	**3450**	-	-	-
Nb	XRF	ppm	**7**	0	**18**	8	10	39	-	-	-	**16**	-	-	-
Nb	ICP-MS	ppm	**0.16**	0	**13**	6.4	5.8	29	-	-	-	**11**	-	-	-
Nd	ICP-MS	ppm	**0.2**	0	**32**	19	14	80	-	-	-	**30**	-	-	-
Ni	XRF	ppm	**14**	33.3	**22**	9	<	42	<	<	<	**17**	-	-	-
Ni	ICP-AES	ppm partial	**3.5**	0	**12**	6.0	4.3	22	-	-	-	**11**	-	-	-
P	XRF	ppm	**105**	0	**2115**	1273	685	4447	-	-	-	**2058**	-	-	-
P	ICP-AES	ppm partial	**6**	0	**1922**	1129	583	4240	-	-	-	**1930**	-	-	-
Pb	XRF	ppm	**14**	0	**23**	6	18	37	-	-	-	**22**	-	-	-
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**8.1**	5.0	3.5	20.7	-	-	-	**7.3**	-	-	-
Rb	XRF	ppm	**5.5**	0	**43**	28	20	110	-	-	-	**37**	-	-	-
Rb	ICP-MS	ppm	**0.6**	0	**41**	27	18	105	-	-	-	**30**	-	-	-
S	XRF	ppm	**70**	0	**414**	171	135	675	-	-	-	**422**	-	-	-
S	ICP-AES	ppm partial	**14.3**	0	**505**	197	185	817	-	-	-	**488**	-	-	-
Sc	ICP-MS	ppm	**2.8**	0	**16**	5.5	10	25	-	-	-	**13**	-	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**2.4**	1.8	0.52	6.6	-	-	-	**2.0**	-	-	-
Se	GFAAS	ppm partial	**0.055**	66.7	**-**	-	<	0.06	<	<	<	**<**	0.06	-	-
Sm	ICP-MS	ppm	**0.5**	0	**6.2**	3.4	2.8	15	-	-	-	**6.0**	-	-	-
Sr	XRF	ppm	**4**	0	**548**	127	282	697	-	-	-	**598**	-	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**73**	29	16	118	-	-	-	**75**	-	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.76**	0.34	0.30	1.5	-	-	-	**0.66**	-	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.86**	0.46	0.40	2.0	-	-	-	**0.83**	-	-	-
Te	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Th	ICP-MS	ppm	**0.13**	0	**3.4**	3.2	0.95	12	-	-	-	**2.6**	-	-	-
Th	ICP-AES	ppm partial	**5.6**	66.7	**-**	-	<	22	<	<	<	**<**	8	-	-
Ti	XRF	ppm	**30**	0	**11076**	6342	4884	25740	-	-	-	**8760**	-	-	-
Ti	ICP-MS	ppm	**10**	0	**10643**	6476	4970	26200	-	-	-	**8130**	-	-	-
Ti	ICP-AES	ppm partial	**2**	0	**1822**	1275	519	4130	-	-	-	**1450**	-	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.34**	0.16	0.17	0.71	-	-	-	**0.30**	-	-	-
U	ICP-MS	ppm	**0.08**	0	**0.81**	0.73	0.32	2.65	-	-	-	**0.54**	-	-	-
V	XRF	ppm	**6**	0	**157**	101	89	405	-	-	-	**120**	-	-	-
V	ICP-MS	ppm	**2**	0	**107**	69	50	271	-	-	-	**88**	-	-	-
V	ICP-AES	ppm partial	**0.6**	0	**62**	34	22	127	-	-	-	**53**	-	-	-
Y	XRF	ppm	**2.8**	0	**24**	13	13	57	-	-	-	**22**	-	-	-
Y	ICP-MS	ppm	**0.1**	0	**26**	13	14	56	-	-	-	**25**	-	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**13**	6.1	4.4	24	-	-	-	**13**	-	-	-
Yb	ICP-MS	ppm	**0.22**	0	**2.2**	1.1	1.2	4.6	-	-	-	**1.8**	-	-	-
Zn	XRF	ppm	**4**	0	**113**	42	62	194	-	-	-	**104**	-	-	-
Zn	ICP-AES	ppm partial	**2**	0	**51**	38	9.5	130	-	-	-	**37**	-	-	-
Zr	XRF	ppm	**6**	0	**200**	102	102	441	-	-	-	**179**	-	-	-
Zr	ICP-MS	ppm	**3**	0	**154**	94	81	386	-	-	-	**120**	-	-	-

Table 8. Chemical concentration summary statistics for map unit 12.

Map unit	**12**	**Granite, northern Finland (1.80 - 1.77 Ga)**
Number of samples	29	
Unit area	940.7	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

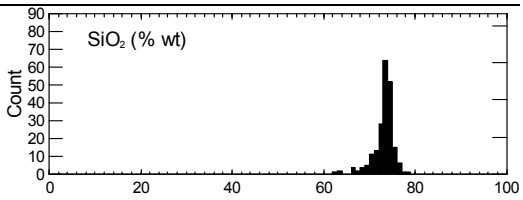


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**73.45**	1.78	69.50	76.20	70.45	70.58	72.55	**74.00**	74.63	75.40	76.01
TiO_2	XRF	%	**0.005**	0	**0.22**	0.13	0.04	0.55	0.04	0.06	0.13	**0.19**	0.32	0.42	0.45
Al_2O_3	XRF	%	**0.02**	0	**13.82**	0.63	12.80	15.20	12.99	13.14	13.38	**13.70**	14.23	14.80	15.11
FeO	XRF	%	**0.01**	0	**1.61**	0.74	0.42	3.26	0.54	0.64	1.20	**1.42**	2.15	2.77	3.06
MnO	XRF	%	**0.012**	0	**0.032**	0.013	0.014	0.077	0.015	0.018	0.023	**0.032**	0.038	0.045	0.047
MgO	XRF	%	**0.09**	10.3	**0.38**	0.24	<	0.79	<	<	0.19	**0.32**	0.59	0.72	0.76
CaO	XRF	%	**0.004**	0	**1.08**	0.38	0.21	1.85	0.62	0.66	0.77	**1.09**	1.37	1.60	1.73
Na_2O	XRF	%	**0.05**	0	**3.88**	0.45	3.23	5.32	3.40	3.44	3.62	**3.76**	4.19	4.44	4.76
K_2O	XRF	%	**0.003**	0	**4.62**	0.58	2.79	5.49	3.78	3.93	4.32	**4.72**	4.99	5.39	5.48
P_2O_5	XRF	%	**0.024**	27.6	**0.066**	0.048	<	0.176	<	<	<	**0.045**	0.105	0.140	0.167
C_{tot}	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	48.3	**0.09**	0.04	<	0.20	<	<	<	**0.06**	0.11	0.14	0.19
Al	XRF	ppm	**106**	0	**73129**	3327	67712	80408	68717	69511	70754	**72473**	75250	78292	79905
Al	ICP-AES	ppm partial	**1100**	0	**4868**	2350	1660	11500	1784	1996	3080	**5000**	5793	7892	10075
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	96.6	**-**	-	<	5	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**721**	468	29	1932	39	44	492	**659**	956	1362	1560
Ba	ICP-AES	ppm partial	**10**	3.4	**42**	28	<	133	11	15	22	**34**	58	78	90
Bi	GFAAS	ppm partial	**0.04**	89.7	**-**	-	<	0.08	<	<	<	**<**	<	0.03	0.08
Ca	XRF	ppm	**29**	0	**7693**	2724	1530	13228	4454	4740	5534	**7794**	9817	11411	12341
Ca	ICP-AES	ppm partial	**50**	0	**2026**	1243	194	5500	563	829	1245	**1840**	2295	4160	4930
Ce	ICP-MS	ppm	**0.22**	0	**123**	70	4.5	299	11	34	71	**116**	155	202	246
Cl	XRF	ppm	**45**	3.4	**101**	49	<	280	46	56	70	**85**	123	164	184
Co	ICP-MS	ppm	**2**	55.2	***3.4***	*1.3*	<	5.9	<	<	<	**<**	4.6	5.4	5.6
Co	ICP-AES	ppm partial	**0.9**	17.2	**3.1**	2.0	<	6.9	<	<	1.4	**2.6**	5.0	5.9	6.3
Cr	XRF	ppm	**19**	65.5	***16***	*10*	<	53	<	<	<	**<**	21	26	30
Cr	ICP-AES	ppm partial	**5**	44.8	**7.3**	3.1	<	14	<	<	<	**5.5**	8.9	13	13
Cu	XRF	ppm	**17**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Cu	ICP-AES	ppm partial	**3**	31	**5.1**	3.0	<	14	<	<	<	**3.6**	6.7	9.7	10
Dy	ICP-MS	ppm	**0.55**	0	**2.7**	1.3	0.7	5.4	0.8	1.1	1.7	**2.6**	3.4	4.7	5.0
Er	ICP-MS	ppm	**0.3**	3.4	**1.4**	0.7	<	2.8	0.3	0.6	0.9	**1.3**	2.0	2.4	2.7
Eu	ICP-MS	ppm	**0.09**	0	**0.67**	0.32	0.11	1.2	0.18	0.23	0.43	**0.61**	0.88	1.2	1.2
Fe	XRF	ppm	**78**	0	**12486**	5758	3256	25307	4211	5004	9301	**11049**	16737	21507	23776
Fe	ICP-AES	ppm partial	**2300**	0	**15261**	6539	4080	29800	6047	6728	11575	**13600**	19800	24800	28565
Ga	XRF	ppm	**10**	0	**28**	4	19	39	21	23	26	**28**	30	33	35
Gd	ICP-MS	ppm	**0.5**	0	**4.3**	2.2	0.9	8.7	1.4	1.5	2.6	**4.0**	5.3	7.6	8.5
Hf	ICP-MS	ppm	**0.12**	0	**5.47**	1.79	3.34	10.1	3.56	3.66	4.31	**4.89**	6.10	8.31	10.0
Ho	ICP-MS	ppm	**0.09**	0	**0.52**	0.25	0.10	1.1	0.13	0.23	0.31	**0.48**	0.67	0.87	0.99
K	XRF	ppm	**25**	0	**38379**	4806	23157	45567	31357	32619	35856	**39176**	41392	44754	45492
K	ICP-AES	ppm partial	**100**	0	**2337**	1732	523	8200	786	825	977	**1930**	3055	4292	6015
La	ICP-MS	ppm	**0.55**	0	**70**	42	1.8	173	5.1	14	44	**66**	85	121	158
La	ICP-AES	ppm partial	**1.3**	3.4	**66**	40	<	164	7.1	14	41	**61**	91	119	149
Li	ICP-AES	ppm partial	**3.5**	10.3	**20.0**	17.9	<	72.9	<	<	8.2	**12.9**	23.5	47.8	63.9
Lu	ICP-MS	ppm	**0.03**	3.4	**0.22**	0.13	<	0.62	0.03	0.07	0.14	**0.22**	0.30	0.36	0.38
Mg	XRF	ppm	**543**	10.3	**2267**	1423	<	4764	<	<	1116	**1905**	3576	4348	4577
Mg	ICP-AES	ppm partial	**50**	0	**2348**	1552	151	5300	249	460	1208	**1770**	3950	4544	4797
Mn	XRF	ppm	**93**	0	**248**	101	109	597	116	140	178	**248**	295	349	364
Mn	ICP-AES	ppm partial	**50**	0	**193**	84	76	413	78	97	129	**167**	246	311	344
Mo	XRF	ppm	**2.6**	96.6	**-**	-	<	3	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**28804**	3339	23967	39474	25235	25495	26823	**27899**	31105	32915	35319
Na	ICP-AES	ppm partial	**150**	0	**554**	93	400	824	400	451	500	**537**	627	651	719
Nb	XRF	ppm	**7**	6.9	**18**	8	<	39	<	9	13	**17**	22	32	37
Nb	ICP-MS	ppm	**0.16**	0	**15**	6.8	3.1	30	3.6	8.5	11	**14**	18	28	28
Nd	ICP-MS	ppm	**0.2**	0	**41**	23	2.3	90	5.3	9.9	23	**38**	56	70	83
Ni	XRF	ppm	**14**	96.6	**-**	-	<	23	<	<	<	**<**	<	<	<
Ni	ICP-AES	ppm partial	**3.5**	20.7	**5.0**	1.8	<	11	<	<	3.6	**4.6**	5.8	7.0	8.5
P	XRF	ppm	**105**	0	**288**	209	<	767	<	<	<	**196**	458	610	728
P	ICP-AES	ppm partial	**6**	0	**248**	210	6.0	722	7.5	14	79	**177**	424	583	636
Pb	XRF	ppm	**14**	0	**41**	11	25	67	26	28	34	**39**	48	58	63
Pb	ICP-AES	ppm partial	**8.7**	31	**13**	4	<	23	<	<	<	**12**	15	19	22
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	3.4	**12.9**	7.3	<	29.7	1.4	3.5	7.4	**11.9**	17.4	22.2	27.1
Rb	XRF	ppm	**5.5**	0	**213**	54	115	342	148	153	172	**197**	251	275	332
Rb	ICP-MS	ppm	**0.6**	0	**201**	53	120	317	136	144	156	**187**	243	268	312
S	XRF	ppm	**70**	93.1	**-**	-	<	210	<	<	<	**<**	<	<	125
S	ICP-AES	ppm partial	**14.3**	65.5	***28***	*67*	<	318	<	<	<	**<**	19	99	163
Sc	ICP-MS	ppm	**2.8**	34.5	**3.7**	1.1	<	6.8	<	<	<	**3.2**	4.1	5.1	6.4
Sc	ICP-AES	ppm partial	**0.4**	0	**2.3**	1.1	0.58	5.2	1.1	1.2	1.4	**2.0**	2.8	4.0	4.5
Se	GFAAS	ppm partial	**0.055**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Sm	ICP-MS	ppm	**0.5**	0	**5.6**	2.9	0.99	11	1.2	1.9	3.3	**5.6**	7.3	10	11
Sr	XRF	ppm	**4**	0	**142**	107	16	474	16	24	48	**126**	208	269	339
Sr	ICP-AES	ppm partial	**1.2**	10.3	**6.6**	5.8	<	31	<	<	2.5	**5.6**	7.3	13	16
Ta	ICP-MS	ppm	**0.06**	0	**1.0**	0.42	0.23	1.8	0.24	0.48	0.83	**1.0**	1.2	1.7	1.8
Tb	ICP-MS	ppm	**0.08**	0	**0.57**	0.28	0.15	1.1	0.18	0.21	0.35	**0.53**	0.76	0.93	1.1
Te	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Th	ICP-MS	ppm	**0.13**	0	**33**	11	10	52	19	21	24	**32**	43	47	51
Th	ICP-AES	ppm partial	**5.6**	0	**42**	13	16	66	24	26	31	**42**	52	59	65
Ti	XRF	ppm	**30**	0	**1338**	792	240	3306	258	336	780	**1140**	1914	2520	2688
Ti	ICP-MS	ppm	**10**	0	**1259**	762	215	3070	245	355	744	**1030**	1773	2500	2643
Ti	ICP-AES	ppm partial	**2**	0	**866**	672	55	2250	61	168	345	**647**	1508	1778	2203
Tm	ICP-MS	ppm	**0.03**	0	**0.22**	0.11	0.04	0.41	0.06	0.08	0.14	**0.20**	0.29	0.39	0.39
U	ICP-MS	ppm	**0.08**	0	**6.39**	6.83	1.78	37.2	1.79	1.99	2.66	**4.47**	7.88	12.1	13.8
V	XRF	ppm	**6**	17.2	**22**	15	<	67	<	<	9	**19**	33	44	46
V	ICP-MS	ppm	**2**	13.8	**13**	9.8	<	41	<	<	5.4	**10**	20	27	30
V	ICP-AES	ppm partial	**0.6**	10.3	**13**	11	<	43	<	<	4.0	**11**	23	29	30
Y	XRF	ppm	**2.8**	0	**19**	8	7	31	7	8	12	**18**	25	30	31
Y	ICP-MS	ppm	**0.1**	0	**17**	7.9	2.9	31	4.1	7.9	11	**16**	22	29	30
Y	ICP-AES	ppm partial	**0.15**	0	**13**	6.0	2.2	24	3.3	6.7	7.8	**13**	17	23	24
Yb	ICP-MS	ppm	**0.22**	0	**1.5**	0.78	0.25	3.5	0.31	0.51	0.93	**1.4**	2.0	2.5	2.6
Zn	XRF	ppm	**4**	0	**33**	20	8	81	9	12	15	**29**	46	61	78
Zn	ICP-AES	ppm partial	**2**	0	**28**	18	5.2	69	6.1	7.8	12	**26**	39	58	66
Zr	XRF	ppm	**6**	0	**216**	97	76	465	80	117	145	**200**	266	369	423
Zr	ICP-MS	ppm	**3**	0	**189**	87	69	402	77	101	135	**163**	243	335	384

Table 9. Chemical concentration summary statistics for map unit 14.

Map unit	14	**Microcline granite (1.84 - 1.82 Ga)**
Number of samples	209	
Unit area	13371.0	km^2
Percent of bedrock	4.0	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

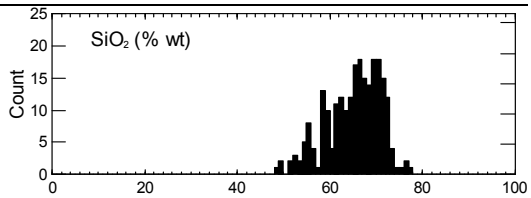


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**73.01**	2.31	62.70	78.00	68.29	70.10	72.50	**73.50**	74.33	75.10	75.51
TiO_2	XRF	%	**0.005**	0	**0.18**	0.15	0.01	0.92	0.01	0.02	0.07	**0.15**	0.24	0.34	0.43
Al_2O_3	XRF	%	**0.02**	0	**14.32**	0.84	11.70	17.30	13.10	13.60	13.88	**14.20**	14.70	15.40	15.81
FeO	XRF	%	**0.01**	0	**1.35**	0.80	0.18	5.48	0.36	0.52	0.81	**1.23**	1.66	2.32	2.97
MnO	XRF	%	**0.012**	12.4	**0.029**	0.022	<	0.181	<	<	0.016	**0.022**	0.037	0.054	0.076
MgO	XRF	%	**0.09**	9.1	**0.40**	0.40	<	2.59	<	0.09	0.18	**0.29**	0.43	0.80	1.20
CaO	XRF	%	**0.004**	0	**1.09**	0.68	0.17	3.98	0.44	0.52	0.66	**0.88**	1.21	2.03	2.59
Na_2O	XRF	%	**0.05**	0	**3.30**	0.69	1.76	5.74	2.34	2.53	2.83	**3.22**	3.62	4.28	4.72
K_2O	XRF	%	**0.003**	0	**5.01**	1.37	1.00	8.32	2.21	3.11	4.22	**5.23**	5.86	6.61	7.01
P_2O_5	XRF	%	**0.024**	2.4	**0.102**	0.069	<	0.352	0.027	0.034	0.054	**0.077**	0.136	0.191	0.243
C_{tot}	Leco	%	**0.05**	94.3	**-**	-	<	0.12	<	<	<	**<**	<	<	0.05
$C_{non\text{-}carb}$	Leco	%	**0.05**	96.2	**-**	-	<	0.05	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	78	***0.04***	*0.04*	<	0.28	<	<	<	**<**	<	0.08	0.11
Al	XRF	ppm	**106**	0	**75769**	4433	61893	91517	69299	71944	73399	**75118**	77763	81466	83608
Al	ICP-AES	ppm partial	**1100**	0	**5939**	3527	1500	23700	2133	2596	3735	**5485**	6875	9789	13000
As	GFAAS	ppm partial	**3**	98.1	**-**	-	<	13	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	98.6	**-**	-	<	4.3	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	79.9	***4***	*1*	<	8	<	<	<	**<**	<	5	6
Ba	XRF	ppm	**21**	0	**479**	408	27	4160	76	141	247	**396**	611	862	1100
Ba	ICP-AES	ppm partial	**10**	8.6	**35**	43	<	353	<	10	15	**23**	36	65	101
Bi	GFAAS	ppm partial	**0.04**	49.3	**0.27**	0.71	<	5.6	<	<	<	**0.04**	0.12	0.59	1.5
Ca	XRF	ppm	**29**	0	**7808**	4876	1223	28457	3153	3682	4740	**6263**	8666	14486	18526
Ca	ICP-AES	ppm partial	**50**	0	**1341**	1077	100	8220	274	348	543	**1090**	1750	2598	3600
Ce	ICP-MS	ppm	**0.22**	0	**74**	59	0.86	375	5.3	8.9	27	**62**	110	149	182
Cl	XRF	ppm	**45**	17.7	**99**	78	<	644	<	<	50	**74**	117	191	236
Co	ICP-MS	ppm	**2**	53.6	***2.7***	*2.4*	<	14	<	<	<	**<**	3.5	5.8	7.6
Co	ICP-AES	ppm partial	**0.9**	20.6	**2.5**	2.3	<	14	<	<	1.0	**1.7**	2.6	5.1	7.5
Cr	XRF	ppm	**19**	48.3	**23**	11	<	98	<	<	<	**19**	21	26	37
Cr	ICP-AES	ppm partial	**5**	50.2	***7.0***	*12*	<	88	<	<	<	**<**	7.1	12	20
Cu	XRF	ppm	**17**	98.1	**-**	-	<	168	<	<	<	**<**	<	<	<
Cu	ICP-AES	ppm partial	**3**	39.2	**5.6**	11	<	153	<	<	<	**3.3**	4.6	7.2	14
Dy	ICP-MS	ppm	**0.55**	3.3	**3.3**	3.2	<	28	0.7	0.9	1.5	**2.5**	3.9	6.1	8.7
Er	ICP-MS	ppm	**0.3**	7.2	**1.5**	2.0	<	15	<	0.3	0.5	**0.9**	1.8	3.2	4.4
Eu	ICP-MS	ppm	**0.09**	4.3	**0.63**	0.39	<	2.2	0.10	0.22	0.39	**0.57**	0.75	1.1	1.3
Fe	XRF	ppm	**78**	0	**10474**	6247	1360	42580	2766	4002	6294	**9580**	12883	18050	23092
Fe	ICP-AES	ppm partial	**2300**	0	**11898**	7499	2630	42900	3275	4335	6090	**10700**	15500	20670	26540
Ga	XRF	ppm	**10**	0	**27**	4	16	45	19	22	24	**27**	30	32	33
Gd	ICP-MS	ppm	**0.5**	2.4	**4.9**	3.6	<	19.4	0.6	0.9	2.3	**4.3**	6.2	9.7	11.8
Hf	ICP-MS	ppm	**0.12**	0	**3.72**	2.21	0.26	11.8	0.81	1.00	1.93	**3.64**	5.12	6.10	7.63
Ho	ICP-MS	ppm	**0.09**	3.3	**0.58**	0.67	<	5.5	0.11	0.15	0.22	**0.37**	0.71	1.1	1.5
K	XRF	ppm	**25**	0	**41616**	11330	8267	69056	18326	25780	35051	**43409**	48638	54863	58191
K	ICP-AES	ppm partial	**100**	0	**3131**	2651	508	15800	861	993	1335	**2405**	3780	6379	8420
La	ICP-MS	ppm	**0.55**	0	**37**	30	1.1	210	2.9	4.8	13	**31**	52	72	91
La	ICP-AES	ppm partial	**1.3**	4.8	**32**	28	<	223	1.2	2.7	10	**27**	49	68	76
Li	ICP-AES	ppm partial	**3.5**	1.9	**18.8**	13.8	<	96.1	4.6	6.4	9.0	**15.4**	24.5	34.9	45.7
Lu	ICP-MS	ppm	**0.03**	4.8	**0.20**	0.24	<	1.54	0.03	0.04	0.07	**0.11**	0.25	0.41	0.60
Mg	XRF	ppm	**543**	9.1	**2424**	2394	<	15618	<	567	1103	**1749**	2617	4824	7248
Mg	ICP-AES	ppm partial	**50**	0	**2442**	2490	117	17700	378	594	1065	**1755**	2680	4984	7426
Mn	XRF	ppm	**93**	12.4	**225**	171	<	1403	<	<	124	**171**	287	419	589
Mn	ICP-AES	ppm partial	**50**	6.2	**131**	95	<	661	<	55	69	**104**	150	237	349
Mo	XRF	ppm	**2.6**	93.3	**-**	-	<	12	<	<	<	**<**	<	<	3
Mo	ICP-AES	ppm partial	**2.6**	96.2	**-**	-	<	13	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**24516**	5127	13059	42591	17363	18758	20984	**23892**	26860	31728	35030
Na	ICP-AES	ppm partial	**150**	0	**491**	144	297	1180	341	352	391	**456**	542	679	777
Nb	XRF	ppm	**7**	26.8	**14**	10	<	104	<	<	<	**11**	17	25	30
Nb	ICP-MS	ppm	**0.16**	0.5	**11**	9.8	<	98	1.1	2.1	4.9	**9.2**	14	20	25
Nd	ICP-MS	ppm	**0.2**	0	**30**	24	0.36	124	1.9	3.6	11	**25**	45	61	75
Ni	XRF	ppm	**14**	93.3	**-**	-	<	49	<	<	<	**<**	<	<	19
Ni	ICP-AES	ppm partial	**3.5**	33	**5.6**	5.7	<	51	<	<	<	**3.9**	5.0	7.5	14
P	XRF	ppm	**105**	0	**445**	301	<	1535	118	148	235	**336**	593	833	1059
P	ICP-AES	ppm partial	**6**	0	**192**	227	9.9	1450	40	48	79	**117**	206	379	618
Pb	XRF	ppm	**14**	0	**49**	13	14	121	26	29	43	**50**	56	62	68
Pb	ICP-AES	ppm partial	**8.7**	79.9	***5***	*5*	<	48	<	<	<	**<**	<	10	13
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	7.7	**8.6**	6.7	<	39.8	<	0.96	3.1	**7.2**	12.5	17.2	20.6
Rb	XRF	ppm	**5.5**	0	**189**	65	8	353	85	105	153	**185**	230	281	298
Rb	ICP-MS	ppm	**0.6**	0	**181**	62	6.1	354	79	102	145	**174**	219	268	298
S	XRF	ppm	**70**	94.3	**-**	-	<	1100	<	<	<	**<**	<	<	151
S	ICP-AES	ppm partial	**14.3**	59.8	***43***	*151*	<	1320	<	<	<	**<**	21	58	226
Sc	ICP-MS	ppm	**2.8**	39.2	**4.2**	2.2	<	16	<	<	<	**3.3**	4.5	7.3	8.3
Sc	ICP-AES	ppm partial	**0.4**	10.5	**1.9**	1.7	<	10	<	<	0.65	**1.5**	2.4	3.4	5.6
Se	GFAAS	ppm partial	**0.055**	94.3	**-**	-	<	0.33	<	<	<	**<**	<	<	0.07
Sm	ICP-MS	ppm	**0.5**	2.9	**5.7**	4.1	<	17	0.52	0.95	2.3	**5.2**	8.0	12	13
Sr	XRF	ppm	**4**	0	**158**	154	15	1000	35	47	74	**109**	188	284	503
Sr	ICP-AES	ppm partial	**1.2**	0.5	**5.5**	4.6	<	33	1.8	2.3	3.2	**4.4**	6.1	9.0	13
Ta	ICP-MS	ppm	**0.06**	2.4	**0.65**	0.63	<	4.3	0.10	0.16	0.23	**0.46**	0.85	1.4	1.8
Tb	ICP-MS	ppm	**0.08**	1.9	**0.68**	0.54	<	4.0	0.12	0.17	0.32	**0.58**	0.85	1.3	1.6
Te	GFAAS	ppb partial	**5**	85.6	**-**	-	<	44	<	<	<	**<**	<	6	11
Th	ICP-MS	ppm	**0.13**	0.5	**18**	14	<	61	1.0	2.0	5.9	**15**	27	38	46
Th	ICP-AES	ppm partial	**5.6**	21.5	**22**	16	<	70	<	<	8	**19**	32	46	54
Ti	XRF	ppm	**30**	0	**1056**	882	30	5514	66	126	438	**924**	1410	2022	2556
Ti	ICP-MS	ppm	**10**	0	**978**	832	49	5190	84	137	409	**831**	1253	1886	2356
Ti	ICP-AES	ppm partial	**2**	0	**627**	718	11	3880	15	26	94	**427**	833	1467	2132
Tm	ICP-MS	ppm	**0.03**	2.9	**0.21**	0.28	<	1.98	0.03	0.05	0.07	**0.12**	0.26	0.45	0.61
U	ICP-MS	ppm	**0.08**	0	**5.15**	5.90	0.28	54.8	0.81	1.13	2.09	**3.83**	6.32	9.83	11.4
V	XRF	ppm	**6**	25.8	**17**	16	<	103	<	<	<	**12**	18	33	51
V	ICP-MS	ppm	**2**	23.4	**10.0**	13	<	92	<	<	2.1	**5.7**	10	24	37
V	ICP-AES	ppm partial	**0.6**	14.4	**9.3**	14	<	97	<	<	1.4	**5.0**	9.7	25	39
Y	XRF	ppm	**2.8**	3.3	**19**	21	<	188	4	6	9	**13**	22	38	51
Y	ICP-MS	ppm	**0.1**	0	**18**	21	1.2	182	3.5	4.7	7.3	**12**	22	35	46
Y	ICP-AES	ppm partial	**0.15**	0	**8.4**	11	0.59	107	1.2	2.0	3.1	**5.6**	9.1	17	24
Yb	ICP-MS	ppm	**0.22**	5.3	**1.4**	1.8	<	11	<	0.26	0.45	**0.74**	1.7	2.9	4.2
Zn	XRF	ppm	**4**	0	**44**	27	7	202	12	15	23	**41**	56	73	88
Zn	ICP-AES	ppm partial	**2**	1	**36**	26	<	171	5.7	7.4	17	**32**	51	67	83
Zr	XRF	ppm	**6**	0.5	**128**	93	<	558	13	19	56	**121**	180	234	286
Zr	ICP-MS	ppm	**3**	0	**121**	83	6.3	496	15	22	54	**117**	168	207	268

Table 10. Chemical concentration summary statistics for map unit 15SA.

Map unit	**15SA**	**Granodiorite, tonalite and quartz diorite (1.89 - 1.87 Ga) - Svecofennian Domain A**
Number of samples	236	
Unit area	9050.4	km^2
Percent of bedrock	2.7	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

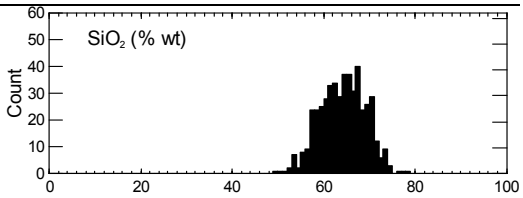


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**65.09**	5.85	48.90	77.70	54.39	56.06	61.20	**66.00**	69.80	71.90	72.57
TiO_2	XRF	%	**0.005**	0	**0.62**	0.35	0.04	2.11	0.20	0.25	0.36	**0.53**	0.83	1.04	1.24
Al_2O_3	XRF	%	**0.02**	0	**15.65**	1.13	12.00	21.40	13.90	14.40	15.10	**15.70**	16.25	17.00	17.40
FeO	XRF	%	**0.01**	0	**4.02**	1.91	0.35	11.70	1.49	2.01	2.50	**3.66**	5.41	6.34	7.33
MnO	XRF	%	**0.012**	0.4	**0.073**	0.035	<	0.205	0.023	0.030	0.046	**0.068**	0.096	0.121	0.133
MgO	XRF	%	**0.09**	0.4	**1.96**	1.27	<	7.15	0.49	0.67	0.98	**1.68**	2.70	3.70	4.42
CaO	XRF	%	**0.004**	0	**3.75**	1.61	0.66	11.40	1.59	1.95	2.53	**3.50**	4.76	5.83	6.66
Na_2O	XRF	%	**0.05**	0	**3.92**	0.75	2.25	5.89	2.79	2.94	3.39	**3.88**	4.34	5.04	5.31
K_2O	XRF	%	**0.003**	0	**2.45**	1.00	0.57	5.48	1.13	1.29	1.73	**2.31**	3.05	3.82	4.41
P_2O_5	XRF	%	**0.024**	1.3	**0.215**	0.192	<	1.290	0.052	0.064	0.097	**0.155**	0.257	0.441	0.589
C_{tot}	Leco	%	**0.05**	89.4	**-**	-	<	0.24	<	<	<	**<**	<	0.05	0.07
$C_{non\text{-}carb}$	Leco	%	**0.05**	92.4	**-**	-	<	0.07	<	<	<	**<**	<	<	0.05
F	Ion	%	**0.055**	30.5	**0.09**	0.05	<	0.51	<	<	<	**0.07**	0.10	0.14	0.17
Al	XRF	ppm	**106**	0	**82773**	5957	63480	113206	73531	76176	79879	**83053**	85963	89930	92046
Al	ICP-AES	ppm partial	**1100**	0	**13895**	6216	2900	38300	5665	7032	9480	**12600**	17100	23180	25510
As	GFAAS	ppm partial	**3**	91.5	**-**	-	<	20	<	<	<	**<**	<	<	3.8
Au	GFAAS	ppb partial	**2.5**	97.9	**-**	-	<	4.8	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	83.1	**-**	-	<	8	<	<	<	**<**	<	5	6
Ba	XRF	ppm	**21**	0	**612**	295	96	2180	208	293	448	**566**	734	884	1080
Ba	ICP-AES	ppm partial	**10**	0	**197**	198	13	1460	36	46	72	**121**	246	470	606
Bi	GFAAS	ppm partial	**0.04**	55.5	***0.08***	*0.21*	<	2.7	<	<	<	**<**	0.07	0.16	0.23
Ca	XRF	ppm	**29**	0	**26784**	11512	4712	81510	11383	13950	18054	**24989**	33998	41699	47648
Ca	ICP-AES	ppm partial	**50**	0	**5110**	3663	541	26300	1154	1556	2595	**4270**	6535	9578	12190
Ce	ICP-MS	ppm	**0.22**	0	**66**	43	7.3	290	22	27	38	**52**	82	122	158
Cl	XRF	ppm	**45**	6.4	**189**	143	<	868	<	55	82	**145**	240	376	485
Co	ICP-MS	ppm	**2**	2.1	**13**	9.5	<	84	2.9	4.2	6.7	**11**	17	23	29
Co	ICP-AES	ppm partial	**0.9**	1.7	**10**	4.7	<	25	3.3	4.1	6.7	**9.8**	14	17	18
Cr	XRF	ppm	**19**	4.2	**58**	49	<	380	19	21	26	**43**	73	117	157
Cr	ICP-AES	ppm partial	**5**	3	**34**	29	<	179	5.4	6.8	13	**25**	44	71	102
Cu	XRF	ppm	**17**	58.1	**22**	*25*	<	213	<	<	<	**<**	28	49	69
Cu	ICP-AES	ppm partial	**3**	5.9	**22**	26	<	211	<	3.5	5.1	**14**	29	48	63
Dy	ICP-MS	ppm	**0.55**	2.5	**3.2**	2.0	<	15	0.9	1.2	1.7	**2.9**	4.2	5.6	6.5
Er	ICP-MS	ppm	**0.3**	3	**1.7**	1.1	<	9.0	0.4	0.6	0.8	**1.5**	2.2	3.0	3.7
Eu	ICP-MS	ppm	**0.09**	0	**1.1**	0.65	0.15	3.6	0.44	0.54	0.72	**0.98**	1.4	2.1	2.5
Fe	XRF	ppm	**78**	0	**31259**	14817	2688	90893	11601	15594	19433	**28454**	42051	49277	56915
Fe	ICP-AES	ppm partial	**2300**	0	**29608**	11909	5160	70000	13590	16330	21550	**27050**	35750	47670	54740
Ga	XRF	ppm	**10**	0	**27**	4	17	37	22	23	25	**27**	30	32	33
Gd	ICP-MS	ppm	**0.5**	0.4	**4.6**	2.7	<	16.6	1.4	1.9	2.7	**4.0**	5.8	8.5	9.9
Hf	ICP-MS	ppm	**0.12**	0	**4.72**	2.27	0.59	15.7	2.34	2.63	3.31	**4.16**	5.55	7.33	9.21
Ho	ICP-MS	ppm	**0.09**	2.5	**0.61**	0.40	<	3.0	0.15	0.22	0.32	**0.54**	0.81	1.1	1.2
K	XRF	ppm	**25**	0	**20335**	8333	4706	45484	9379	10707	14318	**19173**	25274	31689	36595
K	ICP-AES	ppm partial	**100**	0	**8984**	4483	1010	21700	2156	3533	5925	**8290**	11600	15200	17800
La	ICP-MS	ppm	**0.55**	0	**33**	21	3.3	138	12	14	20	**28**	40	60	77
La	ICP-AES	ppm partial	**1.3**	0.4	**28**	19	<	110	7.9	10	16	**23**	34	51	70
Li	ICP-AES	ppm partial	**3.5**	0.4	**34.3**	21.3	<	155	10.2	13.5	20.7	**28.9**	41.6	59.2	73.3
Lu	ICP-MS	ppm	**0.03**	2.1	**0.23**	0.16	<	1.13	0.05	0.07	0.11	**0.20**	0.30	0.42	0.53
Mg	XRF	ppm	**543**	0.4	**11813**	7640	<	43115	2955	4010	5915	**10100**	16251	22293	26659
Mg	ICP-AES	ppm partial	**50**	0	**9151**	4474	518	23800	2812	3961	5825	**8455**	12050	15200	17510
Mn	XRF	ppm	**93**	0.4	**566**	271	<	1589	178	233	357	**527**	744	938	1031
Mn	ICP-AES	ppm partial	**50**	0.4	**342**	144	<	855	119	153	232	**341**	438	525	587
Mo	XRF	ppm	**2.6**	95.8	**-**	-	<	9	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	97	**-**	-	<	9	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**29049**	5572	16695	43704	20702	21822	25117	**28753**	32203	37389	39422
Na	ICP-AES	ppm partial	**150**	0	**912**	485	313	6040	508	553	646	**814**	1030	1360	1781
Nb	XRF	ppm	**7**	16.1	**14**	8	<	77	<	<	9	**12**	16	23	28
Nb	ICP-MS	ppm	**0.16**	0	**11**	7.7	1.1	69	4.0	4.7	6.7	**9.5**	13	19	24
Nd	ICP-MS	ppm	**0.2**	0	**29**	19	2.7	128	9.2	11	16	**24**	37	55	69
Ni	XRF	ppm	**14**	38.6	**27**	22	<	202	<	<	<	**18**	30	56	75
Ni	ICP-AES	ppm partial	**3.5**	2.1	**18**	15	<	102	4.1	5.1	8.1	**14**	22	40	51
P	XRF	ppm	**105**	0	**937**	837	<	5624	227	279	423	**676**	1121	1923	2568
P	ICP-AES	ppm partial	**6**	0	**855**	800	19	5290	152	236	385	**616**	1010	1686	2436
Pb	XRF	ppm	**14**	0.8	**27**	9	<	97	16	18	21	**25**	30	38	42
Pb	ICP-AES	ppm partial	**8.7**	93.6	**-**	-	<	34	<	<	<	**<**	<	<	9
Pd	GFAAS	ppb partial	**5**	99.2	**-**	-	<	7	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**7.8**	5.2	0.77	35.4	2.5	2.9	4.4	**6.2**	9.8	15.1	18.3
Rb	XRF	ppm	**5.5**	0	**96**	51	15	337	30	41	57	**91**	121	155	187
Rb	ICP-MS	ppm	**0.6**	0	**92**	48	15	303	30	38	54	**87**	119	148	179
S	XRF	ppm	**70**	53	**273**	391	<	1940	<	<	<	**<**	335	878	1227
S	ICP-AES	ppm partial	**14.3**	7.6	**320**	453	<	2030	<	15	30	**100**	398	1038	1429
Sc	ICP-MS	ppm	**2.8**	4.7	**11**	7.0	<	42	3.0	3.7	5.4	**10.0**	16	21	24
Sc	ICP-AES	ppm partial	**0.4**	0	**4.8**	3.3	0.60	19	1.5	1.8	2.5	**3.8**	6.1	9.0	12
Se	GFAAS	ppm partial	**0.055**	64.8	***0.06***	*0.05*	<	0.32	<	<	<	**<**	0.08	0.13	0.17
Sm	ICP-MS	ppm	**0.5**	0.4	**5.2**	3.2	<	19	1.6	2.0	3.0	**4.4**	6.7	9.7	12
Sr	XRF	ppm	**4**	0	**505**	319	49	1990	144	200	274	**412**	640	966	1157
Sr	ICP-AES	ppm partial	**1.2**	0	**19**	29	3.2	401	4.8	6.3	8.5	**14**	21	34	52
Ta	ICP-MS	ppm	**0.06**	0	**0.77**	0.58	0.09	5.6	0.25	0.33	0.46	**0.63**	0.90	1.2	1.9
Tb	ICP-MS	ppm	**0.08**	0.4	**0.64**	0.38	<	2.7	0.20	0.25	0.37	**0.57**	0.81	1.1	1.3
Te	GFAAS	ppb partial	**5**	82.2	**-**	-	<	31	<	<	<	**<**	<	9	12
Th	ICP-MS	ppm	**0.13**	0.4	**7.4**	5.9	<	39	1.2	1.9	3.3	**6.1**	9.5	14	17
Th	ICP-AES	ppm partial	**5.6**	22	**12**	6	<	47	<	<	6	**10**	15	19	22
Ti	XRF	ppm	**30**	0	**3690**	2082	228	12660	1188	1470	2160	**3186**	4956	6240	7422
Ti	ICP-MS	ppm	**10**	0	**3507**	2064	231	12700	1096	1341	1990	**3015**	4775	5940	7473
Ti	ICP-AES	ppm partial	**2**	0	**2685**	1355	56	7520	815	1132	1725	**2480**	3315	4547	5097
Tm	ICP-MS	ppm	**0.03**	2.1	**0.24**	0.17	<	1.33	0.05	0.08	0.12	**0.21**	0.32	0.43	0.53
U	ICP-MS	ppm	**0.08**	0	**2.31**	2.32	0.13	18.9	0.48	0.68	1.13	**1.85**	2.87	4.01	4.99
V	XRF	ppm	**6**	0.8	**86**	52	<	255	17	27	45	**71**	129	156	178
V	ICP-MS	ppm	**2**	1.3	**67**	46	<	233	11	17	31	**56**	99	133	148
V	ICP-AES	ppm partial	**0.6**	0.4	**54**	30	<	142	12	18	33	**49**	73	95	111
Y	XRF	ppm	**2.8**	4.2	**18**	11	<	87	3	6	9	**16**	23	31	37
Y	ICP-MS	ppm	**0.1**	0	**19**	12	0.67	87	4.7	7.0	10	**17**	24	32	37
Y	ICP-AES	ppm partial	**0.15**	0	**9.4**	6.5	0.18	38	2.3	3.0	4.4	**7.8**	12	19	23
Yb	ICP-MS	ppm	**0.22**	2.5	**1.6**	1.1	<	8.3	0.32	0.48	0.79	**1.4**	2.1	2.8	3.5
Zn	XRF	ppm	**4**	0	**81**	34	8	226	38	43	57	**75**	100	126	139
Zn	ICP-AES	ppm partial	**2**	0	**59**	26	7.0	156	23	31	41	**53**	72	94	113
Zr	XRF	ppm	**6**	0	**206**	110	34	828	93	108	138	**179**	240	319	415
Zr	ICP-MS	ppm	**3**	0	**189**	102	25	734	82	100	124	**161**	221	306	379

Table 11. Chemical concentration summary statistics for map unit 15SB.

Map unit	**15SB**	**Granodiorite, tonalite and quartz diorite (1.89 - 1.87 Ga) - Svecofennian Domain B**
Number of samples	484	
Unit area	31938.8	km^{-2}
Percent of bedrock	9.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

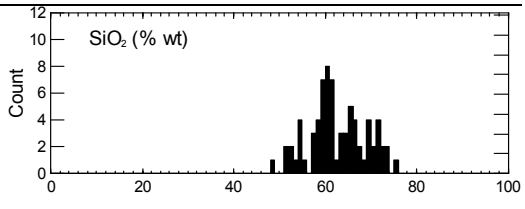


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**64.13**	4.94	49.20	78.00	56.30	57.70	60.60	**64.30**	67.70	70.40	71.75
TiO_2	XRF	%	**0.005**	0	**0.65**	0.29	0.04	2.42	0.26	0.31	0.45	**0.63**	0.80	0.96	1.07
Al_2O_3	XRF	%	**0.02**	0	**15.88**	1.20	11.70	19.70	14.10	14.50	15.10	**15.80**	16.50	17.50	18.10
FeO	XRF	%	**0.01**	0	**4.81**	1.68	0.53	10.35	2.12	2.64	3.57	**4.78**	5.99	6.97	7.57
MnO	XRF	%	**0.012**	0.2	**0.088**	0.030	<	0.179	0.038	0.049	0.068	**0.089**	0.109	0.129	0.138
MgO	XRF	%	**0.09**	0	**1.89**	1.08	0.09	7.37	0.55	0.71	1.04	**1.75**	2.56	3.19	3.73
CaO	XRF	%	**0.004**	0	**3.98**	1.45	0.31	8.57	1.83	2.13	2.81	**4.00**	5.06	5.83	6.31
Na_2O	XRF	%	**0.05**	0	**3.61**	0.58	1.46	6.20	2.88	3.01	3.25	**3.53**	3.85	4.35	4.71
K_2O	XRF	%	**0.003**	0	**2.96**	1.11	0.37	6.85	1.48	1.73	2.11	**2.81**	3.72	4.47	5.01
P_2O_5	XRF	%	**0.024**	0.4	**0.203**	0.130	<	1.450	0.076	0.092	0.126	**0.181**	0.248	0.317	0.387
C_{tot}	Leco	%	**0.05**	91.5	**-**	-	<	0.19	<	<	<	**<**	<	<	0.07
$C_{non\text{-}carb}$	Leco	%	**0.05**	93	**-**	-	<	0.14	<	<	<	**<**	<	<	0.05
F	Ion	%	**0.055**	31.3	**0.08**	0.05	<	0.78	<	<	<	**0.07**	0.08	0.12	0.14
Al	XRF	ppm	**106**	0	**84021**	6337	61893	104213	74589	76705	79879	**83582**	87285	92575	95749
Al	ICP-AES	ppm partial	**1100**	0	**15360**	5366	1800	33400	7438	8650	11400	**15100**	18425	22800	24750
As	GFAAS	ppm partial	**3**	81	**-**	-	<	270	<	<	<	**<**	<	4.3	7.0
Au	GFAAS	ppb partial	**2.5**	96.9	**-**	-	<	32.8	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	96.1	**-**	-	<	13	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0.2	**784**	388	<	4720	358	433	548	**710**	907	1191	1370
Ba	ICP-AES	ppm partial	**10**	0.2	**191**	160	<	1060	37	50	73	**139**	256	420	493
Bi	GFAAS	ppm partial	**0.04**	46	**0.08**	0.12	<	1.9	<	<	<	**0.04**	0.08	0.16	0.21
Ca	XRF	ppm	**29**	0	**28457**	10353	2224	61276	13106	15230	20077	**28600**	36143	41685	45081
Ca	ICP-AES	ppm partial	**50**	0	**5107**	2532	300	16300	1845	2360	3300	**4720**	6303	8200	9563
Ce	ICP-MS	ppm	**0.22**	0	**64**	36	1.7	278	27	32	44	**56**	73	106	135
Cl	XRF	ppm	**45**	2.5	**226**	128	<	951	60	80	128	**210**	292	400	457
Co	ICP-MS	ppm	**2**	1.6	**12**	6.0	<	33	3.8	5.0	7.6	**12**	16	19	22
Co	ICP-AES	ppm partial	**0.9**	0.6	**11**	4.2	<	27	4.2	5.1	7.3	**11**	13	15	17
Cr	XRF	ppm	**19**	14.2	**50**	50	<	591	<	<	22	**37**	57	88	115
Cr	ICP-AES	ppm partial	**5**	4.1	**29**	32	<	292	5.3	6.4	10	**20**	36	57	80
Cu	XRF	ppm	**17**	60.2	***18***	*14*	<	125	<	<	<	**<**	23	35	44
Cu	ICP-AES	ppm partial	**3**	1.2	**18**	13	<	88	3.7	4.6	7.7	**17**	24	33	47
Dy	ICP-MS	ppm	**0.55**	0.8	**3.7**	1.9	<	15	1.2	1.7	2.5	**3.3**	4.5	6.1	7.4
Er	ICP-MS	ppm	**0.3**	1.2	**2.0**	1.0	<	7.8	0.6	0.9	1.3	**1.9**	2.4	3.4	4.0
Eu	ICP-MS	ppm	**0.09**	0.2	**1.1**	0.42	<	3.3	0.56	0.65	0.83	**1.0**	1.3	1.7	2.0
Fe	XRF	ppm	**78**	0	**37343**	13046	4134	80404	16434	20482	27754	**37125**	46542	54188	58842
Fe	ICP-AES	ppm partial	**2300**	0	**33272**	10150	3830	72200	18850	21200	26450	**33100**	38825	45900	51575
Ga	XRF	ppm	**10**	0	**26**	4	15	40	20	21	23	**26**	28	30	31
Gd	ICP-MS	ppm	**0.5**	0.2	**4.8**	2.3	<	15.6	2.0	2.4	3.4	**4.3**	5.8	7.7	9.4
Hf	ICP-MS	ppm	**0.12**	0	**4.90**	2.57	0.74	23.0	2.36	2.68	3.36	**4.22**	5.48	8.09	10.2
Ho	ICP-MS	ppm	**0.09**	0.6	**0.72**	0.37	<	2.9	0.23	0.31	0.49	**0.67**	0.87	1.2	1.4
K	XRF	ppm	**25**	0	**24535**	9230	3030	56855	12267	14359	17513	**23323**	30876	37101	41608
K	ICP-AES	ppm partial	**100**	0	**10274**	4184	400	22400	3950	5100	7180	**10100**	13025	15700	18000
La	ICP-MS	ppm	**0.55**	0	**33**	19	0.7	157	13	16	22	**28**	38	52	65
La	ICP-AES	ppm partial	**1.3**	0.4	**29**	18	<	177	10	13	19	**26**	34	47	62
Li	ICP-AES	ppm partial	**3.5**	0	**31.7**	16.5	3.5	154	15.0	17.0	22.4	**28.1**	36.9	48.9	63.6
Lu	ICP-MS	ppm	**0.03**	0.4	**0.29**	0.15	<	1.21	0.09	0.12	0.20	**0.27**	0.35	0.45	0.55
Mg	XRF	ppm	**543**	0	**11397**	6524	567	44441	3310	4287	6271	**10553**	15437	19236	22480
Mg	ICP-AES	ppm partial	**50**	0	**9120**	3978	405	24700	3208	4190	6000	**8950**	12000	14100	15550
Mn	XRF	ppm	**93**	0.2	**682**	233	<	1387	295	380	527	**690**	845	1000	1070
Mn	ICP-AES	ppm partial	**50**	0.2	**438**	127	<	1070	233	279	361	**440**	506	592	644
Mo	XRF	ppm	**2.6**	89.5	**-**	-	<	7	<	<	<	**<**	<	3	3
Mo	ICP-AES	ppm partial	**2.6**	91.1	**-**	-	<	11	<	<	<	**<**	<	<	3
Na	XRF	ppm	**371**	0	**26808**	4296	10833	46004	21347	22334	24100	**26193**	28589	32277	34970
Na	ICP-AES	ppm partial	**150**	0	**957**	340	371	2790	508	600	709	**900**	1110	1390	1620
Nb	XRF	ppm	**7**	14.8	**12**	6	<	68	<	<	8	**10**	14	20	24
Nb	ICP-MS	ppm	**0.16**	0	**11**	5.5	0.57	61	4.7	5.5	7.4	**9.2**	12	18	22
Nd	ICP-MS	ppm	**0.2**	0	**28**	15	1.1	101	13	15	20	**25**	33	48	62
Ni	XRF	ppm	**14**	48.2	**20**	14	<	150	<	<	<	**14**	21	30	42
Ni	ICP-AES	ppm partial	**3.5**	3.1	**13**	11	<	110	3.8	4.3	6.1	**9.9**	16	24	30
P	XRF	ppm	**105**	0	**885**	567	<	6322	331	401	549	**789**	1081	1382	1687
P	ICP-AES	ppm partial	**6**	0	**801**	521	22	5650	304	364	501	**720**	991	1250	1490
Pb	XRF	ppm	**14**	0.6	**28**	8	<	97	18	20	23	**27**	32	37	42
Pb	ICP-AES	ppm partial	**8.7**	89.1	**-**	-	<	51	<	<	<	**<**	<	9	11
Pd	GFAAS	ppb partial	**5**	99.2	**-**	-	<	11	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0.4	**7.5**	4.1	<	29.5	3.1	3.9	5.1	**6.5**	8.5	12.8	16.0
Rb	XRF	ppm	**5.5**	0	**101**	43	6	281	37	51	72	**98**	125	154	179
Rb	ICP-MS	ppm	**0.6**	0	**98**	42	6.5	280	37	49	70	**95**	125	150	171
S	XRF	ppm	**70**	42.7	**235**	307	<	2660	<	<	<	**103**	274	534	758
S	ICP-AES	ppm partial	**14.3**	4.5	**252**	350	<	2470	16	20	35	**116**	331	633	881
Sc	ICP-MS	ppm	**2.8**	1.9	**14**	6.5	<	56	4.2	5.3	8.9	**13**	18	22	25
Sc	ICP-AES	ppm partial	**0.4**	0	**5.0**	2.9	0.40	22	1.9	2.4	3.3	**4.4**	5.8	8.7	11
Se	GFAAS	ppm partial	**0.055**	73.4	***0.05***	*0.05*	<	0.45	<	<	<	**<**	0.06	0.11	0.16
Sm	ICP-MS	ppm	**0.5**	0.4	**5.2**	2.6	<	17	2.1	2.7	3.7	**4.6**	6.1	8.6	11
Sr	XRF	ppm	**4**	0	**459**	225	14	1320	196	234	295	**398**	578	759	907
Sr	ICP-AES	ppm partial	**1.2**	0.2	**18**	11	<	103	6.6	7.9	11	**15**	22	30	38
Ta	ICP-MS	ppm	**0.06**	0.2	**0.73**	0.36	<	4.1	0.27	0.40	0.51	**0.68**	0.87	1.2	1.4
Tb	ICP-MS	ppm	**0.08**	0.2	**0.69**	0.34	<	2.5	0.25	0.33	0.49	**0.62**	0.83	1.1	1.4
Te	GFAAS	ppb partial	**5**	78.8	***4***	*5*	<	63	<	<	<	**<**	<	8	10
Th	ICP-MS	ppm	**0.13**	0.2	**8.0**	5.9	<	49	1.3	2.1	3.8	**6.7**	11	16	17
Th	ICP-AES	ppm partial	**5.6**	19.2	**12**	7	<	57	<	<	6	**10**	14	20	24
Ti	XRF	ppm	**30**	0	**3882**	1752	222	14520	1578	1884	2676	**3780**	4812	5736	6420
Ti	ICP-MS	ppm	**10**	0	**3708**	1727	200	13600	1510	1800	2595	**3540**	4563	5640	6210
Ti	ICP-AES	ppm partial	**2**	0	**2678**	1088	52	7090	1138	1390	1888	**2620**	3325	4050	4638
Tm	ICP-MS	ppm	**0.03**	0.6	**0.30**	0.15	<	1.11	0.09	0.12	0.20	**0.28**	0.36	0.49	0.57
U	ICP-MS	ppm	**0.08**	0	**2.34**	1.80	0.11	18.1	0.61	0.78	1.21	**1.88**	2.97	4.20	5.62
V	XRF	ppm	**6**	0.2	**97**	47	<	305	30	38	58	**93**	128	159	174
V	ICP-MS	ppm	**2**	0.4	**75**	42	<	240	17	24	39	**72**	102	132	147
V	ICP-AES	ppm partial	**0.6**	0.2	**58**	28	<	179	16	23	36	**58**	77	92	104
Y	XRF	ppm	**2.8**	1.2	**22**	11	<	89	6	10	15	**21**	26	35	41
Y	ICP-MS	ppm	**0.1**	0	**22**	11	2.1	81	6.9	9.9	15	**20**	26	37	42
Y	ICP-AES	ppm partial	**0.15**	0	**11**	6.8	0.70	67	3.2	4.5	6.5	**9.2**	13	19	22
Yb	ICP-MS	ppm	**0.22**	0.6	**2.0**	1.0	<	7.8	0.59	0.80	1.4	**1.8**	2.4	3.2	3.7
Zn	XRF	ppm	**4**	0	**91**	28	15	232	51	56	72	**91**	107	123	136
Zn	ICP-AES	ppm partial	**2**	0	**67**	22	8.0	210	38	43	53	**64**	79	95	106
Zr	XRF	ppm	**6**	0	**210**	124	15	1160	103	115	140	**171**	235	365	460
Zr	ICP-MS	ppm	**3**	0	**190**	115	16	1070	85	102	124	**156**	212	318	421

Table 12. Chemical concentration summary statistics for map unit 15SC.

Map unit	**15SC**	**Granodiorite, tonalite and quartz diorite (1.89 - 1.87 Ga) - Svecofennian Domain C**
Number of samples	74	
Unit area	3044.4	km²
Percent of bedrock	0.9	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

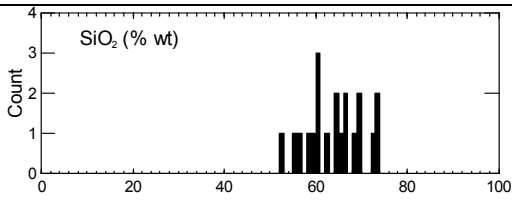


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
									Percentiles						
SiO_2	XRF	%	**0.02**	0	**62.56**	6.10	48.30	75.20	52.24	54.28	59.00	**61.35**	66.20	71.22	72.74
TiO_2	XRF	%	**0.005**	0	**0.82**	0.46	0.05	2.61	0.24	0.31	0.57	**0.79**	0.98	1.28	1.76
Al_2O_3	XRF	%	**0.02**	0	**16.08**	1.22	12.20	19.20	14.20	14.39	15.40	**16.10**	16.80	17.40	17.98
FeO	XRF	%	**0.01**	0	**5.66**	2.31	0.46	11.70	2.04	2.70	4.13	**5.81**	7.23	8.55	9.39
MnO	XRF	%	**0.012**	0	**0.097**	0.039	0.024	0.205	0.035	0.047	0.067	**0.097**	0.116	0.145	0.165
MgO	XRF	%	**0.09**	0	**2.23**	1.37	0.11	6.95	0.44	0.78	1.25	**2.18**	2.89	3.57	5.12
CaO	XRF	%	**0.004**	0	**4.30**	1.73	1.16	9.75	1.73	2.06	3.08	**4.32**	5.28	6.24	7.66
Na_2O	XRF	%	**0.05**	0	**3.77**	0.63	2.60	5.41	2.89	2.95	3.30	**3.73**	4.23	4.49	4.79
K_2O	XRF	%	**0.003**	0	**2.79**	1.23	0.45	6.25	1.00	1.31	1.97	**2.59**	3.49	4.41	5.40
P_2O_5	XRF	%	**0.024**	1.4	**0.309**	0.271	<	1.400	0.068	0.089	0.175	**0.264**	0.331	0.453	1.044
C_{tot}	Leco	%	**0.05**	90.5	**-**	-	<	0.13	<	<	<	**<**	<	<	0.08
$C_{non\text{-}carb}$	Leco	%	**0.05**	94.6	**-**	-	<	0.08	<	<	<	**<**	<	<	0.04
F	Ion	%	**0.055**	28.4	**0.09**	0.04	<	0.25	<	<	<	**0.07**	0.09	0.13	0.19
Al	XRF	ppm	**106**	0	**85042**	6427	64538	101568	75118	76123	81466	**85169**	88872	92046	95114
Al	ICP-AES	ppm partial	**1100**	0	**15793**	5621	2800	33500	7556	8830	12400	**15500**	18400	23810	25560
As	GFAAS	ppm partial	**3**	90.5	**-**	-	<	38	<	<	<	**<**	<	<	4.5
Au	GFAAS	ppb partial	**2.5**	98.6	**-**	-	<	2.6	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**870**	529	114	4461	341	415	586	**808**	1040	1293	1393
Ba	ICP-AES	ppm partial	**10**	0	**301**	248	31	1280	43	68	117	**251**	367	646	733
Bi	GFAAS	ppm partial	**0.04**	64.9	***0.05***	*0.08*	<	0.31	<	<	<	**<**	0.05	0.16	0.27
Ca	XRF	ppm	**29**	0	**30759**	12362	8294	69713	12341	14722	22022	**30852**	37752	44595	54798
Ca	ICP-AES	ppm partial	**50**	0	**6134**	3528	857	18400	1738	2194	3700	**5675**	7600	10770	13740
Ce	ICP-MS	ppm	**0.22**	0	**77**	45	15	217	25	36	47	**67**	90	131	189
Cl	XRF	ppm	**45**	2.7	**279**	191	<	1090	82	105	140	**233**	350	569	668
Co	ICP-MS	ppm	**2**	1.4	**16**	9.8	<	54	3.8	5.5	8.8	**13**	19	29	33
Co	ICP-AES	ppm partial	**0.9**	1.4	**12**	5.1	<	23	3.3	5.9	8.6	**12**	16	18	22
Cr	XRF	ppm	**19**	12.2	**50**	37	<	222	<	<	26	**39**	63	93	109
Cr	ICP-AES	ppm partial	**5**	2.7	**29**	22	<	92	5.7	6.9	13	**21**	39	62	71
Cu	XRF	ppm	**17**	41.9	**30**	17	<	97	<	<	<	**24**	36	54	72
Cu	ICP-AES	ppm partial	**3**	0	**26**	20	3.8	90	4.1	4.8	12	**22**	36	47	75
Dy	ICP-MS	ppm	**0.55**	1.4	**4.1**	2.1	<	9.3	1.4	1.5	2.5	**3.6**	5.7	7.5	8.4
Er	ICP-MS	ppm	**0.3**	1.4	**2.2**	1.2	<	5.2	0.6	0.8	1.3	**2.0**	3.0	4.0	4.2
Eu	ICP-MS	ppm	**0.09**	0	**1.4**	0.58	0.29	3.6	0.64	0.83	1.0	**1.3**	1.7	2.1	2.6
Fe	XRF	ppm	**78**	0	**43994**	17941	3543	90909	15812	20979	32090	**45105**	56138	66410	72960
Fe	ICP-AES	ppm partial	**2300**	0	**36054**	13682	4960	74100	15180	19560	27800	**35400**	41600	58500	63060
Ga	XRF	ppm	**10**	0	**25**	3	14	34	19	21	23	**25**	27	29	30
Gd	ICP-MS	ppm	**0.5**	0	**5.6**	2.8	1.2	15.2	1.9	2.7	3.7	**5.0**	7.4	9.7	11.5
Hf	ICP-MS	ppm	**0.12**	0	**5.48**	3.02	1.30	17.9	2.14	2.44	3.41	**4.56**	6.89	8.71	10.6
Ho	ICP-MS	ppm	**0.09**	0	**0.78**	0.42	0.09	1.8	0.24	0.28	0.45	**0.70**	1.1	1.5	1.6
K	XRF	ppm	**25**	0	**23132**	10168	3743	51875	8283	10832	16351	**21497**	28967	36636	44837
K	ICP-AES	ppm partial	**100**	0	**10905**	4895	976	23100	3072	5143	7590	**11050**	13300	18230	20520
La	ICP-MS	ppm	**0.55**	0	**39**	23	7.6	108	11	17	24	**33**	48	74	94
La	ICP-AES	ppm partial	**1.3**	0	**35**	23	6.1	106	7.7	10	21	**30**	43	67	83
Li	ICP-AES	ppm partial	**3.5**	0	**27.2**	15.0	4.0	77.0	7.4	10.2	15.9	**24.6**	36.7	46.1	57.5
Lu	ICP-MS	ppm	**0.03**	0	**0.29**	0.16	0.04	0.85	0.08	0.10	0.17	**0.26**	0.39	0.51	0.60
Mg	XRF	ppm	**543**	0	**13459**	8285	645	41909	2665	4703	7538	**13115**	17427	21515	30849
Mg	ICP-AES	ppm partial	**50**	0	**10092**	4601	700	27900	2660	4580	7010	**9560**	13200	15250	16480
Mn	XRF	ppm	**93**	0	**752**	302	186	1589	271	364	519	**752**	899	1124	1279
Mn	ICP-AES	ppm partial	**50**	0	**443**	157	142	974	202	259	342	**423**	516	675	723
Mo	XRF	ppm	**2.6**	91.9	**-**	-	<	12	<	<	<	**<**	<	<	3
Mo	ICP-AES	ppm partial	**2.6**	90.5	**-**	-	<	6	<	<	<	**<**	<	<	4
Na	XRF	ppm	**371**	0	**27944**	4667	19292	40142	21459	21882	24486	**27677**	31387	33316	35527
Na	ICP-AES	ppm partial	**150**	0	**949**	341	400	2100	514	600	700	**900**	1110	1404	1600
Nb	XRF	ppm	**7**	5.4	**14**	7	<	45	<	7	9	**13**	16	22	28
Nb	ICP-MS	ppm	**0.16**	0	**13**	6.3	3.4	39	5.1	6.8	8.3	**12**	16	21	25
Nd	ICP-MS	ppm	**0.2**	0	**35**	20	7.7	102	13	16	22	**30**	40	61	83
Ni	XRF	ppm	**14**	40.5	**22**	12	<	58	<	<	<	**16**	27	44	50
Ni	ICP-AES	ppm partial	**3.5**	2.7	**15**	11	<	44	3.6	4.2	7.0	**13**	21	30	40
P	XRF	ppm	**105**	0	**1347**	1182	<	6104	296	388	763	**1151**	1443	1975	4552
P	ICP-AES	ppm partial	**6**	0	**1240**	1088	99	5580	273	353	704	**1060**	1320	1792	4180
Pb	XRF	ppm	**14**	0	**27**	7	16	41	17	17	22	**27**	32	38	39
Pb	ICP-AES	ppm partial	**8.7**	85.1	**-**	-	<	14	<	<	<	**<**	<	9	12
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**9.2**	5.3	2.0	25.5	3.3	4.0	5.8	**8.0**	10.7	15.7	22.2
Rb	XRF	ppm	**5.5**	0	**88**	48	9	231	23	35	58	**81**	110	146	197
Rb	ICP-MS	ppm	**0.6**	0	**86**	46	5.6	228	21	33	55	**80**	109	142	189
S	XRF	ppm	**70**	31.1	**382**	542	<	2600	<	<	<	**157**	410	1140	1820
S	ICP-AES	ppm partial	**14.3**	1.4	**410**	563	<	2510	19	33	63	**197**	476	1038	1828
Sc	ICP-MS	ppm	**2.8**	2.7	**15**	8.1	<	38	4.4	6.8	9.2	**13**	18	28	33
Sc	ICP-AES	ppm partial	**0.4**	1.4	**5.7**	3.4	<	20	2.3	3.0	3.6	**4.8**	6.9	9.8	14
Se	GFAAS	ppm partial	**0.055**	67.6	***0.05***	*0.04*	<	0.20	<	<	<	**<**	0.07	0.13	0.15
Sm	ICP-MS	ppm	**0.5**	0	**6.3**	3.3	1.3	18	2.2	2.8	4.3	**5.6**	7.3	12	13
Sr	XRF	ppm	**4**	0	**557**	267	124	1519	184	214	329	**549**	720	928	964
Sr	ICP-AES	ppm partial	**1.2**	0	**20**	10	4.2	45	6.3	7.2	11	**18**	26	35	40
Ta	ICP-MS	ppm	**0.06**	0	**0.73**	0.36	0.17	2.0	0.26	0.31	0.47	**0.68**	0.94	1.2	1.3
Tb	ICP-MS	ppm	**0.08**	0	**0.78**	0.39	0.15	1.9	0.28	0.34	0.54	**0.68**	1.1	1.4	1.5
Te	GFAAS	ppb partial	**5**	71.6	***4***	*4*	<	21	<	<	<	**<**	5	11	12
Th	ICP-MS	ppm	**0.13**	0	**6.6**	5.1	0.42	23	0.85	1.1	2.9	**5.6**	9.4	15	17
Th	ICP-AES	ppm partial	**5.6**	35.1	**10**	6	<	28	<	<	<	**10**	13	19	22
Ti	XRF	ppm	**30**	0	**4896**	2742	282	15660	1458	1854	3438	**4764**	5886	7686	10572
Ti	ICP-MS	ppm	**10**	0	**4738**	2589	282	14300	1468	1871	3470	**4485**	5630	8175	10010
Ti	ICP-AES	ppm partial	**2**	0	**3161**	1490	128	7040	1036	1529	2310	**2895**	3890	5305	6394
Tm	ICP-MS	ppm	**0.03**	0	**0.31**	0.17	0.04	0.85	0.09	0.11	0.19	**0.28**	0.43	0.57	0.62
U	ICP-MS	ppm	**0.08**	0	**1.63**	1.10	0.15	5.32	0.30	0.39	0.69	**1.44**	2.27	3.04	3.88
V	XRF	ppm	**6**	0	**119**	65	8	312	19	41	70	**114**	160	181	228
V	ICP-MS	ppm	**2**	0	**92**	59	4.5	292	14	25	48	**86**	130	153	201
V	ICP-AES	ppm partial	**0.6**	0	**66**	33	3.0	146	12	26	42	**65**	87	106	133
Y	XRF	ppm	**2.8**	0	**23**	12	3	55	7	9	14	**20**	30	39	47
Y	ICP-MS	ppm	**0.1**	0	**24**	12	3.4	56	8.5	8.8	15	**22**	31	44	45
Y	ICP-AES	ppm partial	**0.15**	0	**11**	7.6	1.6	34	2.9	3.6	5.6	**9.2**	14	24	27
Yb	ICP-MS	ppm	**0.22**	0	**2.0**	1.1	0.30	6.0	0.60	0.69	1.2	**1.9**	2.8	3.6	4.0
Zn	XRF	ppm	**4**	0	**96**	34	21	186	45	56	74	**93**	113	149	168
Zn	ICP-AES	ppm partial	**2**	0	**69**	30	12	160	27	32	50	**68**	87	104	124
Zr	XRF	ppm	**6**	0	**245**	158	67	1115	83	99	140	**211**	290	406	554
Zr	ICP-MS	ppm	**3**	0	**222**	138	50	878	74	85	123	**190**	277	346	514

Table 13. Chemical concentration summary statistics for map unit 15K.

Map unit	**15K**	**Granodiorite, tonalite and quartz diorite (1.89 - 1.87 Ga) - Karelian Domain**
Number of samples	20	
Unit area	387.7	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

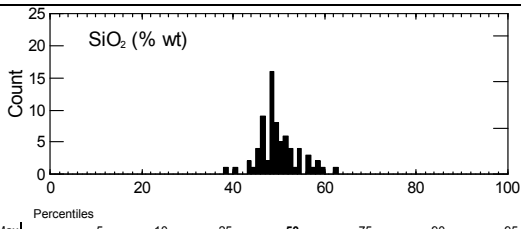


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**63.95**	6.08	52.10	73.70	53.90	56.10	59.75	**64.15**	68.90	72.80	73.45
TiO_2	XRF	%	**0.005**	0	**0.89**	0.52	0.18	2.35	0.22	0.27	0.53	**0.77**	1.16	1.50	1.98
Al_2O_3	XRF	%	**0.02**	0	**15.87**	1.18	13.70	18.20	14.00	14.35	14.95	**15.95**	16.65	17.20	17.75
FeO	XRF	%	**0.01**	0	**5.08**	2.24	1.94	10.62	1.97	2.03	3.32	**5.17**	6.58	7.64	9.43
MnO	XRF	%	**0.012**	0	**0.081**	0.035	0.032	0.153	0.033	0.036	0.047	**0.078**	0.109	0.127	0.143
MgO	XRF	%	**0.09**	0	**2.12**	1.08	0.36	4.14	0.50	0.77	1.16	**2.22**	2.88	3.73	4.09
CaO	XRF	%	**0.004**	0	**4.06**	1.58	1.85	6.73	1.88	1.92	2.84	**3.91**	5.39	6.45	6.59
Na_2O	XRF	%	**0.05**	0	**3.76**	0.53	2.99	4.88	2.99	3.02	3.36	**3.79**	4.09	4.49	4.73
K_2O	XRF	%	**0.003**	0	**2.48**	0.70	1.37	3.89	1.47	1.65	2.02	**2.37**	2.92	3.53	3.71
P_2O_5	XRF	%	**0.024**	0	**0.339**	0.262	0.027	0.940	0.048	0.077	0.150	**0.246**	0.524	0.727	0.837
C_{tot}	Leco	%	**0.05**	95	**-**	-	<	0.10	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	95	**-**	-	<	0.08	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	40	**0.08**	0.04	<	0.17	<	<	<	**0.06**	0.11	0.14	0.16
Al	XRF	ppm	**106**	0	**83926**	6253	72473	96278	74060	75912	79086	**84376**	88079	90988	93898
Al	ICP-AES	ppm partial	**1100**	0	**18019**	5929	7950	27300	7990	9165	13450	**18850**	22700	25150	26450
As	GFAAS	ppm partial	**3**	95	**-**	-	<	3.1	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**822**	406	275	1758	299	373	467	**764**	1130	1275	1569
Ba	ICP-AES	ppm partial	**10**	0	**430**	348	51	1210	56	67	154	**338**	678	978	1135
Bi	GFAAS	ppm partial	**0.04**	60	***0.04***	*0.05*	<	0.18	<	<	<	**<**	0.05	0.11	0.15
Ca	XRF	ppm	**29**	0	**29000**	11297	13228	48120	13406	13692	20270	**27921**	38503	46118	47119
Ca	ICP-AES	ppm partial	**50**	0	**5362**	3309	619	12400	865	1255	2655	**4370**	8105	9600	11125
Ce	ICP-MS	ppm	**0.22**	0	**87**	34	35	162	38	42	62	**85**	106	133	150
Cl	XRF	ppm	**45**	0	**240**	115	59	490	68	94	151	**222**	328	380	439
Co	ICP-MS	ppm	**2**	0	**16**	8.4	2.7	32	3.5	4.8	9.1	**16**	19	30	31
Co	ICP-AES	ppm partial	**0.9**	0	**13**	5.1	3.0	23	3.7	5.3	8.9	**14**	16	18	21
Cr	XRF	ppm	**19**	20	**44**	25	<	110	<	<	23	**39**	57	77	103
Cr	ICP-AES	ppm partial	**5**	10	**27**	22	<	93	<	<	11	**22**	34	53	75
Cu	XRF	ppm	**17**	65	***16***	*11*	<	49	<	<	<	**<**	21	31	41
Cu	ICP-AES	ppm partial	**3**	0	**17**	13	4.6	59	4.7	5.8	8.4	**14**	19	32	46
Dy	ICP-MS	ppm	**0.55**	0	**3.7**	2.5	1.1	11	1.2	1.4	1.8	**3.2**	4.8	6.5	9.0
Er	ICP-MS	ppm	**0.3**	0	**2.0**	1.7	0.6	8.2	0.6	0.7	0.8	**1.6**	2.6	3.0	5.6
Eu	ICP-MS	ppm	**0.09**	0	**1.4**	0.58	0.85	2.7	0.86	0.89	0.95	**1.3**	1.8	2.4	2.7
Fe	XRF	ppm	**78**	0	**39448**	17381	15035	82502	15276	15765	25765	**40163**	51142	59324	73271
Fe	ICP-AES	ppm partial	**2300**	0	**36690**	12774	17800	56000	18500	19400	25700	**38450**	48200	52400	55050
Ga	XRF	ppm	**10**	0	**26**	4	16	31	18	20	25	**26**	29	31	31
Gd	ICP-MS	ppm	**0.5**	0	**5.5**	2.6	1.7	10.1	2.1	2.6	3.3	**4.8**	7.7	9.5	9.8
Hf	ICP-MS	ppm	**0.12**	0	**4.75**	1.91	2.04	11.0	2.39	3.07	3.62	**4.41**	5.76	6.43	8.83
Ho	ICP-MS	ppm	**0.09**	0	**0.72**	0.53	0.19	2.5	0.21	0.24	0.33	**0.60**	0.94	1.2	1.8
K	XRF	ppm	**25**	0	**20592**	5843	11371	32287	12160	13654	16725	**19630**	24195	29299	30793
K	ICP-AES	ppm partial	**100**	0	**13331**	5642	2730	22900	3955	6015	8615	**13900**	17850	20000	22200
La	ICP-MS	ppm	**0.55**	0	**45**	17	19	85	20	21	31	**45**	53	69	77
La	ICP-AES	ppm partial	**1.3**	0	**39**	19	13	87	15	17	25	**39**	47	65	78
Li	ICP-AES	ppm partial	**3.5**	0	**24.8**	7.7	10.4	41.0	12.5	15.0	19.8	**24.4**	30.6	34.8	38.2
Lu	ICP-MS	ppm	**0.03**	0	**0.27**	0.29	0.05	1.36	0.06	0.07	0.11	**0.19**	0.35	0.46	0.93
Mg	XRF	ppm	**543**	0	**12753**	6524	2159	24964	2985	4649	6995	**13356**	17366	22462	24633
Mg	ICP-AES	ppm partial	**50**	0	**11285**	4561	2290	19500	3325	5025	7330	**12050**	14800	15900	18100
Mn	XRF	ppm	**93**	0	**628**	271	248	1186	256	279	364	**605**	845	984	1108
Mn	ICP-AES	ppm partial	**50**	0	**418**	168	164	827	199	240	289	**400**	515	666	757
Mo	XRF	ppm	**2.6**	85	**-**	-	<	3	<	<	<	**<**	<	3	3
Mo	ICP-AES	ppm partial	**2.6**	95	**-**	-	<	4	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**27907**	3940	22186	36210	22186	22408	24894	**28122**	30348	33279	35060
Na	ICP-AES	ppm partial	**150**	0	**923**	301	629	1990	648	668	766	**850**	985	1210	1650
Nb	XRF	ppm	**7**	15	**16**	8	<	32	<	<	10	**14**	21	29	31
Nb	ICP-MS	ppm	**0.16**	0	**15**	7.0	6.5	29	6.8	7.2	9.6	**13**	20	26	28
Nd	ICP-MS	ppm	**0.2**	0	**37**	16	13	71	16	20	25	**35**	50	58	66
Ni	XRF	ppm	**14**	50	***20***	*14*	<	59	<	<	<	**<**	26	38	51
Ni	ICP-AES	ppm partial	**3.5**	0	**15**	10	4.5	47	4.7	5.0	7.1	**12**	19	27	37
P	XRF	ppm	**105**	0	**1478**	1142	118	4098	209	336	654	**1073**	2285	3170	3649
P	ICP-AES	ppm partial	**6**	0	**1372**	1051	71	3740	169	328	606	**1033**	2045	2915	3355
Pb	XRF	ppm	**14**	0	**26**	5	16	37	17	19	22	**25**	30	33	36
Pb	ICP-AES	ppm partial	**8.7**	90	**-**	-	<	16	<	<	<	**<**	<	<	13
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**10.2**	4.1	3.9	19.3	4.4	5.0	7.1	**9.8**	13.1	15.6	17.5
Rb	XRF	ppm	**5.5**	0	**74**	25	32	134	34	44	58	**69**	90	105	120
Rb	ICP-MS	ppm	**0.6**	0	**76**	25	38	133	39	45	58	**73**	96	108	123
S	XRF	ppm	**70**	30	**375**	360	<	1430	<	<	<	**198**	607	813	1145
S	ICP-AES	ppm partial	**14.3**	10	**352**	324	<	934	<	<	77	**204**	641	878	922
Sc	ICP-MS	ppm	**2.8**	0	**13**	6.2	3.1	23	3.1	3.8	7.4	**13**	18	20	22
Sc	ICP-AES	ppm partial	**0.4**	0	**6.8**	4.4	0.85	16	1.3	2.0	3.0	**5.5**	10	14	15
Se	GFAAS	ppm partial	**0.055**	85	**-**	-	<	0.31	<	<	<	**<**	<	0.18	0.26
Sm	ICP-MS	ppm	**0.5**	0	**6.3**	2.7	2.1	11	2.5	3.2	3.9	**5.9**	8.6	10	11
Sr	XRF	ppm	**4**	0	**607**	249	244	1240	284	331	382	**606**	800	882	1082
Sr	ICP-AES	ppm partial	**1.2**	0	**22**	15	5.8	60	6.8	7.9	12	**21**	26	46	58
Ta	ICP-MS	ppm	**0.06**	0	**0.88**	0.44	0.20	1.8	0.34	0.49	0.54	**0.75**	1.2	1.5	1.7
Tb	ICP-MS	ppm	**0.08**	0	**0.74**	0.39	0.26	1.7	0.29	0.32	0.45	**0.65**	1.0	1.2	1.5
Te	GFAAS	ppb partial	**5**	85	**-**	-	<	13	<	<	<	**<**	<	9	11
Th	ICP-MS	ppm	**0.13**	0	**6.2**	4.5	1.6	17	1.8	2.1	3.5	**4.8**	6.9	15	17
Th	ICP-AES	ppm partial	**5.6**	25	**9**	4	<	21	<	<	<	**8**	11	14	17
Ti	XRF	ppm	**30**	0	**5328**	3120	1080	14100	1326	1620	3204	**4596**	6930	8970	11880
Ti	ICP-MS	ppm	**10**	0	**5131**	3090	1230	14400	1320	1540	2995	**4405**	6645	8425	11655
Ti	ICP-AES	ppm partial	**2**	0	**3702**	1615	829	6260	1125	1465	2440	**3805**	4985	5745	6150
Tm	ICP-MS	ppm	**0.03**	0	**0.28**	0.29	0.07	1.40	0.07	0.08	0.13	**0.21**	0.38	0.43	0.92
U	ICP-MS	ppm	**0.08**	0	**1.37**	0.66	0.38	3.05	0.45	0.54	0.92	**1.31**	1.70	2.23	2.70
V	XRF	ppm	**6**	0	**113**	59	15	223	22	33	57	**115**	150	195	213
V	ICP-MS	ppm	**2**	0	**86**	48	6.8	171	13	26	39	**87**	120	156	169
V	ICP-AES	ppm partial	**0.6**	0	**74**	34	5.3	134	14	28	43	**80**	96	112	124
Y	XRF	ppm	**2.8**	0	**22**	16	8	78	9	10	11	**20**	29	34	56
Y	ICP-MS	ppm	**0.1**	0	**21**	16	5.4	78	6.1	7.6	8.8	**18**	29	34	56
Y	ICP-AES	ppm partial	**0.15**	0	**9.8**	6.0	2.6	23	3.0	3.4	4.4	**9.0**	14	18	21
Yb	ICP-MS	ppm	**0.22**	0	**1.9**	1.9	0.42	9.2	0.43	0.49	0.75	**1.3**	2.5	3.0	6.1
Zn	XRF	ppm	**4**	0	**102**	33	54	163	54	57	77	**97**	129	149	160
Zn	ICP-AES	ppm partial	**2**	0	**81**	30	41	147	42	44	55	**80**	105	114	131
Zr	XRF	ppm	**6**	0	**227**	111	82	601	104	131	156	**207**	265	325	473
Zr	ICP-MS	ppm	**3**	0	**202**	94	92	537	109	127	153	**177**	241	271	406

Table 14. Chemical concentration summary statistics for map unit 16SA.

Map unit	**16SA**	**Gabbro and diorite (1.89 - 1.87 Ga) - Svecofennian Domain A**
Number of samples	72	
Unit area	835.9	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

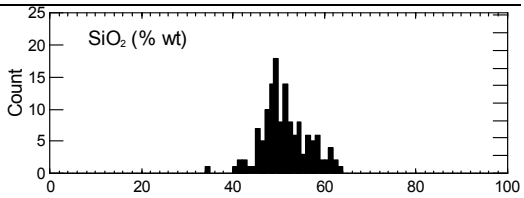


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**49.81**	4.25	38.20	62.30	44.00	45.54	47.00	**49.00**	51.65	56.06	58.74
TiO_2	XRF	%	**0.005**	0	**1.16**	0.61	0.17	3.17	0.37	0.52	0.67	**1.05**	1.51	1.94	2.34
Al_2O_3	XRF	%	**0.02**	0	**14.96**	3.33	2.18	19.40	6.52	10.94	14.80	**15.95**	16.70	17.63	18.47
FeO	XRF	%	**0.01**	0	**8.44**	2.20	4.86	18.18	6.23	6.42	6.92	**7.98**	9.58	10.54	12.05
MnO	XRF	%	**0.012**	0	**0.153**	0.042	0.082	0.357	0.106	0.111	0.128	**0.149**	0.162	0.209	0.231
MgO	XRF	%	**0.09**	0	**7.26**	4.41	2.07	26.70	3.03	3.53	4.60	**5.96**	9.27	12.99	14.49
CaO	XRF	%	**0.004**	0	**8.62**	2.20	2.08	13.20	5.61	6.12	7.40	**8.36**	10.10	11.83	12.90
Na_2O	XRF	%	**0.05**	0	**2.74**	1.04	0.10	4.43	0.66	0.95	2.20	**2.91**	3.40	4.02	4.12
K_2O	XRF	%	**0.003**	0	**1.08**	0.66	0.03	2.72	0.24	0.40	0.57	**0.95**	1.53	2.08	2.43
P_2O_5	XRF	%	**0.024**	2.8	**0.388**	0.401	<	1.870	0.030	0.055	0.135	**0.255**	0.436	0.959	1.467
C_{tot}	Leco	%	**0.05**	76.4	***0.04***	*0.03*	<	0.15	<	<	<	**<**	<	0.09	0.12
$C_{non\text{-}carb}$	Leco	%	**0.05**	81.9	**-**	-	<	0.10	<	<	<	**<**	<	0.05	0.05
F	Ion	%	**0.055**	34.7	**0.09**	0.06	<	0.27	<	<	<	**0.07**	0.11	0.19	0.24
Al	XRF	ppm	**106**	0	**79133**	17605	11532	102626	34475	57873	78292	**84376**	88343	93263	97706
Al	ICP-AES	ppm partial	**1100**	0	**19123**	11931	1920	62400	6070	8119	12300	**16450**	21200	29890	50090
As	GFAAS	ppm partial	**3**	90.3	**-**	-	<	16	<	<	<	**<**	<	<	4.0
Au	GFAAS	ppb partial	**2.5**	93.1	**-**	-	<	3.4	<	<	<	**<**	<	<	2.6
B	ICP-AES	ppm partial	**4.5**	76.4	***6***	*27*	<	196	<	<	<	**<**	<	6	10
Ba	XRF	ppm	**21**	0	**331**	246	22	1130	59	86	126	**278**	466	711	846
Ba	ICP-AES	ppm partial	**10**	2.8	**180**	189	<	818	12	16	41	**127**	254	446	602
Bi	GFAAS	ppm partial	**0.04**	51.4	***0.06***	*0.08*	<	0.59	<	<	<	**<**	0.07	0.11	0.15
Ca	XRF	ppm	**29**	0	**61640**	15716	14872	94380	40104	43787	52910	**59774**	72215	84585	92235
Ca	ICP-AES	ppm partial	**50**	0	**14268**	8086	608	38400	5223	5784	8185	**12700**	17700	25060	32720
Ce	ICP-MS	ppm	**0.22**	0	**50**	44	1.7	222	8.9	11	22	**37**	59	111	135
Cl	XRF	ppm	**45**	0	**302**	427	58	2600	91	97	115	**177**	305	455	886
Co	ICP-MS	ppm	**2**	0	**38**	18	14	128	19	21	26	**35**	44	61	70
Co	ICP-AES	ppm partial	**0.9**	0	**19**	13	2.8	97	7.2	9.1	13	**17**	20	30	46
Cr	XRF	ppm	**19**	2.8	**301**	405	<	2340	20	32	65	**166**	395	684	983
Cr	ICP-AES	ppm partial	**5**	2.8	**78**	125	<	916	6.2	12	21	**41**	87	169	227
Cu	XRF	ppm	**17**	16.7	**58**	48	<	339	<	<	25	**48**	74	108	119
Cu	ICP-AES	ppm partial	**3**	2.8	**56**	49	<	345	5.7	11	25	**46**	76	109	114
Dy	ICP-MS	ppm	**0.55**	0	**4.0**	1.7	0.6	9.7	1.5	2.1	2.6	**4.1**	5.0	6.1	6.8
Er	ICP-MS	ppm	**0.3**	0	**2.1**	0.8	0.3	4.1	0.8	1.1	1.4	**2.3**	2.8	3.1	3.6
Eu	ICP-MS	ppm	**0.09**	0	**1.7**	1.0	0.17	5.1	0.48	0.63	1.0	**1.4**	2.1	3.0	3.7
Fe	XRF	ppm	**78**	0	**65555**	17078	37754	141228	48415	49883	53768	**62012**	74460	81872	93613
Fe	ICP-AES	ppm partial	**2300**	0	**30140**	17059	3770	113000	10990	14420	18500	**25900**	38000	50600	56310
Ga	XRF	ppm	**10**	1.4	**24**	5	<	33	16	16	21	**24**	28	29	30
Gd	ICP-MS	ppm	**0.5**	0	**5.4**	2.8	0.7	14.3	1.6	2.4	3.6	**5.0**	6.9	9.3	10.6
Hf	ICP-MS	ppm	**0.12**	0	**2.71**	1.71	0.26	8.00	0.65	0.98	1.50	**2.37**	3.69	4.89	6.17
Ho	ICP-MS	ppm	**0.09**	0	**0.79**	0.31	0.11	1.6	0.32	0.40	0.51	**0.82**	0.99	1.2	1.3
K	XRF	ppm	**25**	0	**8989**	5478	208	22576	2017	3345	4764	**7885**	12658	17297	20169
K	ICP-AES	ppm partial	**100**	2.8	**5433**	4866	<	18600	288	534	1050	**4040**	9255	12020	14690
La	ICP-MS	ppm	**0.55**	1.4	**23**	20	<	104	3.9	4.3	9.7	**17**	27	49	60
La	ICP-AES	ppm partial	**1.3**	11.1	**16**	16	<	70	<	<	4.3	**11**	19	35	51
Li	ICP-AES	ppm partial	**3.5**	12.5	**21.8**	27.9	<	206	<	<	8.7	**13.9**	25.7	38.5	60.9
Lu	ICP-MS	ppm	**0.03**	0	**0.28**	0.11	0.04	0.53	0.11	0.13	0.19	**0.28**	0.36	0.41	0.45
Mg	XRF	ppm	**543**	0	**43772**	26568	12482	161001	18289	21268	27738	**35939**	55898	78330	87375
Mg	ICP-AES	ppm partial	**50**	0	**14397**	16112	3180	113000	4286	6825	8650	**10600**	14100	19600	31810
Mn	XRF	ppm	**93**	0	**1186**	326	636	2767	822	860	992	**1155**	1256	1620	1790
Mn	ICP-AES	ppm partial	**50**	0	**286**	186	66	1160	90	126	158	**233**	373	508	602
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**20331**	7724	772	32871	4890	7034	16287	**21592**	25228	29799	30563
Na	ICP-AES	ppm partial	**150**	1.4	**1937**	1279	<	6380	594	739	997	**1615**	2450	3911	4661
Nb	XRF	ppm	**7**	26.4	**13**	8	<	48	<	<	<	**9**	14	24	29
Nb	ICP-MS	ppm	**0.16**	0	**8.8**	7.6	0.23	40	0.99	1.7	4.1	**7.1**	10	19	23
Nd	ICP-MS	ppm	**0.2**	0	**27**	21	1.9	101	5.5	7.6	13	**21**	36	57	67
Ni	XRF	ppm	**14**	8.3	**95**	96	<	504	<	17	32	**65**	113	263	302
Ni	ICP-AES	ppm partial	**3.5**	2.8	**51**	63	<	333	5.4	7.9	14	**33**	50	125	188
P	XRF	ppm	**105**	0	**1692**	1748	<	8153	131	240	589	**1112**	1901	4181	6396
P	ICP-AES	ppm partial	**6**	0	**1584**	1638	36	7860	104	222	559	**1105**	1755	3949	5813
Pb	XRF	ppm	**14**	9.7	**20**	4	<	36	<	10	16	**19**	22	26	28
Pb	ICP-AES	ppm partial	**8.7**	98.6	**-**	-	<	15	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	91.7	**-**	-	<	12	<	<	<	**<**	<	<	7
Pr	ICP-MS	ppm	**0.74**	4.2	**6.6**	5.4	<	27.1	1.2	1.7	3.1	**4.9**	8.2	13.8	16.7
Rb	XRF	ppm	**5.5**	8.3	**37**	26	<	139	<	8	15	**33**	52	76	81
Rb	ICP-MS	ppm	**0.6**	0	**35**	26	1.6	130	2.9	6.6	15	**32**	48	73	83
S	XRF	ppm	**70**	15.3	**888**	1085	<	7700	<	<	147	**743**	1090	1801	2036
S	ICP-AES	ppm partial	**14.3**	1.4	**1024**	1263	<	9090	26	44	158	**890**	1265	2053	2344
Sc	ICP-MS	ppm	**2.8**	0	**33**	15	12	78	16	17	22	**30**	39	55	66
Sc	ICP-AES	ppm partial	**0.4**	0	**4.4**	2.3	1.3	17	1.6	2.2	2.9	**4.0**	5.5	6.7	8.0
Se	GFAAS	ppm partial	**0.055**	22.2	**0.14**	0.17	<	1.4	<	<	0.06	**0.10**	0.14	0.25	0.32
Sm	ICP-MS	ppm	**0.5**	1.4	**5.5**	3.4	<	17	1.4	2.1	3.2	**4.6**	7.6	10	12
Sr	XRF	ppm	**4**	0	**494**	302	14	1290	120	170	290	**430**	669	920	1101
Sr	ICP-AES	ppm partial	**1.2**	0	**57**	61	2.2	323	11	13	20	**43**	60	142	201
Ta	ICP-MS	ppm	**0.06**	4.2	**0.50**	0.39	<	2.3	0.07	0.11	0.25	**0.43**	0.61	0.90	1.3
Tb	ICP-MS	ppm	**0.08**	0	**0.76**	0.35	0.11	2.0	0.26	0.37	0.47	**0.75**	0.92	1.2	1.3
Te	GFAAS	ppb partial	**5**	59.7	***6***	*7*	<	46	<	<	<	**<**	8	12	20
Th	ICP-MS	ppm	**0.13**	1.4	**2.2**	1.5	<	7.1	0.45	0.58	0.96	**2.0**	3.2	4.1	5.1
Th	ICP-AES	ppm partial	**5.6**	77.8	***5***	*3*	<	14	<	<	<	**<**	<	9	10
Ti	XRF	ppm	**30**	0	**6960**	3630	1014	19020	2226	3090	4014	**6270**	9030	11616	14064
Ti	ICP-MS	ppm	**10**	0	**6880**	3692	1000	19700	2237	2972	3800	**6135**	9235	11950	13840
Ti	ICP-AES	ppm partial	**2**	0	**2302**	1441	103	6080	216	513	1215	**2150**	3120	4501	4910
Tm	ICP-MS	ppm	**0.03**	0	**0.30**	0.12	0.05	0.59	0.10	0.15	0.21	**0.31**	0.39	0.44	0.49
U	ICP-MS	ppm	**0.08**	1.4	**0.94**	0.64	<	2.72	0.16	0.26	0.39	**0.77**	1.33	2.01	2.19
V	XRF	ppm	**6**	0	**213**	81	93	563	134	144	160	**194**	243	303	390
V	ICP-MS	ppm	**2**	0	**192**	88	50	580	102	109	138	**170**	219	284	392
V	ICP-AES	ppm partial	**0.6**	0	**69**	46	8.8	277	17	30	41	**58**	83	122	140
Y	XRF	ppm	**2.8**	2.8	**20**	8	<	44	8	9	13	**20**	26	30	33
Y	ICP-MS	ppm	**0.1**	0	**23**	9.2	3.4	47	9.3	11	15	**24**	29	35	37
Y	ICP-AES	ppm partial	**0.15**	0	**6.6**	4.9	0.41	21	0.56	0.98	2.3	**6.2**	8.8	14	17
Yb	ICP-MS	ppm	**0.22**	0	**1.9**	0.75	0.35	3.6	0.80	0.94	1.3	**2.0**	2.5	2.8	3.2
Zn	XRF	ppm	**4**	0	**111**	31	53	218	71	73	87	**110**	130	142	163
Zn	ICP-AES	ppm partial	**2**	0	**40**	26	5.5	141	11	15	19	**36**	52	74	89
Zr	XRF	ppm	**6**	1.4	**119**	79	<	378	25	34	60	**105**	167	231	272
Zr	ICP-MS	ppm	**3**	0	**107**	79	5.7	376	21	29	51	**89**	148	198	282

Table 15. Chemical concentration summary statistics for map unit 16SB.

Map unit	**16SB**	**Gabbro and diorite (1.89 - 1.87 Ga) - Svecofennian Domain B**
Number of samples	137	
Unit area	1642.1	km^2
Percent of bedrock	0.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

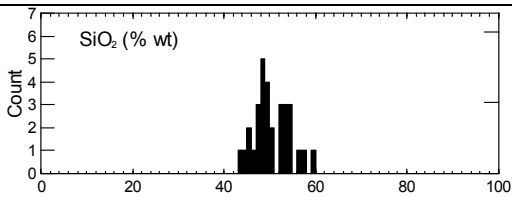


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**51.36**	5.05	34.60	63.80	44.09	45.82	48.20	**50.60**	54.40	58.36	60.79
TiO_2	XRF	%	**0.005**	0	**1.17**	0.62	0.06	3.87	0.49	0.56	0.75	**1.03**	1.42	1.99	2.30
Al_2O_3	XRF	%	**0.02**	0	**16.25**	3.59	0.57	28.10	9.33	11.86	15.18	**16.60**	17.93	19.62	21.10
FeO	XRF	%	**0.01**	0	**8.83**	2.29	3.59	19.80	5.60	6.35	7.41	**8.63**	10.01	11.58	12.17
MnO	XRF	%	**0.012**	0	**0.152**	0.035	0.055	0.271	0.101	0.113	0.131	**0.149**	0.170	0.199	0.204
MgO	XRF	%	**0.09**	0	**5.97**	4.38	0.67	33.70	2.11	2.76	3.33	**4.73**	6.81	11.36	14.05
CaO	XRF	%	**0.004**	0	**7.95**	2.24	0.37	14.70	5.01	5.42	6.46	**7.78**	9.15	10.70	11.77
Na_2O	XRF	%	**0.05**	1.5	**2.88**	0.90	<	5.31	1.01	1.37	2.64	**3.07**	3.39	3.81	4.13
K_2O	XRF	%	**0.003**	0	**1.43**	0.84	0.00	4.22	0.29	0.41	0.73	**1.37**	1.98	2.40	2.84
P_2O_5	XRF	%	**0.024**	2.2	**0.383**	0.378	<	2.380	0.058	0.074	0.166	**0.280**	0.454	0.743	1.033
C_{tot}	Leco	%	**0.05**	77.4	***0.04***	*0.03*	<	0.16	<	<	<	**<**	<	0.08	0.11
$C_{non\text{-}carb}$	Leco	%	**0.05**	86.1	**-**	-	<	0.14	<	<	<	**<**	<	0.05	0.05
F	Ion	%	**0.055**	43.8	**0.08**	0.04	<	0.36	<	<	<	**0.06**	0.09	0.12	0.17
Al	XRF	ppm	**106**	0	**85936**	18996	3015	148649	49335	62739	80276	**87814**	94823	103790	111593
Al	ICP-AES	ppm partial	**1100**	0	**24234**	19303	1400	164000	7715	13040	16425	**19300**	25000	35340	66030
As	GFAAS	ppm partial	**3**	79.6	***2.4***	*8.4*	<	97	<	<	<	**<**	<	5.1	7.2
Au	GFAAS	ppb partial	**2.5**	91.2	**-**	-	<	35.0	<	<	<	**<**	<	<	3.4
B	ICP-AES	ppm partial	**4.5**	92	**-**	-	<	172	<	<	<	**<**	<	<	5
Ba	XRF	ppm	**21**	0	**517**	442	21	3400	91	134	223	**460**	635	901	1344
Ba	ICP-AES	ppm partial	**10**	2.9	**267**	228	<	1310	17	30	76	**229**	401	574	681
Bi	GFAAS	ppm partial	**0.04**	68.6	***0.04***	*0.04*	<	0.41	<	<	<	**<**	0.05	0.08	0.09
Ca	XRF	ppm	**29**	0	**56807**	16016	2660	105105	35843	38767	46189	**55627**	65423	76505	84120
Ca	ICP-AES	ppm partial	**50**	0	**14195**	11257	500	88200	5597	6576	8173	**11000**	15900	23300	36925
Ce	ICP-MS	ppm	**0.22**	0	**47**	35	0.39	259	9.1	12	24	**40**	63	88	109
Cl	XRF	ppm	**45**	2.2	**227**	193	<	1520	58	69	104	**174**	285	443	593
Co	ICP-MS	ppm	**2**	0	**36**	31	9.4	346	14	18	23	**31**	42	52	58
Co	ICP-AES	ppm partial	**0.9**	0	**20**	16	3.8	169	9.4	12	14	**17**	21	26	33
Cr	XRF	ppm	**19**	4.4	**209**	342	<	2310	19	25	42	**86**	212	507	870
Cr	ICP-AES	ppm partial	**5**	5.8	**65**	108	<	931	<	8.3	16	**32**	73	143	183
Cu	XRF	ppm	**17**	10.2	**47**	33	<	190	<	<	25	**36**	56	77	121
Cu	ICP-AES	ppm partial	**3**	1.5	**45**	33	<	201	7.6	18	25	**35**	56	88	113
Dy	ICP-MS	ppm	**0.55**	0.7	**4.0**	2.1	<	12	1.1	1.8	2.6	**3.6**	4.8	6.6	7.9
Er	ICP-MS	ppm	**0.3**	0.7	**2.2**	1.2	<	7.6	0.7	1.0	1.4	**1.9**	2.6	3.6	4.4
Eu	ICP-MS	ppm	**0.09**	0.7	**1.4**	0.66	<	4.2	0.64	0.70	0.95	**1.4**	1.6	2.3	2.8
Fe	XRF	ppm	**78**	0	**68617**	17770	27894	153846	43543	49316	57607	**67055**	77778	89977	94592
Fe	ICP-AES	ppm partial	**2300**	0	**34843**	17959	6030	165000	11975	16700	24900	**34000**	40825	51380	63320
Ga	XRF	ppm	**10**	0.7	**25**	5	<	39	16	19	22	**25**	27	31	32
Gd	ICP-MS	ppm	**0.5**	0.7	**5.1**	2.7	<	14.4	1.4	2.2	3.4	**4.4**	6.4	9.5	10.2
Hf	ICP-MS	ppm	**0.12**	0	**3.10**	2.72	0.36	21.3	0.68	0.94	1.56	**2.64**	3.85	5.70	6.28
Ho	ICP-MS	ppm	**0.09**	0	**0.77**	0.41	0.09	2.4	0.25	0.36	0.51	**0.70**	0.94	1.2	1.5
K	XRF	ppm	**25**	0	**11852**	6947	33	35026	2415	3428	6084	**11371**	16393	19920	23539
K	ICP-AES	ppm partial	**100**	0	**7567**	5336	100	25900	466	676	2115	**7960**	11650	14440	15630
La	ICP-MS	ppm	**0.55**	0.7	**22**	16	<	112	4.1	5.4	11	**18**	29	40	47
La	ICP-AES	ppm partial	**1.3**	7.3	**15**	13	<	78	<	1.4	5.9	**13**	22	29	38
Li	ICP-AES	ppm partial	**3.5**	5.1	**18.2**	11.7	<	68.2	<	4.9	9.2	**16.3**	24.6	33.6	37.6
Lu	ICP-MS	ppm	**0.03**	0	**0.29**	0.16	0.04	1.26	0.11	0.14	0.19	**0.27**	0.34	0.48	0.54
Mg	XRF	ppm	**543**	0	**35987**	26399	4040	203211	12711	16619	20050	**28522**	41064	68501	84691
Mg	ICP-AES	ppm partial	**50**	0	**14636**	22606	1200	247000	4729	6344	9155	**11800**	13925	17660	28395
Mn	XRF	ppm	**93**	0	**1178**	271	426	2100	783	876	1015	**1155**	1318	1542	1581
Mn	ICP-AES	ppm partial	**50**	0	**328**	218	64	1760	102	131	186	**277**	422	565	650
Mo	XRF	ppm	**2.6**	95.6	**-**	-	<	9	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	94.2	**-**	-	<	8	<	<	<	**<**	<	<	3
Na	XRF	ppm	**371**	1.5	**21377**	6641	<	39400	7465	10136	19611	**22779**	25154	28285	30615
Na	ICP-AES	ppm partial	**150**	1.5	**2193**	1627	<	8000	552	814	1075	**1610**	2585	4486	6063
Nb	XRF	ppm	**7**	38	**12**	6	<	34	<	<	<	**9**	14	19	25
Nb	ICP-MS	ppm	**0.16**	1.5	**8.8**	6.3	<	34	1.4	1.9	4.7	**7.5**	11	17	21
Nd	ICP-MS	ppm	**0.2**	0	**26**	18	0.36	134	5.3	7.9	15	**22**	32	48	61
Ni	XRF	ppm	**14**	21.2	**70**	132	<	1130	<	<	17	**34**	73	136	181
Ni	ICP-AES	ppm partial	**3.5**	2.9	**42**	96	<	843	4.0	5.3	11	**20**	38	74	116
P	XRF	ppm	**105**	0	**1670**	1648	<	10377	253	323	724	**1221**	1979	3239	4504
P	ICP-AES	ppm partial	**6**	0	**1507**	1441	7.0	8000	218	294	664	**1120**	1853	2980	4242
Pb	XRF	ppm	**14**	3.6	**21**	6	<	52	14	15	17	**20**	24	29	31
Pb	ICP-AES	ppm partial	**8.7**	88.3	**-**	-	<	37	<	<	<	**<**	<	9	11
Pd	GFAAS	ppb partial	**5**	94.2	**-**	-	<	13	<	<	<	**<**	<	<	5
Pr	ICP-MS	ppm	**0.74**	1.5	**6.2**	4.4	<	31.7	1.2	1.7	3.4	**5.3**	7.8	11.4	14.1
Rb	XRF	ppm	**5.5**	3.6	**45**	30	<	167	6	9	22	**42**	61	86	98
Rb	ICP-MS	ppm	**0.6**	2.2	**42**	29	<	157	3.9	7.4	20	**41**	59	86	92
S	XRF	ppm	**70**	12.4	**766**	830	<	6320	<	<	214	**594**	1003	1658	2241
S	ICP-AES	ppm partial	**14.3**	1.5	**851**	922	<	6890	24	52	237	**670**	1113	1790	2647
Sc	ICP-MS	ppm	**2.8**	0	**30**	14	6.1	94	13	18	20	**26**	34	48	58
Sc	ICP-AES	ppm partial	**0.4**	0	**4.3**	2.3	0.50	19	1.3	2.0	3.0	**3.9**	5.2	6.8	7.9
Se	GFAAS	ppm partial	**0.055**	32.8	**0.11**	0.12	<	1.1	<	<	<	**0.08**	0.11	0.20	0.34
Sm	ICP-MS	ppm	**0.5**	0.7	**5.3**	3.2	<	20	1.3	2.0	3.3	**4.6**	6.5	9.6	11
Sr	XRF	ppm	**4**	0	**596**	325	7	1660	161	227	361	**526**	805	993	1208
Sr	ICP-AES	ppm partial	**1.2**	0	**80**	108	1.8	766	11	18	25	**44**	99	147	311
Ta	ICP-MS	ppm	**0.06**	1.5	**0.52**	0.32	<	1.8	0.08	0.13	0.30	**0.47**	0.71	0.89	1.1
Tb	ICP-MS	ppm	**0.08**	0.7	**0.73**	0.37	<	2.1	0.18	0.33	0.48	**0.63**	0.92	1.3	1.5
Te	GFAAS	ppb partial	**5**	60.6	***6***	*7*	<	44	<	<	<	**<**	8	14	19
Th	ICP-MS	ppm	**0.13**	1.5	**2.7**	2.6	<	14	0.24	0.45	0.94	**2.1**	3.6	5.4	8.3
Th	ICP-AES	ppm partial	**5.6**	63.5	***5***	*4*	<	20	<	<	<	**<**	7	10	13
Ti	XRF	ppm	**30**	0	**7044**	3732	360	23220	2946	3366	4518	**6180**	8538	11952	13776
Ti	ICP-MS	ppm	**10**	0	**6931**	3850	647	22400	2950	3344	4290	**5910**	8775	11390	14050
Ti	ICP-AES	ppm partial	**2**	0	**2567**	1412	114	6790	459	742	1390	**2560**	3578	4422	5110
Tm	ICP-MS	ppm	**0.03**	0	**0.31**	0.17	0.04	1.21	0.10	0.14	0.19	**0.28**	0.37	0.48	0.58
U	ICP-MS	ppm	**0.08**	3.6	**1.05**	0.78	<	4.72	0.11	0.21	0.42	**0.92**	1.47	2.07	2.36
V	XRF	ppm	**6**	0	**224**	92	42	588	96	127	162	**213**	260	341	399
V	ICP-MS	ppm	**2**	0	**199**	97	29	571	78	100	136	**179**	239	318	395
V	ICP-AES	ppm partial	**0.6**	0	**90**	50	7.9	280	27	38	58	**85**	111	155	193
Y	XRF	ppm	**2.8**	1.5	**21**	12	<	72	6	8	14	**20**	26	35	43
Y	ICP-MS	ppm	**0.1**	0	**23**	12	2.5	78	7.0	10	14	**21**	27	38	45
Y	ICP-AES	ppm partial	**0.15**	0.7	**7.5**	5.7	<	27	0.85	1.3	3.2	**6.1**	10	16	19
Yb	ICP-MS	ppm	**0.22**	0	**2.0**	1.1	0.25	8.6	0.70	0.86	1.3	**1.8**	2.3	3.1	3.8
Zn	XRF	ppm	**4**	0	**116**	30	42	214	68	79	96	**113**	135	154	169
Zn	ICP-AES	ppm partial	**2**	0	**51**	26	7.7	135	13	19	29	**49**	65	82	102
Zr	XRF	ppm	**6**	0.7	**138**	153	<	1238	22	31	62	**114**	165	218	282
Zr	ICP-MS	ppm	**3**	0	**122**	135	6.2	1060	21	29	54	**97**	151	205	255

Table 16. Chemical concentration summary statistics for map unit 16SC.

Map unit	**16SC**	**Gabbro and diorite (1.89 - 1.87 Ga) - Svecofennian Domain C**
Number of samples	31	
Unit area	273.9	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

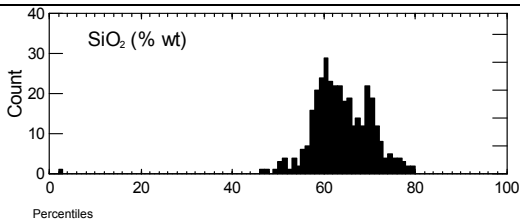


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
									Percentiles						
SiO_2	XRF	%	**0.02**	0	**50.34**	3.92	43.20	59.30	44.05	45.24	47.68	**49.90**	53.15	55.38	56.96
TiO_2	XRF	%	**0.005**	0	**1.36**	0.85	0.15	4.02	0.22	0.38	0.79	**1.31**	1.89	2.33	2.89
Al_2O_3	XRF	%	**0.02**	0	**15.40**	3.40	4.50	20.90	5.27	12.62	14.63	**16.20**	16.88	18.78	19.30
FeO	XRF	%	**0.01**	0	**10.24**	2.11	7.09	15.70	7.12	7.65	8.56	**10.40**	11.38	13.00	14.33
MnO	XRF	%	**0.012**	0	**0.167**	0.028	0.123	0.225	0.126	0.127	0.145	**0.169**	0.185	0.207	0.209
MgO	XRF	%	**0.09**	0	**6.66**	3.97	2.00	18.30	2.90	3.48	4.25	**5.40**	7.53	13.02	16.50
CaO	XRF	%	**0.004**	0	**8.35**	2.30	4.34	15.20	5.41	6.06	7.06	**7.96**	9.26	10.72	14.51
Na_2O	XRF	%	**0.05**	0	**2.82**	0.84	0.59	4.16	0.65	1.56	2.63	**3.03**	3.26	3.62	3.68
K_2O	XRF	%	**0.003**	0	**1.18**	0.83	0.16	2.99	0.16	0.18	0.35	**1.18**	1.82	2.25	2.87
P_2O_5	XRF	%	**0.024**	16.1	**0.501**	0.542	<	2.640	<	<	0.174	**0.327**	0.710	1.098	1.386
C_{tot}	Leco	%	**0.05**	45.2	**0.07**	0.03	<	0.15	<	<	<	**0.05**	0.09	0.12	0.14
$C_{non-carb}$	Leco	%	**0.05**	64.5	**-**	-	<	0.05	<	<	<	**<**	0.05	0.05	0.05
F	Ion	%	**0.055**	48.4	**0.09**	0.04	<	0.23	<	<	<	**0.06**	0.11	0.14	0.15
Al	XRF	ppm	**106**	0	**81466**	17997	23805	110561	27899	66760	77366	**85698**	89269	99346	102071
Al	ICP-AES	ppm partial	**1100**	0	**20603**	11374	1900	63700	3950	9660	14500	**19600**	24175	33520	34995
As	GFAAS	ppm partial	**3**	93.5	**-**	-	<	3.5	<	<	<	**<**	<	<	3.2
Au	GFAAS	ppb partial	**2.5**	93.5	**-**	-	<	6.4	<	<	<	**<**	<	<	2.5
B	ICP-AES	ppm partial	**4.5**	96.8	**-**	-	<	5	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**505**	394	35	1427	58	95	165	**424**	742	1071	1309
Ba	ICP-AES	ppm partial	**10**	3.2	**380**	361	<	1420	14	30	54	**282**	694	819	956
Bi	GFAAS	ppm partial	**0.04**	83.9	**-**	-	<	0.10	<	<	<	**<**	<	0.05	0.06
Ca	XRF	ppm	**29**	0	**59681**	16459	31031	108680	38682	43358	50465	**56914**	66209	76648	103747
Ca	ICP-AES	ppm partial	**50**	0	**14176**	6678	3800	31400	7454	7960	9450	**12200**	17875	23780	30435
Ce	ICP-MS	ppm	**0.22**	0	**49**	42	2.3	149	3.3	4.2	15	**42**	90	108	123
Cl	XRF	ppm	**45**	6.5	**248**	163	<	620	<	56	123	**190**	365	484	542
Co	ICP-MS	ppm	**2**	0	**40**	16	20	89	20	23	29	**36**	48	64	76
Co	ICP-AES	ppm partial	**0.9**	0	**22**	11	8.8	63	9.9	14	16	**18**	24	33	46
Cr	XRF	ppm	**19**	6.5	**204**	254	<	964	<	25	61	**110**	237	569	904
Cr	ICP-AES	ppm partial	**5**	6.5	**57**	54	<	236	<	11	20	**39**	68	134	186
Cu	XRF	ppm	**17**	6.5	**50**	32	<	150	<	22	28	**44**	56	92	126
Cu	ICP-AES	ppm partial	**3**	0	**50**	35	18	169	19	25	27	**33**	59	86	142
Dy	ICP-MS	ppm	**0.55**	3.2	**4.3**	2.8	<	13	0.7	1.1	2.3	**4.2**	5.7	7.8	8.4
Er	ICP-MS	ppm	**0.3**	0	**2.3**	1.4	0.4	6.6	0.5	0.8	1.3	**1.9**	2.8	4.2	4.9
Eu	ICP-MS	ppm	**0.09**	0	**1.6**	0.90	0.22	3.2	0.36	0.63	0.88	**1.3**	2.3	3.0	3.0
Fe	XRF	ppm	**78**	0	**79557**	16410	55089	121989	55338	59456	66503	**80808**	88384	101010	111321
Fe	ICP-AES	ppm partial	**2300**	0	**35511**	16901	7500	75900	8362	12396	23550	**33600**	46250	58800	67225
Ga	XRF	ppm	**10**	3.2	**22**	5	<	33	12	15	19	**23**	25	28	32
Gd	ICP-MS	ppm	**0.5**	0	**5.6**	3.9	0.5	18.0	0.7	1.0	2.7	**4.3**	8.6	9.6	10.9
Hf	ICP-MS	ppm	**0.12**	0	**3.14**	3.67	0.25	19.9	0.28	0.30	0.80	**2.41**	4.23	6.08	6.16
Ho	ICP-MS	ppm	**0.09**	0	**0.82**	0.53	0.14	2.5	0.18	0.24	0.43	**0.76**	1.0	1.6	1.6
K	XRF	ppm	**25**	0	**9811**	6906	1287	24817	1328	1502	2897	**9794**	15081	18675	23821
K	ICP-AES	ppm partial	**100**	0	**7676**	6823	200	23700	315	631	1050	**7840**	12125	17340	21305
La	ICP-MS	ppm	**0.55**	0	**22**	20	1.0	78	1.3	1.9	6.3	**17**	40	50	54
La	ICP-AES	ppm partial	**1.3**	19.4	**18**	19	<	78	<	<	2.7	**12**	26	49	56
Li	ICP-AES	ppm partial	**3.5**	29	**12.8**	11.3	<	55.9	<	<	<	**9.2**	19.7	25.8	28.3
Lu	ICP-MS	ppm	**0.03**	0	**0.30**	0.18	0.07	0.81	0.08	0.12	0.17	**0.24**	0.39	0.54	0.67
Mg	XRF	ppm	**543**	0	**40136**	23933	12060	110349	17457	20972	25628	**32562**	45388	78511	99495
Mg	ICP-AES	ppm partial	**50**	0	**14003**	14323	3740	85000	4115	4640	7193	**10500**	15325	22620	23495
Mn	XRF	ppm	**93**	0	**1294**	217	953	1744	977	984	1124	**1310**	1434	1604	1620
Mn	ICP-AES	ppm partial	**50**	0	**313**	182	81	816	100	122	195	**233**	453	564	675
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**20902**	6240	4378	30867	4823	11546	19492	**22483**	24167	26846	27298
Na	ICP-AES	ppm partial	**150**	0	**2111**	1322	500	5500	615	900	1070	**1770**	2555	4400	4890
Nb	XRF	ppm	**7**	41.9	**12**	7	<	28	<	<	<	**7**	17	23	26
Nb	ICP-MS	ppm	**0.16**	0	**8.7**	7.5	0.22	21	0.29	0.31	2.7	**5.3**	17	19	21
Nd	ICP-MS	ppm	**0.2**	0	**27**	21	1.8	76	2.1	2.3	8.7	**22**	49	56	61
Ni	XRF	ppm	**14**	12.9	**77**	78	<	338	<	<	21	**46**	115	174	238
Ni	ICP-AES	ppm partial	**3.5**	0	**49**	56	3.5	266	4.0	7.9	14	**24**	69	102	175
P	XRF	ppm	**105**	0	**2184**	2363	<	11510	<	<	759	**1426**	3096	4787	6043
P	ICP-AES	ppm partial	**6**	0	**1971**	2124	11	9870	20	51	661	**1180**	2878	4572	5879
Pb	XRF	ppm	**14**	29	**18**	4	<	27	<	<	<	**17**	20	25	27
Pb	ICP-AES	ppm partial	**8.7**	96.8	**-**	-	<	14	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	93.5	**-**	-	<	14	<	<	<	**<**	<	<	6
Pr	ICP-MS	ppm	**0.74**	12.9	**6.5**	5.1	<	16.9	<	<	2.0	**5.0**	11.6	13.9	16.4
Rb	XRF	ppm	**5.5**	29	**33**	27	<	99	<	<	<	**30**	49	76	84
Rb	ICP-MS	ppm	**0.6**	3.2	**30**	27	<	93	0.9	1.0	4.2	**30**	47	72	75
S	XRF	ppm	**70**	3.2	**1210**	1224	<	6450	102	158	600	**980**	1500	1764	3779
S	ICP-AES	ppm partial	**14.3**	0	**1396**	1384	17	7130	99	175	692	**1070**	1800	2230	4404
Sc	ICP-MS	ppm	**2.8**	0	**34**	15	17	82	18	20	24	**32**	39	46	78
Sc	ICP-AES	ppm partial	**0.4**	0	**4.6**	2.1	1.1	10	1.2	1.6	3.5	**4.6**	5.7	6.9	8.4
Se	GFAAS	ppm partial	**0.055**	16.1	**0.14**	0.11	<	0.51	<	<	0.06	**0.09**	0.16	0.26	0.43
Sm	ICP-MS	ppm	**0.5**	0	**5.6**	4.1	0.50	17	0.55	0.76	2.3	**4.3**	9.1	11	11
Sr	XRF	ppm	**4**	0	**531**	341	46	1690	106	255	343	**413**	651	822	1457
Sr	ICP-AES	ppm partial	**1.2**	0	**60**	52	6.8	253	10	18	28	**44**	76	130	151
Ta	ICP-MS	ppm	**0.06**	19.4	**0.48**	0.37	<	1.2	<	<	0.17	**0.37**	0.86	0.98	1.1
Tb	ICP-MS	ppm	**0.08**	0	**0.78**	0.52	0.10	2.4	0.11	0.16	0.39	**0.61**	1.2	1.4	1.5
Te	GFAAS	ppb partial	**5**	45.2	**9**	7	<	39	<	<	<	**5**	9	17	21
Th	ICP-MS	ppm	**0.13**	12.9	**1.7**	1.9	<	8.8	<	<	0.26	**1.3**	2.4	4.1	4.8
Th	ICP-AES	ppm partial	**5.6**	77.4	***4***	*4*	<	20	<	<	<	**<**	<	10	13
Ti	XRF	ppm	**30**	0	**8172**	5124	912	24120	1332	2280	4752	**7860**	11310	13992	17316
Ti	ICP-MS	ppm	**10**	0	**8126**	5094	916	22700	1372	2278	4650	**6960**	11000	14020	18665
Ti	ICP-AES	ppm partial	**2**	0	**2735**	2036	105	7970	180	368	891	**2940**	3930	5344	6144
Tm	ICP-MS	ppm	**0.03**	0	**0.31**	0.19	0.06	0.86	0.07	0.10	0.18	**0.25**	0.37	0.58	0.68
U	ICP-MS	ppm	**0.08**	19.4	**0.53**	0.40	<	1.39	<	<	0.11	**0.55**	0.87	1.13	1.23
V	XRF	ppm	**6**	0	**243**	87	91	451	141	165	172	**216**	304	372	409
V	ICP-MS	ppm	**2**	0	**214**	98	98	467	123	128	145	**173**	275	375	434
V	ICP-AES	ppm partial	**0.6**	0	**97**	63	8.8	258	15	20	53	**95**	123	197	231
Y	XRF	ppm	**2.8**	0	**23**	15	6	71	6	7	11	**20**	31	43	48
Y	ICP-MS	ppm	**0.1**	0	**24**	16	3.8	72	4.9	6.7	13	**23**	31	45	51
Y	ICP-AES	ppm partial	**0.15**	0	**10**	12	0.20	60	0.31	0.49	2.9	**7.0**	11	25	29
Yb	ICP-MS	ppm	**0.22**	0	**2.0**	1.2	0.40	5.6	0.58	0.73	1.2	**1.6**	2.5	3.8	4.6
Zn	XRF	ppm	**4**	0	**123**	40	67	222	68	72	97	**114**	153	179	184
Zn	ICP-AES	ppm partial	**2**	0	**47**	33	5.8	131	6.3	7.3	23	**40**	68	96	106
Zr	XRF	ppm	**6**	0	**143**	144	7	675	7	12	34	**118**	180	333	357
Zr	ICP-MS	ppm	**3**	0	**128**	163	7.7	867	8.6	9.2	28	**91**	173	263	291

Table 17. Chemical concentration summary statistics for map unit 18.

Map unit	18	Mica schist and mica gneiss
Number of samples	348	
Unit area	15883.8	km^2
Percent of bedrock	4.7	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

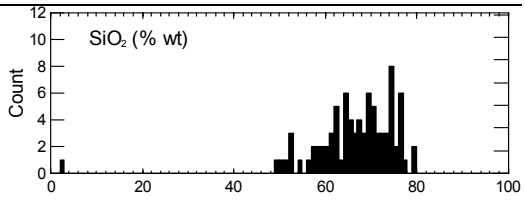


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**63.79**	6.88	2.16	79.70	54.49	57.10	59.70	**63.40**	68.80	71.84	74.71
TiO_2	XRF	%	**0.005**	0	**0.73**	0.28	0.01	3.75	0.46	0.51	0.60	**0.70**	0.79	0.92	1.16
Al_2O_3	XRF	%	**0.02**	0	**15.96**	2.64	0.15	25.30	11.58	12.63	14.20	**16.30**	17.70	19.10	19.90
FeO	XRF	%	**0.01**	0	**5.65**	1.65	0.19	11.61	3.05	3.62	4.53	**5.66**	6.60	7.59	8.63
MnO	XRF	%	**0.012**	0	**0.069**	0.040	0.018	0.368	0.030	0.034	0.044	**0.060**	0.081	0.118	0.144
MgO	XRF	%	**0.09**	0	**2.68**	1.47	0.32	19.10	1.08	1.44	2.00	**2.55**	3.13	3.70	4.10
CaO	XRF	%	**0.004**	0	**2.03**	2.21	0.14	31.60	0.33	0.55	0.91	**1.60**	2.42	4.18	5.52
Na_2O	XRF	%	**0.05**	0.3	**2.37**	0.86	<	5.53	1.00	1.25	1.74	**2.40**	2.94	3.40	3.69
K_2O	XRF	%	**0.003**	0	**3.05**	1.05	0.01	6.44	1.45	1.74	2.26	**3.00**	3.77	4.41	4.78
P_2O_5	XRF	%	**0.024**	0	**0.141**	0.129	0.025	1.110	0.051	0.061	0.082	**0.117**	0.150	0.202	0.289
C_{tot}	Leco	%	**0.05**	65.2	***0.13***	*0.72*	<	13	<	<	<	**<**	0.09	0.30	0.40
$C_{non\text{-}carb}$	Leco	%	**0.05**	69.5	***0.07***	*0.13*	<	1.1	<	<	<	**<**	0.05	0.24	0.33
F	Ion	%	**0.055**	10.1	**0.12**	0.15	<	2.7	<	<	0.07	**0.09**	0.13	0.16	0.22
Al	XRF	ppm	**106**	0	**84402**	13987	778	133837	61258	66813	75118	**86227**	93633	101039	105271
Al	ICP-AES	ppm partial	**1100**	0.3	**30542**	12898	<	95400	14570	17300	22250	**29300**	36150	45480	50310
As	GFAAS	ppm partial	**3**	87.6	**-**	-	<	300	<	<	<	**<**	<	3.4	6.9
Au	GFAAS	ppb partial	**2.5**	87.1	**-**	-	<	31.3	<	<	<	**<**	<	2.9	4.6
B	ICP-AES	ppm partial	**4.5**	71.6	***4***	*3*	<	24	<	<	<	**<**	5	7	9
Ba	XRF	ppm	**21**	0.3	**565**	239	<	1760	177	262	411	**567**	689	866	954
Ba	ICP-AES	ppm partial	**10**	0	**206**	164	10	1310	61	75	102	**159**	257	390	487
Bi	GFAAS	ppm partial	**0.04**	25.3	**0.17**	0.27	<	4.0	<	<	<	**0.09**	0.20	0.39	0.50
Ca	XRF	ppm	**29**	0	**14543**	15773	994	225940	2381	3954	6471	**11404**	17267	29880	39497
Ca	ICP-AES	ppm partial	**50**	0	**3729**	13836	198	235000	425	504	748	**1180**	2175	7659	13920
Ce	ICP-MS	ppm	**0.22**	0	**80**	25	1.0	210	39	55	66	**79**	93	107	114
Cl	XRF	ppm	**45**	28.4	**94**	76	<	470	<	<	<	**65**	111	169	268
Co	ICP-MS	ppm	**2**	1.7	**17**	8.5	<	99	6.1	8.4	12	**15**	20	25	30
Co	ICP-AES	ppm partial	**0.9**	0.3	**15**	5.3	<	32	6.9	8.6	12	**15**	18	23	25
Cr	XRF	ppm	**19**	2	**128**	81	<	1250	27	49	92	**128**	150	185	205
Cr	ICP-AES	ppm partial	**5**	2.6	**99**	52	<	381	12	28	68	**96**	127	157	180
Cu	XRF	ppm	**17**	37.9	**39**	38	<	407	<	<	<	**23**	46	80	112
Cu	ICP-AES	ppm partial	**3**	6	**35**	39	<	397	<	3.9	10	**25**	45	80	108
Dy	ICP-MS	ppm	**0.55**	0.6	**4.7**	2.2	<	25	2.8	3.2	3.7	**4.4**	5.1	6.0	7.8
Er	ICP-MS	ppm	**0.3**	0.3	**2.7**	1.4	<	16	1.5	1.7	2.1	**2.4**	2.9	3.6	4.6
Eu	ICP-MS	ppm	**0.09**	0.3	**1.2**	0.41	<	3.6	0.79	0.88	1.0	**1.2**	1.3	1.5	1.9
Fe	XRF	ppm	**78**	0	**43916**	12821	1500	90194	23699	28104	35167	**44009**	51251	58974	67063
Fe	ICP-AES	ppm partial	**2300**	0.3	**42731**	13343	<	83700	22550	26230	32500	**41350**	53000	59940	66040
Ga	XRF	ppm	**10**	0.3	**29**	6	<	48	19	21	25	**29**	33	36	37
Gd	ICP-MS	ppm	**0.5**	0.3	**6.0**	2.0	<	20.7	3.7	4.3	5.0	**5.8**	6.6	7.9	9.1
Hf	ICP-MS	ppm	**0.12**	0.3	**5.08**	1.89	<	22.0	3.07	3.52	4.19	**4.83**	5.67	6.63	7.90
Ho	ICP-MS	ppm	**0.09**	0.3	**0.93**	0.49	<	5.5	0.54	0.61	0.72	**0.85**	1.0	1.2	1.5
K	XRF	ppm	**25**	0	**25307**	8674	42	53452	12035	14409	18758	**24859**	31291	36603	39699
K	ICP-AES	ppm partial	**100**	0.3	**14861**	5844	<	28300	5596	6841	10850	**14950**	19250	22170	24520
La	ICP-MS	ppm	**0.55**	0	**40**	13	0.9	101	19	27	33	**40**	47	54	57
La	ICP-AES	ppm partial	**1.3**	0.3	**27**	9.7	<	76	14	17	22	**27**	32	36	43
Li	ICP-AES	ppm partial	**3.5**	0.6	**47.8**	43.9	<	386	13.5	16.9	24.7	**37.0**	55.0	83.1	113
Lu	ICP-MS	ppm	**0.03**	0.3	**0.38**	0.22	<	2.48	0.20	0.25	0.29	**0.35**	0.41	0.51	0.62
Mg	XRF	ppm	**543**	0	**16142**	8840	1930	115173	6512	8701	12060	**15377**	18844	22311	24741
Mg	ICP-AES	ppm partial	**50**	0	**14204**	7444	1990	115000	6454	7829	10200	**13600**	17500	20670	22510
Mn	XRF	ppm	**93**	0	**535**	310	140	2852	233	264	341	**465**	628	915	1116
Mn	ICP-AES	ppm partial	**50**	0	**271**	153	70	885	96	107	149	**237**	348	497	584
Mo	XRF	ppm	**2.6**	97.1	**-**	-	<	27	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	95.4	**-**	-	<	24	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0.3	**17548**	6396	<	41033	7405	9297	12874	**17771**	21778	25213	27409
Na	ICP-AES	ppm partial	**150**	0	**827**	915	168	8440	369	406	466	**571**	726	1444	2164
Nb	XRF	ppm	**7**	2.3	**16**	6	<	50	8	10	13	**16**	19	22	26
Nb	ICP-MS	ppm	**0.16**	0	**13**	4.9	0.24	43	6.5	8.2	10	**13**	14	17	22
Nd	ICP-MS	ppm	**0.2**	0	**35**	11	0.70	92	18	24	29	**35**	40	47	51
Ni	XRF	ppm	**14**	6.9	**53**	30	<	426	<	22	36	**51**	68	80	89
Ni	ICP-AES	ppm partial	**3.5**	2	**47**	26	<	320	8.3	18	32	**45**	61	72	82
P	XRF	ppm	**105**	0	**615**	562	109	4840	222	266	358	**510**	654	881	1260
P	ICP-AES	ppm partial	**6**	0	**412**	536	31	4160	48	57	99	**314**	485	748	1126
Pb	XRF	ppm	**14**	0	**33**	8	14	64	21	23	28	**32**	37	41	47
Pb	ICP-AES	ppm partial	**8.7**	85.3	**-**	-	<	32	<	<	<	**<**	<	9	11
Pd	GFAAS	ppb partial	**5**	97.1	**-**	-	<	15	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0.3	**9.5**	2.9	<	25.4	4.6	6.5	7.9	**9.4**	10.9	12.7	13.6
Rb	XRF	ppm	**5.5**	0.3	**168**	79	<	936	71	87	120	**164**	201	241	296
Rb	ICP-MS	ppm	**0.6**	0.3	**162**	79	<	935	66	83	116	**155**	198	237	282
S	XRF	ppm	**70**	28.2	**906**	1897	<	20800	<	<	<	**365**	879	2027	3672
S	ICP-AES	ppm partial	**14.3**	0.9	**996**	2049	<	23500	24	37	103	**414**	939	2144	3799
Sc	ICP-MS	ppm	**2.8**	0.3	**18**	6.8	<	56	8.6	10	14	**18**	22	26	30
Sc	ICP-AES	ppm partial	**0.4**	0.3	**11**	5.1	<	44	3.6	4.4	6.6	**10**	14	17	19
Se	GFAAS	ppm partial	**0.055**	27.6	**0.22**	0.32	<	3.8	<	<	<	**0.13**	0.26	0.47	0.69
Sm	ICP-MS	ppm	**0.5**	0.3	**6.5**	1.9	<	19	3.8	4.5	5.4	**6.3**	7.4	8.5	9.5
Sr	XRF	ppm	**4**	0	**216**	178	8	1440	83	95	130	**176**	234	333	506
Sr	ICP-AES	ppm partial	**1.2**	0	**21**	52	2.3	615	3.7	4.6	6.4	**10**	14	31	69
Ta	ICP-MS	ppm	**0.06**	0.3	**0.89**	0.36	<	2.8	0.43	0.55	0.70	**0.84**	1.0	1.2	1.6
Tb	ICP-MS	ppm	**0.08**	0.3	**0.87**	0.34	<	3.7	0.55	0.61	0.71	**0.83**	0.95	1.1	1.4
Te	GFAAS	ppb partial	**5**	16.1	**25**	24	<	191	<	<	9	**19**	33	45	63
Th	ICP-MS	ppm	**0.13**	0.3	**12**	3.9	<	25	4.3	7.4	9.6	**12**	14	16	18
Th	ICP-AES	ppm partial	**5.6**	5.5	**14**	5	<	30	<	8	11	**14**	17	20	22
Ti	XRF	ppm	**30**	0	**4374**	1674	54	22500	2736	3054	3570	**4194**	4722	5502	6960
Ti	ICP-MS	ppm	**10**	0	**4097**	1622	72	21200	2500	2813	3305	**3925**	4520	5247	6235
Ti	ICP-AES	ppm partial	**2**	0	**3448**	1943	29	32700	1539	1910	2595	**3330**	4055	4714	5234
Tm	ICP-MS	ppm	**0.03**	0.3	**0.39**	0.22	<	2.40	0.20	0.25	0.30	**0.35**	0.42	0.52	0.64
U	ICP-MS	ppm	**0.08**	0	**2.79**	1.09	0.40	11.5	1.39	1.63	2.05	**2.64**	3.30	3.97	4.56
V	XRF	ppm	**6**	0	**130**	56	8	640	53	74	100	**127**	154	181	203
V	ICP-MS	ppm	**2**	0.3	**110**	53	<	565	33	55	82	**108**	134	159	180
V	ICP-AES	ppm partial	**0.6**	0	**107**	51	2.7	581	32	57	78	**105**	134	153	173
Y	XRF	ppm	**2.8**	0	**29**	14	3	155	16	19	22	**27**	32	38	46
Y	ICP-MS	ppm	**0.1**	0	**28**	14	2.6	157	15	18	22	**26**	31	37	46
Y	ICP-AES	ppm partial	**0.15**	0	**8.0**	4.7	1.4	51	3.7	4.4	5.7	**6.8**	9.0	12	17
Yb	ICP-MS	ppm	**0.22**	0.3	**2.6**	1.5	<	16	1.4	1.6	2.0	**2.3**	2.8	3.5	4.2
Zn	XRF	ppm	**4**	0	**127**	44	21	367	64	73	93	**125**	155	183	201
Zn	ICP-AES	ppm partial	**2**	0	**91**	37	16	246	35	48	66	**88**	111	139	160
Zr	XRF	ppm	**6**	0.3	**206**	79	<	889	120	144	168	**194**	224	270	328
Zr	ICP-MS	ppm	**3**	0	**188**	71	3.7	726	112	132	153	**175**	209	252	294

Table 18. Chemical concentration summary statistics for map unit 19.

Map unit	**19**	**Intermediate and felsic metavolcanic rocks and metasediments**
Number of samples	85	
Unit area	2296.7	km^2
Percent of bedrock	0.7	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

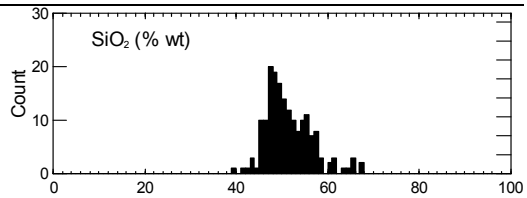


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**66.40**	10.12	2.30	79.60	52.23	56.30	62.38	**67.90**	73.38	76.20	76.73
TiO_2	XRF	%	**0.005**	0	**0.55**	0.32	0.02	1.84	0.12	0.19	0.29	**0.50**	0.70	0.91	1.14
Al_2O_3	XRF	%	**0.02**	0	**13.92**	2.69	0.66	20.20	10.93	11.40	12.30	**13.70**	15.40	17.40	18.50
FeO	XRF	%	**0.01**	0	**4.18**	2.07	0.36	10.17	1.37	1.87	2.59	**3.72**	5.30	6.95	8.01
MnO	XRF	%	**0.012**	0	**0.086**	0.052	0.013	0.277	0.022	0.033	0.051	**0.075**	0.108	0.162	0.188
MgO	XRF	%	**0.09**	0	**1.80**	1.14	0.33	6.05	0.38	0.52	1.04	**1.60**	2.37	3.58	3.96
CaO	XRF	%	**0.004**	0	**4.25**	6.14	0.17	52.70	0.55	0.76	1.38	**2.86**	4.81	7.63	12.25
Na_2O	XRF	%	**0.05**	1.2	**2.98**	1.02	<	5.49	1.42	1.70	2.33	**2.98**	3.64	4.33	4.80
K_2O	XRF	%	**0.003**	0	**2.74**	1.45	0.19	6.13	0.58	0.72	1.71	**2.65**	3.90	4.93	5.17
P_2O_5	XRF	%	**0.024**	17.6	**0.117**	0.080	<	0.511	<	<	0.051	**0.110**	0.159	0.198	0.243
C_{tot}	Leco	%	**0.05**	61.2	***0.20***	*1.2*	<	11	<	<	<	**<**	0.10	0.20	0.29
$C_{non\text{-}carb}$	Leco	%	**0.05**	78.8	***0.03***	*0.03*	<	0.25	<	<	<	**<**	<	0.05	0.05
F	Ion	%	**0.055**	36.5	**0.08**	0.04	<	0.25	<	<	<	**0.07**	0.09	0.11	0.16
Al	XRF	ppm	**106**	0	**73653**	14246	3470	106858	57793	60306	65067	**72473**	81466	92046	97865
Al	ICP-AES	ppm partial	**1100**	1.2	**14774**	7908	<	52000	4895	5710	9728	**14000**	18450	22600	27125
As	GFAAS	ppm partial	**3**	89.4	**-**	-	<	80	<	<	<	**<**	<	3.5	8.2
Au	GFAAS	ppb partial	**2.5**	94.1	**-**	-	<	19.7	<	<	<	**<**	<	<	4.0
B	ICP-AES	ppm partial	**4.5**	76.5	***4***	*2*	<	11	<	<	<	**<**	<	7	7
Ba	XRF	ppm	**21**	0	**574**	308	30	1790	152	200	356	**567**	734	958	1133
Ba	ICP-AES	ppm partial	**10**	1.2	**121**	128	<	631	14	22	36	**72**	158	288	415
Bi	GFAAS	ppm partial	**0.04**	31.8	**0.18**	0.39	<	2.9	<	<	<	**0.07**	0.15	0.30	0.71
Ca	XRF	ppm	**29**	0	**30359**	43922	1180	376805	3911	5448	9831	**20449**	34377	54555	87588
Ca	ICP-AES	ppm partial	**50**	0	**9185**	27631	200	252000	487	759	1823	**4010**	9233	17100	21050
Ce	ICP-MS	ppm	**0.22**	0	**70**	30	6.5	156	16	29	54	**67**	88	108	126
Cl	XRF	ppm	**45**	23.5	**95**	120	<	1070	<	<	46	**67**	99	167	210
Co	ICP-MS	ppm	**2**	20	**10**	9.1	<	42	<	<	2.5	**7.7**	14	21	31
Co	ICP-AES	ppm partial	**0.9**	4.7	**7.9**	6.1	<	24	0.7	1.3	2.6	**5.9**	13	17	19
Cr	XRF	ppm	**19**	18.8	**56**	56	<	418	<	<	20	**35**	71	124	135
Cr	ICP-AES	ppm partial	**5**	27.1	**29**	32	<	128	<	<	<	**12**	45	86	103
Cu	XRF	ppm	**17**	70.6	***18***	*30*	<	155	<	<	<	**<**	19	53	95
Cu	ICP-AES	ppm partial	**3**	11.8	**21**	30	<	175	<	<	4.0	**9.6**	22	57	95
Dy	ICP-MS	ppm	**0.55**	1.2	**6.2**	3.8	<	22	1.2	2.4	3.9	**5.3**	7.6	12	14
Er	ICP-MS	ppm	**0.3**	0	**3.8**	2.5	0.3	14	0.8	1.3	2.2	**3.1**	4.7	8.1	8.9
Eu	ICP-MS	ppm	**0.09**	0	**1.2**	0.49	0.09	3.3	0.54	0.70	0.93	**1.2**	1.4	1.8	2.1
Fe	XRF	ppm	**78**	0	**32510**	16045	2758	79005	10676	14545	20117	**28873**	41212	53978	62222
Fe	ICP-AES	ppm partial	**2300**	2.4	**28662**	14794	<	63100	7013	9440	17375	**27100**	40100	47800	55450
Ga	XRF	ppm	**10**	1.2	**26**	4	<	38	20	21	23	**26**	29	31	33
Gd	ICP-MS	ppm	**0.5**	0	**6.8**	3.5	0.6	18.3	2.0	3.2	4.6	**6.2**	8.3	11.4	14.4
Hf	ICP-MS	ppm	**0.12**	0	**6.07**	3.26	0.31	16.5	1.43	2.94	4.08	**5.13**	7.82	10.7	12.4
Ho	ICP-MS	ppm	**0.09**	1.2	**1.3**	0.84	<	4.6	0.26	0.48	0.74	**1.1**	1.6	2.6	3.0
K	XRF	ppm	**25**	0	**22775**	12043	1544	50879	4781	5993	14152	**21995**	32387	40919	42911
K	ICP-AES	ppm partial	**100**	0	**7514**	5377	189	22700	528	826	2708	**7020**	10950	15400	16900
La	ICP-MS	ppm	**0.55**	0	**34**	15	4.0	76	9.5	15	26	**33**	44	53	59
La	ICP-AES	ppm partial	**1.3**	0	**28**	13	1.5	56	3.6	9.4	21	**29**	37	44	52
Li	ICP-AES	ppm partial	**3.5**	1.2	**31.7**	41.6	<	327	5.4	7.3	10.2	**18.2**	38.6	67.9	98.5
Lu	ICP-MS	ppm	**0.03**	0	**0.55**	0.36	0.03	1.95	0.11	0.19	0.32	**0.47**	0.66	1.17	1.25
Mg	XRF	ppm	**543**	0	**10848**	6850	1990	36482	2261	3118	6271	**9648**	14261	21587	23879
Mg	ICP-AES	ppm partial	**50**	0	**7789**	5108	1060	25200	2140	2420	3930	**6790**	10250	15200	17400
Mn	XRF	ppm	**93**	0	**667**	403	101	2147	171	256	395	**581**	837	1256	1457
Mn	ICP-AES	ppm partial	**50**	0	**342**	219	56	1160	72	119	182	**277**	446	653	752
Mo	XRF	ppm	**2.6**	96.5	**-**	-	<	5	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	90.6	**-**	-	<	6	<	<	<	**<**	<	<	4
Na	XRF	ppm	**371**	1.2	**22082**	7561	<	40736	10522	12614	17311	**22112**	27031	32129	35638
Na	ICP-AES	ppm partial	**150**	1.2	**1022**	813	<	4750	353	395	499	**693**	1158	2140	2495
Nb	XRF	ppm	**7**	8.2	**14**	5	<	36	<	8	12	**14**	17	22	23
Nb	ICP-MS	ppm	**0.16**	0	**11**	5.0	0.85	31	3.8	4.9	8.9	**11**	13	18	20
Nd	ICP-MS	ppm	**0.2**	0	**33**	14	2.8	69	9.3	14	25	**32**	39	50	62
Ni	XRF	ppm	**14**	50.6	**22**	*21*	<	136	<	<	<	**<**	29	47	62
Ni	ICP-AES	ppm partial	**3.5**	25.9	**15**	15	<	62	<	<	<	**7.9**	20	38	47
P	XRF	ppm	**105**	0	**510**	349	<	2228	<	<	222	**480**	693	863	1059
P	ICP-AES	ppm partial	**6**	0	**423**	349	11	2100	29	44	98	**420**	625	769	936
Pb	XRF	ppm	**14**	2.4	**30**	12	<	89	16	17	21	**28**	36	46	52
Pb	ICP-AES	ppm partial	**8.7**	85.9	**-**	-	<	52	<	<	<	**<**	<	10	11
Pd	GFAAS	ppb partial	**5**	98.8	**-**	-	<	14	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**8.5**	3.7	0.82	18.6	1.9	3.5	6.7	**8.1**	10.6	13.0	15.8
Rb	XRF	ppm	**5.5**	0	**107**	64	7	300	13	22	64	**110**	139	189	231
Rb	ICP-MS	ppm	**0.6**	0	**103**	62	4.6	285	11	19	56	**104**	135	184	219
S	XRF	ppm	**70**	52.9	***606***	*1882*	<	12200	<	<	<	**<**	334	1080	2848
S	ICP-AES	ppm partial	**14.3**	10.6	**696**	2006	<	11900	<	<	28	**123**	439	1220	3213
Sc	ICP-MS	ppm	**2.8**	1.2	**15**	9.1	<	44	4.4	5.8	8.3	**13**	17	26	37
Sc	ICP-AES	ppm partial	**0.4**	1.2	**6.7**	4.9	<	22	1.3	1.7	3.2	**5.3**	9.2	14	17
Se	GFAAS	ppm partial	**0.055**	61.2	***0.11***	*0.25*	<	1.8	<	<	<	**<**	0.11	0.24	0.45
Sm	ICP-MS	ppm	**0.5**	0	**6.7**	3.1	0.61	16	2.4	3.1	4.9	**6.2**	8.1	11	13
Sr	XRF	ppm	**4**	0	**232**	246	14	1610	59	69	103	**143**	248	464	776
Sr	ICP-AES	ppm partial	**1.2**	0	**16**	21	2.2	115	2.8	3.3	4.9	**8.2**	17	41	56
Ta	ICP-MS	ppm	**0.06**	1.2	**0.80**	0.41	<	3.0	0.26	0.35	0.51	**0.78**	0.94	1.3	1.4
Tb	ICP-MS	ppm	**0.08**	0	**1.1**	0.60	0.09	3.3	0.25	0.46	0.69	**0.90**	1.3	2.0	2.3
Te	GFAAS	ppb partial	**5**	50.6	***23***	*92*	<	830	<	<	<	**<**	13	31	86
Th	ICP-MS	ppm	**0.13**	0	**10**	5.9	0.43	31	0.87	1.8	5.5	**9.7**	14	17	19
Th	ICP-AES	ppm partial	**5.6**	16.5	**13**	6	<	32	<	<	9	**13**	17	22	25
Ti	XRF	ppm	**30**	0	**3270**	1914	126	11040	744	1158	1758	**2994**	4188	5478	6840
Ti	ICP-MS	ppm	**10**	0	**3098**	1949	168	11800	676	1110	1835	**2740**	3905	5170	7425
Ti	ICP-AES	ppm partial	**2**	0	**2115**	1186	70	5230	385	794	1205	**1870**	2845	4000	4075
Tm	ICP-MS	ppm	**0.03**	0	**0.56**	0.38	0.03	2.02	0.11	0.20	0.33	**0.45**	0.69	1.21	1.29
U	ICP-MS	ppm	**0.08**	0	**3.00**	1.80	0.14	11.1	0.46	0.88	1.87	**2.79**	3.86	5.11	5.76
V	XRF	ppm	**6**	4.7	**78**	72	<	327	5	11	16	**64**	106	164	238
V	ICP-MS	ppm	**2**	9.4	**63**	69	<	314	<	2.7	5.3	**54**	87	155	210
V	ICP-AES	ppm partial	**0.6**	0	**46**	48	0.9	206	1.8	2.6	6.0	**27**	74	114	134
Y	XRF	ppm	**2.8**	2.4	**38**	25	<	133	6	16	22	**32**	47	77	85
Y	ICP-MS	ppm	**0.1**	0	**39**	25	3.5	137	7.3	14	22	**32**	49	78	89
Y	ICP-AES	ppm partial	**0.15**	0	**16**	12	1.1	61	2.8	5.3	7.3	**13**	21	30	44
Yb	ICP-MS	ppm	**0.22**	0	**3.7**	2.5	0.28	14	0.80	1.2	2.1	**3.2**	4.7	7.8	8.6
Zn	XRF	ppm	**4**	0	**95**	93	12	690	26	30	48	**86**	108	131	166
Zn	ICP-AES	ppm partial	**2**	0	**66**	84	5.0	583	12	13	26	**53**	78	106	114
Zr	XRF	ppm	**6**	0	**239**	119	12	645	67	114	167	**214**	301	410	463
Zr	ICP-MS	ppm	**3**	0	**219**	114	11	573	55	94	147	**195**	275	392	451

Table 19. Chemical concentration summary statistics for map unit 20.

Map unit	20	Mafic metavolcanic rocks
Number of samples	178	
Unit area	4130.1	km^2
Percent of bedrock	1.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

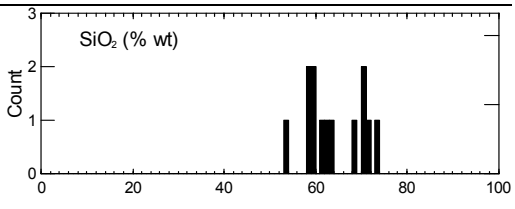


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	51.39	5.07	39.60	67.30	45.28	46.13	47.70	50.40	54.60	57.57	61.36
TiO_2	XRF	%	0.005	0	1.16	0.54	0.24	3.52	0.47	0.62	0.83	1.05	1.37	1.84	2.36
Al_2O_3	XRF	%	0.02	0	15.73	1.85	10.10	21.70	12.60	13.50	14.50	15.85	16.90	17.90	18.74
FeO	XRF	%	0.01	0	8.63	2.32	2.23	16.56	5.15	6.01	7.16	8.46	9.72	11.37	13.28
MnO	XRF	%	0.012	0	0.163	0.040	0.044	0.291	0.090	0.119	0.138	0.164	0.186	0.212	0.231
MgO	XRF	%	0.09	0	5.15	2.36	0.54	17.70	2.20	2.48	3.52	4.92	6.55	7.91	9.37
CaO	XRF	%	0.004	0	8.64	2.77	1.39	20.80	4.58	5.99	7.11	8.17	10.00	11.57	13.78
Na_2O	XRF	%	0.05	0	2.80	0.91	0.48	5.04	1.02	1.54	2.27	2.90	3.38	3.88	4.26
K_2O	XRF	%	0.003	0	1.08	0.78	0.05	4.29	0.18	0.24	0.48	0.96	1.47	1.82	2.53
P_2O_5	XRF	%	0.024	1.1	0.253	0.195	<	1.110	0.047	0.081	0.143	0.199	0.295	0.477	0.657
C_{tot}	Leco	%	0.05	73	*0.06*	*0.14*	<	1.1	<	<	<	<	0.06	0.13	0.24
$C_{non\text{-}carb}$	Leco	%	0.05	80.3	-	-	<	0.43	<	<	<	<	<	0.05	0.05
F	Ion	%	0.055	41	0.09	0.06	<	0.44	<	<	<	0.06	0.09	0.14	0.20
Al	XRF	ppm	106	0	83228	9765	53429	114793	66654	71415	76705	83847	89401	94691	99135
Al	ICP-AES	ppm partial	1100	0	21313	15791	4560	85300	6726	8346	11700	16100	24400	43390	59520
As	GFAAS	ppm partial	3	79.2	*2.6*	*5.9*	<	39	<	<	<	<	<	5.4	12
Au	GFAAS	ppb partial	2.5	88.8	-	-	<	24.4	<	<	<	<	<	2.7	4.9
B	ICP-AES	ppm partial	4.5	78.1	*4*	*2*	<	9	<	<	<	<	<	6	7
Ba	XRF	ppm	21	0	263	201	26	1400	51	68	122	227	339	469	609
Ba	ICP-AES	ppm partial	10	3.9	120	120	<	661	11	14	25	72	187	288	359
Bi	GFAAS	ppm partial	0.04	43.3	0.09	0.10	<	0.57	<	<	<	0.05	0.09	0.16	0.31
Ca	XRF	ppm	29	0	61776	19834	9939	148720	32761	42850	50837	58380	71500	82726	98527
Ca	ICP-AES	ppm partial	50	0	15852	11063	719	65900	5618	7147	9240	12500	17700	30320	42000
Ce	ICP-MS	ppm	0.22	0	36	28	1.7	194	7.2	10	18	30	44	65	82
Cl	XRF	ppm	45	19.7	176	278	<	2890	<	<	50	83	185	378	636
Co	ICP-MS	ppm	2	0	34	13	5.5	104	15	18	26	34	42	49	56
Co	ICP-AES	ppm partial	0.9	0	14	5.8	1.7	46	6.3	7.4	10	14	17	21	23
Cr	XRF	ppm	19	5.6	146	162	<	1030	<	22	40	85	207	320	485
Cr	ICP-AES	ppm partial	5	9	38	41	<	199	<	5.4	9.9	24	49	97	131
Cu	XRF	ppm	17	14	80	65	<	375	<	<	31	59	117	166	207
Cu	ICP-AES	ppm partial	3	1.1	76	65	<	349	5.4	8.5	27	62	114	160	194
Dy	ICP-MS	ppm	0.55	0	4.2	1.7	0.9	13	1.8	2.4	3.1	3.8	5.0	6.4	7.8
Er	ICP-MS	ppm	0.3	0	2.4	1.0	0.6	6.2	1.1	1.3	1.8	2.1	2.8	3.5	4.5
Eu	ICP-MS	ppm	0.09	0	1.3	0.60	0.28	3.7	0.55	0.72	0.95	1.2	1.5	2.1	2.5
Fe	XRF	ppm	78	0	67086	18034	17343	128648	40008	46667	55649	65719	75509	88376	103193
Fe	ICP-AES	ppm partial	2300	0	29230	15153	2600	70900	7236	10900	16600	28700	38300	50000	58600
Ga	XRF	ppm	10	0	25	4	13	37	18	20	23	25	28	30	31
Gd	ICP-MS	ppm	0.5	0	4.7	2.2	0.8	13.8	2.0	2.5	3.3	4.2	5.7	7.7	9.2
Hf	ICP-MS	ppm	0.12	0	2.97	1.57	0.21	9.27	0.95	1.23	2.00	2.64	3.84	4.96	5.84
Ho	ICP-MS	ppm	0.09	0	0.83	0.34	0.20	2.3	0.37	0.49	0.64	0.74	1.0	1.2	1.5
K	XRF	ppm	25	0	8923	6499	440	35607	1453	2000	3959	7976	12201	15065	21032
K	ICP-AES	ppm partial	100	1.1	4735	5078	<	28600	229	318	766	2965	7870	11400	13100
La	ICP-MS	ppm	0.55	0	16	13	0.7	94	2.8	4.2	7.9	13	20	31	37
La	ICP-AES	ppm partial	1.3	10.1	12	12	<	89	<	<	3.2	8.0	15	26	32
Li	ICP-AES	ppm partial	3.5	6.2	24.8	21.6	<	134	<	4.5	8.9	18.6	34.2	48.5	67.7
Lu	ICP-MS	ppm	0.03	0	0.32	0.14	0.08	0.79	0.15	0.18	0.24	0.29	0.39	0.51	0.60
Mg	XRF	ppm	543	0	31067	14213	3244	106731	13278	14960	21226	29668	39497	47709	56501
Mg	ICP-AES	ppm partial	50	0	9853	5672	133	38300	2760	4171	6100	9105	12600	15480	20300
Mn	XRF	ppm	93	0	1263	310	341	2255	698	922	1070	1271	1442	1643	1790
Mn	ICP-AES	ppm partial	50	1.1	321	164	<	1070	110	147	196	298	402	541	621
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	98.9	-	-	<	4	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	20761	6715	3525	37397	7598	11456	16843	21481	25080	28782	31580
Na	ICP-AES	ppm partial	150	0	2094	1378	333	9080	750	871	1130	1635	2530	4049	4866
Nb	XRF	ppm	7	24.7	12	6	<	48	<	<	7	10	13	17	21
Nb	ICP-MS	ppm	0.16	0.6	8.0	6.3	<	46	1.3	1.9	4.3	6.5	10.0	15	17
Nd	ICP-MS	ppm	0.2	0	20	13	1.6	89	5.1	7.4	12	17	24	34	41
Ni	XRF	ppm	14	14.6	57	54	<	431	<	<	18	43	73	118	158
Ni	ICP-AES	ppm partial	3.5	5.1	23	27	<	222	<	5.0	8.4	16	28	43	67
P	XRF	ppm	105	0	1103	850	<	4840	205	353	623	868	1286	2080	2865
P	ICP-AES	ppm partial	6	0	1033	826	24	4950	177	339	554	806	1170	1988	2788
Pb	XRF	ppm	14	8.4	20	5	<	44	<	14	16	19	22	25	29
Pb	ICP-AES	ppm partial	8.7	96.1	-	-	<	16	<	<	<	<	<	<	<
Pd	GFAAS	ppb partial	5	80.9	-	-	<	35	<	<	<	<	<	8	17
Pr	ICP-MS	ppm	0.74	3.9	4.7	3.5	<	23.7	1.0	1.5	2.7	4.0	5.7	8.1	10.3
Rb	XRF	ppm	5.5	10.7	45	49	<	302	<	<	14	33	53	94	143
Rb	ICP-MS	ppm	0.6	0	43	49	0.6	310	1.8	3.9	12	30	52	92	136
S	XRF	ppm	70	28.1	580	779	<	5590	<	<	<	231	817	1597	1886
S	ICP-AES	ppm partial	14.3	5.1	640	874	<	6230	<	30	77	282	956	1757	2038
Sc	ICP-MS	ppm	2.8	0	32	11	7.8	73	15	19	24	31	39	46	51
Sc	ICP-AES	ppm partial	0.4	0.6	5.3	2.8	<	19	1.9	2.2	3.5	4.8	6.5	8.5	10
Se	GFAAS	ppm partial	0.055	33.7	0.15	0.15	<	1.2	<	<	<	0.10	0.18	0.31	0.42
Sm	ICP-MS	ppm	0.5	0	4.5	2.4	0.64	14	1.6	2.1	3.1	3.9	5.4	7.3	8.7
Sr	XRF	ppm	4	0	355	214	11	2090	140	167	233	329	415	510	671
Sr	ICP-AES	ppm partial	1.2	0	52	69	1.9	416	7.9	9.5	15	25	57	116	206
Ta	ICP-MS	ppm	0.06	3.4	0.52	0.41	<	2.7	0.08	0.16	0.27	0.41	0.68	0.93	1.2
Tb	ICP-MS	ppm	0.08	0	0.72	0.31	0.16	2.2	0.32	0.41	0.52	0.66	0.84	1.2	1.3
Te	GFAAS	ppb partial	5	57.3	*8*	*8*	<	42	<	<	<	<	11	19	27
Th	ICP-MS	ppm	0.13	2.2	2.6	2.5	<	14	0.20	0.43	1.0	2.0	3.3	5.7	8.1
Th	ICP-AES	ppm partial	5.6	72.5	*5*	*4*	<	20	<	<	<	<	6	10	13
Ti	XRF	ppm	30	0	6972	3246	1410	21120	2838	3744	4974	6270	8220	11040	14184
Ti	ICP-MS	ppm	10	0	6880	3224	1250	18900	2646	3431	4970	6205	8390	11180	14300
Ti	ICP-AES	ppm partial	2	0	2256	1195	80	6030	554	801	1200	2240	3020	3831	4318
Tm	ICP-MS	ppm	0.03	0	0.34	0.14	0.10	0.85	0.14	0.19	0.26	0.30	0.41	0.51	0.63
U	ICP-MS	ppm	0.08	3.4	1.17	1.03	<	6.24	0.13	0.20	0.48	0.93	1.51	2.54	3.00
V	XRF	ppm	6	0	239	103	38	974	120	138	184	225	278	337	404
V	ICP-MS	ppm	2	0	218	102	16	911	95	119	160	204	263	313	403
V	ICP-AES	ppm partial	0.6	0	74	43	7.7	318	21	29	44	68	95	126	154
Y	XRF	ppm	2.8	0	22	9	5	57	9	11	16	20	28	34	41
Y	ICP-MS	ppm	0.1	0	25	10	5.9	65	11	15	19	23	30	37	47
Y	ICP-AES	ppm partial	0.15	0	6.8	5.3	0.31	29	1.0	2.3	3.4	5.4	8.2	14	18
Yb	ICP-MS	ppm	0.22	0	2.2	0.91	0.60	5.4	1.1	1.2	1.6	2.0	2.6	3.4	4.2
Zn	XRF	ppm	4	0	109	27	39	199	68	79	91	107	122	144	159
Zn	ICP-AES	ppm partial	2	0.6	39	24	<	138	8.7	12	19	36	55	67	79
Zr	XRF	ppm	6	0	124	72	9	467	31	39	83	110	161	202	245
Zr	ICP-MS	ppm	3	0	113	65	6.8	411	29	37	72	99	151	187	233

Table 20. Chemical concentration summary statistics for map unit 22.

Map unit	**22**	**Pyroxene granitoid (1.88 - 1.87 Ga)**
Number of samples	13	
Unit area	814.0	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

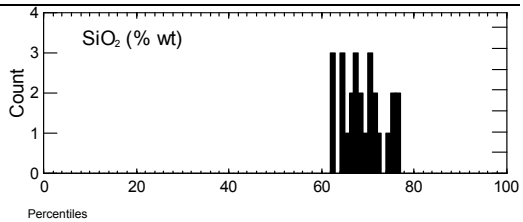


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**63.83**	6.18	53.70	73.50	-	-	58.90	**62.30**	70.10	-	-
TiO_2	XRF	%	**0.005**	0	**0.74**	0.32	0.25	1.14	-	-	0.48	**0.73**	1.02	-	-
Al_2O_3	XRF	%	**0.02**	0	**15.88**	1.47	13.60	17.90	-	-	14.73	**15.80**	17.10	-	-
FeO	XRF	%	**0.01**	0	**5.37**	2.47	1.79	8.81	-	-	3.09	**5.53**	8.07	-	-
MnO	XRF	%	**0.012**	0	**0.085**	0.038	0.040	0.153	-	-	0.050	**0.080**	0.120	-	-
MgO	XRF	%	**0.09**	0	**1.41**	1.07	0.42	4.32	-	-	0.72	**1.24**	1.55	-	-
CaO	XRF	%	**0.004**	0	**3.44**	1.69	1.48	7.22	-	-	1.94	**3.31**	4.22	-	-
Na_2O	XRF	%	**0.05**	0	**3.31**	0.46	2.46	3.94	-	-	3.04	**3.36**	3.74	-	-
K_2O	XRF	%	**0.003**	0	**4.22**	1.13	2.21	5.63	-	-	3.31	**4.65**	5.09	-	-
P_2O_5	XRF	%	**0.024**	0	**0.232**	0.131	0.066	0.451	-	-	0.097	**0.270**	0.318	-	-
C_{tot}	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	76.9	***0.03***	*0.03*	<	0.12	<	<	<	**<**	<	0.09	-
Al	XRF	ppm	**106**	0	**83989**	7776	71944	94691	-	-	77895	**83582**	90459	-	-
Al	ICP-AES	ppm partial	**1100**	0	**11588**	5222	4020	18200	-	-	6268	**11800**	16650	-	-
As	GFAAS	ppm partial	**3**	84.6	**-**	-	<	6.6	<	<	<	**<**	<	4.3	-
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**1263**	405	415	1750	-	-	956	**1330**	1605	-	-
Ba	ICP-AES	ppm partial	**10**	0	**208**	209	26	670	-	-	61	**117**	260	-	-
Bi	GFAAS	ppm partial	**0.04**	46.2	**0.08**	0.06	<	0.23	<	<	<	**0.04**	0.10	-	-
Ca	XRF	ppm	**29**	0	**24603**	12091	10582	51623	-	-	13857	**23667**	30173	-	-
Ca	ICP-AES	ppm partial	**50**	0	**4512**	2206	1310	8030	-	-	2588	**4210**	6428	-	-
Ce	ICP-MS	ppm	**0.22**	0	**79**	42	27	191	-	-	61	**70**	77	-	-
Cl	XRF	ppm	**45**	0	**169**	139	58	498	-	-	85	**125**	167	-	-
Co	ICP-MS	ppm	**2**	0	**11**	7.3	4.1	31	-	-	6.9	**9.2**	14	-	-
Co	ICP-AES	ppm partial	**0.9**	0	**9.4**	4.2	3.6	18	-	-	6.6	**8.3**	12	-	-
Cr	XRF	ppm	**19**	7.7	**34**	16	<	70	<	-	23	**27**	44	-	-
Cr	ICP-AES	ppm partial	**5**	0	**18**	9.5	6.4	34	-	-	10	**16**	25	-	-
Cu	XRF	ppm	**17**	53.8	***20***	*21*	<	82	<	<	<	**<**	28	-	-
Cu	ICP-AES	ppm partial	**3**	0	**24**	22	4.2	89	-	-	10	**20**	29	-	-
Dy	ICP-MS	ppm	**0.55**	0	**4.1**	2.2	0.9	7.4	-	-	2.2	**3.9**	6.0	-	-
Er	ICP-MS	ppm	**0.3**	0	**2.3**	1.2	0.6	4.0	-	-	1.1	**2.0**	3.3	-	-
Eu	ICP-MS	ppm	**0.09**	0	**1.5**	0.72	0.54	3.0	-	-	0.82	**1.5**	1.9	-	-
Fe	XRF	ppm	**78**	0	**41733**	19184	13916	68446	-	-	24002	**42999**	62735	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**32054**	11289	13900	51800	-	-	23975	**33600**	39600	-	-
Ga	XRF	ppm	**10**	0	**25**	3	18	29	-	-	22	**25**	28	-	-
Gd	ICP-MS	ppm	**0.5**	0	**5.9**	2.9	1.5	12.1	-	-	4.0	**6.0**	8.1	-	-
Hf	ICP-MS	ppm	**0.12**	0	**8.24**	3.94	3.18	14.2	-	-	5.05	**6.12**	12.1	-	-
Ho	ICP-MS	ppm	**0.09**	0	**0.82**	0.43	0.18	1.5	-	-	0.42	**0.72**	1.3	-	-
K	XRF	ppm	**25**	0	**34993**	9387	18343	46729	-	-	27498	**38595**	42247	-	-
K	ICP-AES	ppm partial	**100**	0	**8350**	4458	2360	14700	-	-	4038	**8520**	12450	-	-
La	ICP-MS	ppm	**0.55**	0	**41**	22	17	100	-	-	31	**36**	38	-	-
La	ICP-AES	ppm partial	**1.3**	0	**39**	28	9.8	110	-	-	25	**29**	42	-	-
Li	ICP-AES	ppm partial	**3.5**	7.7	**19.6**	7.3	<	28.3	<	-	12.0	**21.0**	26.8	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.31**	0.16	0.12	0.57	-	-	0.16	**0.26**	0.42	-	-
Mg	XRF	ppm	**543**	0	**8508**	6440	2515	26050	-	-	4330	**7477**	9316	-	-
Mg	ICP-AES	ppm partial	**50**	0	**6326**	3744	2220	13800	-	-	2978	**6840**	8435	-	-
Mn	XRF	ppm	**93**	0	**659**	295	310	1186	-	-	388	**620**	930	-	-
Mn	ICP-AES	ppm partial	**50**	0	**347**	104	179	522	-	-	289	**336**	436	-	-
Mo	XRF	ppm	**2.6**	69.2	***2***	*2*	<	6	<	<	<	**<**	3	-	-
Mo	ICP-AES	ppm partial	**2.6**	69.2	***2***	*2*	<	5	<	<	<	**<**	3	-	-
Na	XRF	ppm	**371**	0	**24523**	3413	18253	29235	-	-	22520	**24931**	27751	-	-
Na	ICP-AES	ppm partial	**150**	0	**910**	243	485	1380	-	-	798	**891**	1058	-	-
Nb	XRF	ppm	**7**	15.4	**14**	7	<	32	<	<	9	**13**	18	-	-
Nb	ICP-MS	ppm	**0.16**	0	**13**	6.0	5.7	26	-	-	8.8	**12**	19	-	-
Nd	ICP-MS	ppm	**0.2**	0	**36**	19	12	87	-	-	27	**33**	43	-	-
Ni	XRF	ppm	**14**	46.2	**17**	3	<	24	<	<	<	**15**	17	-	-
Ni	ICP-AES	ppm partial	**3.5**	0	**9.7**	4.5	4.1	19	-	-	6.2	**9.3**	13	-	-
P	XRF	ppm	**105**	0	**1012**	571	288	1966	-	-	423	**1177**	1386	-	-
P	ICP-AES	ppm partial	**6**	0	**931**	512	297	1740	-	-	409	**1080**	1290	-	-
Pb	XRF	ppm	**14**	0	**34**	8	23	45	-	-	27	**34**	42	-	-
Pb	ICP-AES	ppm partial	**8.7**	92.3	**-**	-	<	13	<	<	<	**<**	<	<	-
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**9.4**	5.1	2.9	23.5	-	-	7.5	**8.3**	10.2	-	-
Rb	XRF	ppm	**5.5**	0	**110**	30	74	157	-	-	85	**106**	136	-	-
Rb	ICP-MS	ppm	**0.6**	0	**110**	26	76	155	-	-	87	**100**	128	-	-
S	XRF	ppm	**70**	23.1	**415**	202	<	904	<	<	185	**366**	502	-	-
S	ICP-AES	ppm partial	**14.3**	15.4	**412**	286	<	1030	<	<	189	**447**	518	-	-
Sc	ICP-MS	ppm	**2.8**	0	**15**	8.2	4.8	32	-	-	7.2	**16**	20	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**5.3**	2.3	2.1	9.6	-	-	3.5	**5.1**	7.2	-	-
Se	GFAAS	ppm partial	**0.055**	76.9	***0.03***	*0.04*	<	0.13	<	<	<	**<**	<	0.09	-
Sm	ICP-MS	ppm	**0.5**	0	**6.6**	3.2	1.6	14	-	-	4.6	**6.9**	8.0	-	-
Sr	XRF	ppm	**4**	0	**425**	189	156	720	-	-	296	**350**	618	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**14**	8.0	6.3	37	-	-	9.7	**12**	17	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.87**	0.32	0.43	1.5	-	-	0.67	**0.74**	1.1	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.81**	0.41	0.20	1.5	-	-	0.48	**0.79**	1.1	-	-
Te	GFAAS	ppb partial	**5**	69.2	***7***	*3*	<	14	<	<	<	**<**	9	-	-
Th	ICP-MS	ppm	**0.13**	0	**8.8**	8.3	1.0	24	-	-	2.8	**4.4**	13	-	-
Th	ICP-AES	ppm partial	**5.6**	46.2	**13**	9	<	33	<	<	<	**7**	18	-	-
Ti	XRF	ppm	**30**	0	**4428**	1890	1512	6840	-	-	2886	**4386**	6102	-	-
Ti	ICP-MS	ppm	**10**	0	**4277**	2093	1460	8310	-	-	2553	**4070**	5745	-	-
Ti	ICP-AES	ppm partial	**2**	0	**3023**	1644	868	5980	-	-	1595	**2770**	4125	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.31**	0.16	0.09	0.55	-	-	0.15	**0.28**	0.46	-	-
U	ICP-MS	ppm	**0.08**	0	**1.88**	1.41	0.75	6.03	-	-	0.98	**1.41**	2.03	-	-
V	XRF	ppm	**6**	0	**89**	52	28	223	-	-	62	**78**	99	-	-
V	ICP-MS	ppm	**2**	0	**67**	59	18	239	-	-	37	**51**	67	-	-
V	ICP-AES	ppm partial	**0.6**	0	**49**	26	16	108	-	-	32	**43**	60	-	-
Y	XRF	ppm	**2.8**	0	**24**	11	8	41	-	-	15	**22**	36	-	-
Y	ICP-MS	ppm	**0.1**	0	**25**	13	7.0	44	-	-	13	**22**	38	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**14**	7.4	4.3	27	-	-	7.1	**11**	19	-	-
Yb	ICP-MS	ppm	**0.22**	0	**2.2**	1.1	0.69	3.7	-	-	1.1	**1.9**	3.3	-	-
Zn	XRF	ppm	**4**	0	**102**	40	51	166	-	-	65	**98**	132	-	-
Zn	ICP-AES	ppm partial	**2**	0	**66**	24	28	117	-	-	49	**63**	81	-	-
Zr	XRF	ppm	**6**	0	**364**	194	130	603	-	-	159	**318**	552	-	-
Zr	ICP-MS	ppm	**3**	0	**333**	174	117	556	-	-	177	**274**	516	-	-

Table 21. Chemical concentration summary statistics for map unit 23.

Map unit	23	Granite (1.88 - 1.87 Ga)
Number of samples	26	
Unit area	1768.2	km^2
Percent of bedrock	0.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

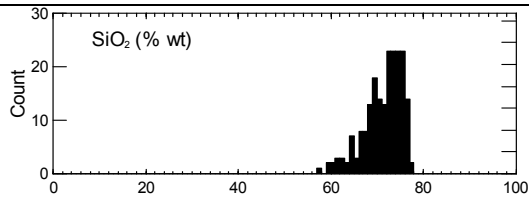


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**68.90**	4.38	62.00	76.20	62.32	62.95	65.40	**68.65**	71.80	75.81	76.04
TiO_2	XRF	%	**0.005**	0	**0.48**	0.25	0.07	0.94	0.10	0.13	0.30	**0.48**	0.65	0.89	0.94
Al_2O_3	XRF	%	**0.02**	0	**14.44**	1.02	12.60	16.00	12.60	12.71	14.00	**14.50**	15.30	15.68	15.84
FeO	XRF	%	**0.01**	0	**3.46**	1.62	1.00	6.84	1.37	1.54	2.30	**3.24**	4.45	6.34	6.64
MnO	XRF	%	**0.012**	0	**0.060**	0.025	0.023	0.115	0.024	0.033	0.043	**0.054**	0.072	0.094	0.115
MgO	XRF	%	**0.09**	7.7	**0.63**	0.31	<	1.46	<	0.20	0.49	**0.60**	0.76	0.88	1.41
CaO	XRF	%	**0.004**	0	**1.85**	0.74	0.23	3.22	0.52	0.92	1.37	**1.85**	2.31	2.87	3.04
Na_2O	XRF	%	**0.05**	0	**3.18**	0.33	2.49	4.02	2.72	2.80	3.02	**3.18**	3.34	3.59	3.81
K_2O	XRF	%	**0.003**	0	**4.99**	0.65	3.41	6.03	3.81	4.03	4.66	**4.97**	5.47	5.81	5.94
P_2O_5	XRF	%	**0.024**	7.7	**0.148**	0.084	<	0.334	<	0.030	0.081	**0.150**	0.205	0.271	0.317
C_{tot}	Leco	%	**0.05**	96.2	**-**	-	<	0.07	<	<	<	**<**	<	<	<
$C_{non-carb}$	Leco	%	**0.05**	96.2	**-**	-	<	0.05	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	26.9	**0.09**	0.02	<	0.13	<	<	<	**0.08**	0.09	0.12	0.12
Al	XRF	ppm	**106**	0	**76398**	5406	66654	84640	66654	67236	74060	**76705**	80937	82947	83794
Al	ICP-AES	ppm partial	**1100**	0	**9753**	4320	2310	20600	2894	4203	7650	**9460**	12000	14540	19160
As	GFAAS	ppm partial	**3**	69.2	***3.3***	*3.1*	<	12	<	<	<	**<**	4.4	7.0	11
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	88.5	**-**	-	<	8	<	<	<	**<**	<	4	6
Ba	XRF	ppm	**21**	0	**1086**	437	249	1850	374	469	747	**1115**	1450	1652	1778
Ba	ICP-AES	ppm partial	**10**	0	**80**	41	17	191	17	21	56	**72**	110	125	145
Bi	GFAAS	ppm partial	**0.04**	23.1	**0.19**	0.49	<	2.6	<	<	0.04	**0.08**	0.11	0.25	0.77
Ca	XRF	ppm	**29**	0	**13242**	5305	1637	23023	3682	6542	9796	**13192**	16517	20492	21765
Ca	ICP-AES	ppm partial	**50**	0	**3054**	1901	116	7780	154	625	1610	**3215**	4260	5462	6156
Ce	ICP-MS	ppm	**0.22**	0	**105**	42	26	182	37	55	72	**104**	138	162	182
Cl	XRF	ppm	**45**	0	**153**	66	47	264	60	77	86	**152**	198	259	262
Co	ICP-MS	ppm	**2**	7.7	**5.0**	2.8	<	12	<	2.1	3.2	**4.2**	5.4	9.8	12
Co	ICP-AES	ppm partial	**0.9**	3.8	**5.1**	2.5	<	12	0.8	2.0	3.6	**5.0**	5.9	7.5	11
Cr	XRF	ppm	**19**	19.2	**27**	11	<	59	<	<	19	**23**	30	35	58
Cr	ICP-AES	ppm partial	**5**	19.2	**12**	9.9	<	43	<	<	5.6	**8.1**	16	20	41
Cu	XRF	ppm	**17**	88.5	**-**	-	<	23	<	<	<	**<**	<	17	22
Cu	ICP-AES	ppm partial	**3**	7.7	**12**	7.2	<	35	<	3.7	5.3	**11**	13	21	25
Dy	ICP-MS	ppm	**0.55**	0	**5.7**	2.3	3.1	11	3.1	3.3	3.7	**5.4**	7.0	9.8	11
Er	ICP-MS	ppm	**0.3**	0	**3.1**	1.3	1.5	5.6	1.6	1.7	1.9	**3.0**	3.9	5.3	5.6
Eu	ICP-MS	ppm	**0.09**	0	**1.3**	0.83	0.15	2.9	0.31	0.37	0.61	**1.3**	1.8	2.7	2.8
Fe	XRF	ppm	**78**	0	**26869**	12564	7762	53139	10614	11950	17902	**25167**	34538	49254	51569
Fe	ICP-AES	ppm partial	**2300**	0	**26850**	9587	10300	51100	13020	14370	21500	**26100**	31100	39840	44780
Ga	XRF	ppm	**10**	0	**28**	4	21	35	22	23	24	**28**	31	33	34
Gd	ICP-MS	ppm	**0.5**	0	**7.6**	3.0	2.5	14.1	3.1	3.5	5.5	**7.6**	9.2	12.1	13.6
Hf	ICP-MS	ppm	**0.12**	0	**8.64**	4.23	3.25	16.9	3.40	3.65	4.96	**7.87**	12.1	15.0	16.0
Ho	ICP-MS	ppm	**0.09**	0	**1.1**	0.44	0.60	2.0	0.61	0.62	0.65	**1.1**	1.3	1.9	2.0
K	XRF	ppm	**25**	0	**41409**	5412	28303	50049	31623	33449	38678	**41210**	45401	48240	49319
K	ICP-AES	ppm partial	**100**	0	**6527**	3298	1080	15500	1368	2151	5610	**6220**	8090	9167	14540
La	ICP-MS	ppm	**0.55**	0	**52**	21	12	87	16	29	37	**48**	69	81	86
La	ICP-AES	ppm partial	**1.3**	0	**49**	21	13	85	18	30	34	**39**	69	76	81
Li	ICP-AES	ppm partial	**3.5**	3.8	**31.7**	13.9	<	67.6	6.8	14.4	23.3	**30.1**	38.6	51.0	59.3
Lu	ICP-MS	ppm	**0.03**	0	**0.42**	0.17	0.16	0.74	0.19	0.21	0.29	**0.41**	0.54	0.71	0.72
Mg	XRF	ppm	**543**	7.7	**3805**	1875	<	8804	<	1206	2973	**3630**	4607	5288	8514
Mg	ICP-AES	ppm partial	**50**	0	**3469**	2032	306	9350	457	1191	2250	**3410**	4470	4958	8302
Mn	XRF	ppm	**93**	0	**465**	194	178	891	186	256	333	**419**	558	729	891
Mn	ICP-AES	ppm partial	**50**	0	**323**	83	147	475	153	167	311	**332**	377	416	437
Mo	XRF	ppm	**2.6**	96.2	**-**	-	<	3	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	73.1	***2***	*2*	<	7	<	<	<	**<**	3	4	5
Na	XRF	ppm	**371**	0	**23618**	2426	18476	29828	20197	20776	22408	**23559**	24783	26667	28285
Na	ICP-AES	ppm partial	**150**	0	**700**	191	395	1070	397	501	539	**706**	793	1000	1062
Nb	XRF	ppm	**7**	0	**21**	9	9	39	9	11	14	**20**	25	38	39
Nb	ICP-MS	ppm	**0.16**	0	**18**	8.4	6.2	32	7.7	8.7	11	**17**	24	32	32
Nd	ICP-MS	ppm	**0.2**	0	**46**	19	12	86	16	22	30	**46**	59	70	83
Ni	XRF	ppm	**14**	76.9	***9***	*8*	<	35	<	<	<	**<**	<	18	29
Ni	ICP-AES	ppm partial	**3.5**	19.2	**7.4**	4.8	<	24	<	<	4.1	**5.5**	8.6	12	20
P	XRF	ppm	**105**	0	**645**	366	<	1456	<	131	353	**654**	894	1182	1382
P	ICP-AES	ppm partial	**6**	0	**594**	367	40	1450	40	131	291	**570**	787	1096	1354
Pb	XRF	ppm	**14**	0	**37**	7	20	45	23	25	34	**39**	42	44	45
Pb	ICP-AES	ppm partial	**8.7**	65.4	***9***	*4*	<	22	<	<	<	**<**	12	14	16
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**12.2**	4.9	3.0	22.1	4.0	5.9	8.4	**12.9**	15.3	18.1	21.7
Rb	XRF	ppm	**5.5**	0	**155**	37	67	230	93	112	132	**153**	171	212	221
Rb	ICP-MS	ppm	**0.6**	0	**150**	37	54	220	82	113	132	**150**	170	202	210
S	XRF	ppm	**70**	61.5	***154***	*249*	<	1120	<	<	<	**<**	199	497	650
S	ICP-AES	ppm partial	**14.3**	11.5	**200**	267	<	1130	<	<	24	**93**	294	594	804
Sc	ICP-MS	ppm	**2.8**	0	**10**	5.2	3.5	23	3.6	3.7	6.6	**8.6**	13	18	21
Sc	ICP-AES	ppm partial	**0.4**	0	**4.8**	2.3	1.1	13	2.0	2.9	3.7	**4.2**	5.7	7.9	9.1
Se	GFAAS	ppm partial	**0.055**	69.2	***0.05***	*0.03*	<	0.14	<	<	<	**<**	0.06	0.09	0.12
Sm	ICP-MS	ppm	**0.5**	0	**8.3**	3.4	2.4	16	3.1	3.7	5.9	**8.2**	10	14	15
Sr	XRF	ppm	**4**	0	**212**	78	45	351	54	109	160	**229**	265	306	320
Sr	ICP-AES	ppm partial	**1.2**	0	**8.4**	3.5	1.9	13	2.0	3.9	5.1	**8.9**	12	12	13
Ta	ICP-MS	ppm	**0.06**	0	**1.0**	0.37	0.36	1.6	0.52	0.66	0.74	**0.97**	1.3	1.6	1.6
Tb	ICP-MS	ppm	**0.08**	0	**1.1**	0.44	0.46	2.1	0.53	0.55	0.80	**1.0**	1.3	1.8	2.0
Te	GFAAS	ppb partial	**5**	61.5	***5***	*4*	<	21	<	<	<	**<**	6	9	13
Th	ICP-MS	ppm	**0.13**	0	**12**	8.8	1.6	48	3.8	4.8	8.0	**11**	14	19	29
Th	ICP-AES	ppm partial	**5.6**	3.8	**18**	10	<	54	5	8	12	**16**	22	26	38
Ti	XRF	ppm	**30**	0	**2874**	1506	438	5622	624	792	1818	**2862**	3912	5322	5610
Ti	ICP-MS	ppm	**10**	0	**2725**	1509	428	5660	442	574	1598	**2640**	3765	5220	5600
Ti	ICP-AES	ppm partial	**2**	0	**1608**	881	141	3600	276	509	984	**1580**	2080	2933	3416
Tm	ICP-MS	ppm	**0.03**	0	**0.43**	0.18	0.18	0.80	0.20	0.22	0.30	**0.40**	0.55	0.76	0.77
U	ICP-MS	ppm	**0.08**	0	**2.99**	1.46	1.20	7.66	1.38	1.75	2.20	**2.67**	3.39	4.76	6.77
V	XRF	ppm	**6**	3.8	**41**	21	<	92	5	11	31	**41**	50	72	81
V	ICP-MS	ppm	**2**	3.8	**26**	17	<	72	1.9	3.8	17	**23**	32	41	69
V	ICP-AES	ppm partial	**0.6**	0	**22**	16	1.0	66	2.2	4.8	10	**20**	28	35	63
Y	XRF	ppm	**2.8**	0	**33**	12	18	62	19	20	22	**32**	40	48	57
Y	ICP-MS	ppm	**0.1**	0	**32**	13	17	60	18	18	20	**32**	41	53	57
Y	ICP-AES	ppm partial	**0.15**	0	**18**	6.4	8.5	34	10	11	14	**17**	23	28	30
Yb	ICP-MS	ppm	**0.22**	0	**2.8**	1.2	1.2	5.0	1.3	1.3	1.9	**2.9**	3.7	4.8	4.9
Zn	XRF	ppm	**4**	0	**89**	41	30	165	32	40	55	**80**	121	161	163
Zn	ICP-AES	ppm partial	**2**	0	**67**	27	32	137	34	36	41	**65**	88	99	110
Zr	XRF	ppm	**6**	0	**361**	191	120	700	130	142	181	**320**	512	639	697
Zr	ICP-MS	ppm	**3**	0	**339**	186	119	665	121	136	151	**300**	517	623	643

Table 22. Chemical concentration summary statistics for map unit 24SB.

Map unit	**24SB**	**Granite (~ 1.87 Ga) - Svecofennian Domain B**
Number of samples	205	
Unit area	13861.7	km^2
Percent of bedrock	4.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

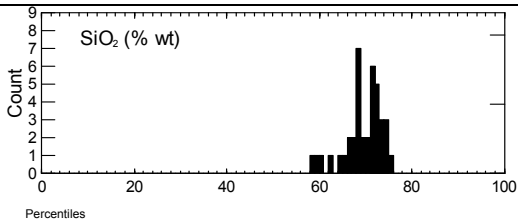


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**71.19**	4.08	57.70	77.30	62.58	65.00	68.90	**72.30**	74.33	75.50	76.30
TiO_2	XRF	%	**0.005**	1	**0.32**	0.23	<	1.20	0.02	0.06	0.15	**0.26**	0.44	0.62	0.75
Al_2O_3	XRF	%	**0.02**	0	**14.37**	1.30	11.90	19.70	12.58	12.80	13.50	**14.20**	15.00	15.90	16.63
FeO	XRF	%	**0.01**	0	**2.61**	1.55	0.12	9.15	0.58	0.84	1.57	**2.21**	3.46	4.71	5.55
MnO	XRF	%	**0.012**	1.5	**0.055**	0.031	<	0.211	0.019	0.026	0.036	**0.050**	0.069	0.096	0.107
MgO	XRF	%	**0.09**	11.2	**0.53**	0.45	<	2.41	<	<	0.20	**0.38**	0.76	1.14	1.38
CaO	XRF	%	**0.004**	0	**1.65**	0.88	0.11	5.19	0.59	0.69	0.94	**1.42**	2.22	2.97	3.42
Na_2O	XRF	%	**0.05**	0	**3.54**	0.73	2.27	6.57	2.67	2.79	3.11	**3.41**	3.81	4.47	4.87
K_2O	XRF	%	**0.003**	0	**4.58**	1.08	0.95	8.75	2.70	3.21	4.02	**4.70**	5.27	5.69	5.88
P_2O_5	XRF	%	**0.024**	9.8	**0.112**	0.110	<	1.190	<	0.024	0.044	**0.086**	0.146	0.232	0.275
C_{tot}	Leco	%	**0.05**	96.6	**-**	-	<	0.13	<	<	<	**<**	<	<	<
$C_{non-carb}$	Leco	%	**0.05**	97.1	**-**	-	<	0.13	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	51.7	***0.07***	*0.04*	<	0.24	<	<	<	**<**	0.08	0.12	0.16
Al	XRF	ppm	**106**	0	**76028**	6861	62951	104213	66522	67712	71415	**75118**	79350	84111	87946
Al	ICP-AES	ppm partial	**1100**	0	**7832**	4476	1310	27100	2215	3110	4763	**7100**	9923	12700	15475
As	GFAAS	ppm partial	**3**	88.3	**-**	-	<	15	<	<	<	**<**	<	3.1	5.6
Au	GFAAS	ppb partial	**2.5**	98.5	**-**	-	<	10.2	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	94.1	**-**	-	<	8	<	<	<	**<**	<	<	5
Ba	XRF	ppm	**21**	2.4	**776**	618	<	4380	43	120	422	**702**	994	1320	1649
Ba	ICP-AES	ppm partial	**10**	9.3	**61**	60	<	459	<	11	24	**46**	78	120	164
Bi	GFAAS	ppm partial	**0.04**	37.1	**0.22**	0.51	<	4.5	<	<	<	**0.06**	0.13	0.49	0.92
Ca	XRF	ppm	**29**	0	**11762**	6321	794	37109	4211	4941	6707	**10153**	15873	21236	24453
Ca	ICP-AES	ppm partial	**50**	0	**2369**	1621	200	10300	352	599	1038	**2110**	3280	4090	5275
Ce	ICP-MS	ppm	**0.22**	0	**85**	54	0.75	295	6.6	25	51	**73**	111	166	193
Cl	XRF	ppm	**45**	15.6	**120**	86	<	597	<	<	54	**95**	162	214	268
Co	ICP-MS	ppm	**2**	29.3	**4.7**	3.1	<	19	<	<	<	**3.7**	6.4	9.7	11
Co	ICP-AES	ppm partial	**0.9**	12.2	**4.0**	3.0	<	14	<	<	1.7	**3.0**	5.9	8.5	9.8
Cr	XRF	ppm	**19**	61.5	***17***	*14*	<	95	<	<	<	**<**	21	29	43
Cr	ICP-AES	ppm partial	**5**	42	**9.7**	10	<	75	<	<	<	**5.8**	9.3	17	28
Cu	XRF	ppm	**17**	89.3	**-**	-	<	64	<	<	<	**<**	<	18	19
Cu	ICP-AES	ppm partial	**3**	11.2	**8.8**	7.9	<	62	<	<	3.5	**5.3**	12	19	22
Dy	ICP-MS	ppm	**0.55**	1.5	**4.4**	2.7	<	19	0.9	1.4	2.6	**3.8**	5.9	7.7	9.4
Er	ICP-MS	ppm	**0.3**	2	**2.5**	1.5	<	11	0.5	0.8	1.4	**2.1**	3.3	4.4	5.0
Eu	ICP-MS	ppm	**0.09**	4.4	**0.88**	0.56	<	3.2	0.15	0.27	0.50	**0.77**	1.2	1.6	1.9
Fe	XRF	ppm	**78**	0	**20256**	12075	932	71096	4530	6511	12214	**17133**	26845	36566	43155
Fe	ICP-AES	ppm partial	**2300**	0.5	**20331**	10198	<	60000	4075	7000	14250	**18500**	25625	34400	38800
Ga	XRF	ppm	**10**	0	**25**	3	15	34	19	20	22	**24**	27	29	30
Gd	ICP-MS	ppm	**0.5**	2.4	**5.7**	3.4	<	21.6	1.0	1.8	3.3	**5.0**	7.6	10.0	11.6
Hf	ICP-MS	ppm	**0.12**	0	**6.08**	3.51	0.26	22.6	1.00	2.33	3.93	**5.19**	7.93	10.6	12.5
Ho	ICP-MS	ppm	**0.09**	2	**0.87**	0.54	<	3.9	0.16	0.28	0.49	**0.73**	1.1	1.5	1.7
K	XRF	ppm	**25**	0	**38006**	8939	7868	72625	22385	26643	33391	**39010**	43741	47227	48763
K	ICP-AES	ppm partial	**100**	0	**4944**	3462	382	18700	894	1200	2353	**4230**	6815	9080	11250
La	ICP-MS	ppm	**0.55**	1	**43**	27	<	152	2.9	12	26	**37**	55	82	100
La	ICP-AES	ppm partial	**1.3**	2.9	**42**	29	<	154	3.3	12	25	**35**	52	83	102
Li	ICP-AES	ppm partial	**3.5**	2.4	**28.5**	18.8	<	129	4.8	9.2	15.8	**25.2**	36.0	50.5	67.2
Lu	ICP-MS	ppm	**0.03**	0.5	**0.35**	0.21	<	1.32	0.07	0.12	0.22	**0.32**	0.48	0.60	0.74
Mg	XRF	ppm	**543**	11.2	**3178**	2689	<	14532	<	<	1182	**2285**	4571	6874	8303
Mg	ICP-AES	ppm partial	**50**	0	**3101**	2617	50	14300	256	525	1268	**2200**	4345	6370	8125
Mn	XRF	ppm	**93**	1.5	**426**	240	<	1635	147	202	279	**388**	535	744	829
Mn	ICP-AES	ppm partial	**50**	1	**313**	143	<	870	83	129	210	**305**	401	490	569
Mo	XRF	ppm	**2.6**	80.5	**-**	-	<	24	<	<	<	**<**	<	3	4
Mo	ICP-AES	ppm partial	**2.6**	87.3	**-**	-	<	31	<	<	<	**<**	<	3	4
Na	XRF	ppm	**371**	0	**26274**	5409	16843	48749	19774	20702	23039	**25302**	28292	33167	36098
Na	ICP-AES	ppm partial	**150**	0	**635**	158	300	1310	400	451	511	**600**	734	853	904
Nb	XRF	ppm	**7**	17.1	**14**	7	<	44	<	<	8	**12**	17	23	29
Nb	ICP-MS	ppm	**0.16**	0.5	**12**	6.8	<	40	4.2	5.1	7.3	**11**	15	21	28
Nd	ICP-MS	ppm	**0.2**	0.5	**36**	23	<	121	2.5	9.8	20	**31**	46	67	82
Ni	XRF	ppm	**14**	91.2	**-**	-	<	51	<	<	<	**<**	<	<	18
Ni	ICP-AES	ppm partial	**3.5**	30.7	**5.8**	5.2	<	39	<	<	<	**4.1**	5.5	8.8	14
P	XRF	ppm	**105**	0	**488**	480	<	5188	<	105	192	**375**	637	1012	1199
P	ICP-AES	ppm partial	**6**	0	**398**	418	19	4470	50	73	152	**288**	513	825	953
Pb	XRF	ppm	**14**	0	**35**	9	16	70	21	25	29	**34**	40	46	50
Pb	ICP-AES	ppm partial	**8.7**	79.5	**7**	*4*	<	26	<	<	<	**<**	<	12	15
Pd	GFAAS	ppb partial	**5**	99.5	**-**	-	<	9	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	5.4	**9.8**	6.2	<	33.5	<	2.8	5.8	**8.6**	12.7	18.9	22.5
Rb	XRF	ppm	**5.5**	0	**152**	53	53	363	75	92	120	**141**	183	218	248
Rb	ICP-MS	ppm	**0.6**	0	**148**	53	53	341	74	87	115	**137**	175	215	245
S	XRF	ppm	**70**	78	**91**	215	<	1440	<	<	<	**<**	<	183	545
S	ICP-AES	ppm partial	**14.3**	39.5	**104**	236	<	1660	<	<	<	**18**	52	233	601
Sc	ICP-MS	ppm	**2.8**	17.1	**7.3**	5.6	<	52	<	<	3.4	**5.5**	9.3	15	16
Sc	ICP-AES	ppm partial	**0.4**	5.9	**3.7**	2.8	<	15	<	0.60	2.0	**3.0**	4.6	7.0	10
Se	GFAAS	ppm partial	**0.055**	90.2	**-**	-	<	0.21	<	<	<	**<**	<	<	0.11
Sm	ICP-MS	ppm	**0.5**	2.4	**6.4**	3.9	<	24	0.92	2.2	3.7	**5.7**	8.6	11	13
Sr	XRF	ppm	**4**	0	**207**	135	5	689	20	52	115	**186**	279	381	461
Sr	ICP-AES	ppm partial	**1.2**	2	**7.6**	5.3	<	39	1.5	2.1	3.9	**6.6**	9.5	13	18
Ta	ICP-MS	ppm	**0.06**	0.5	**0.92**	0.48	<	2.7	0.26	0.33	0.58	**0.87**	1.2	1.5	1.7
Tb	ICP-MS	ppm	**0.08**	2	**0.83**	0.50	<	3.3	0.20	0.29	0.50	**0.71**	1.1	1.5	1.7
Te	GFAAS	ppb partial	**5**	81	**-**	-	<	44	<	<	<	**<**	<	8	10
Th	ICP-MS	ppm	**0.13**	0.5	**12**	8.2	<	50	1.2	2.9	6.6	**11**	16	22	27
Th	ICP-AES	ppm partial	**5.6**	11.2	**16**	9	<	70	<	<	9	**14**	21	26	34
Ti	XRF	ppm	**30**	1	**1890**	1374	<	7200	90	342	924	**1572**	2640	3738	4488
Ti	ICP-MS	ppm	**10**	0	**1743**	1262	30	6670	111	363	823	**1450**	2425	3480	4200
Ti	ICP-AES	ppm partial	**2**	0	**1265**	990	3.6	5880	28	151	546	**1030**	1770	2650	3073
Tm	ICP-MS	ppm	**0.03**	1	**0.36**	0.21	<	1.40	0.07	0.11	0.21	**0.31**	0.49	0.62	0.75
U	ICP-MS	ppm	**0.08**	0	**3.33**	2.37	0.18	17.1	0.84	1.03	1.80	**2.79**	4.34	5.83	6.94
V	XRF	ppm	**6**	9.8	**32**	25	<	131	<	6	13	**24**	46	67	82
V	ICP-MS	ppm	**2**	13.7	**19**	19	<	100	<	<	5.1	**12**	28	42	52
V	ICP-AES	ppm partial	**0.6**	9.8	**17**	17	<	87	<	0.6	4.1	**12**	26	39	49
Y	XRF	ppm	**2.8**	0	**28**	17	4	145	8	10	17	**25**	37	49	55
Y	ICP-MS	ppm	**0.1**	0	**27**	17	1.4	142	5.1	9.2	15	**23**	35	47	53
Y	ICP-AES	ppm partial	**0.15**	0	**16**	12	0.30	122	3.1	4.8	8.8	**13**	20	27	33
Yb	ICP-MS	ppm	**0.22**	0.5	**2.4**	1.4	<	8.8	0.40	0.78	1.4	**2.1**	3.2	4.0	5.0
Zn	XRF	ppm	**4**	0	**67**	36	8	216	17	29	44	**59**	88	111	129
Zn	ICP-AES	ppm partial	**2**	1	**52**	27	<	167	11	22	35	**48**	71	87	94
Zr	XRF	ppm	**6**	1.5	**240**	174	<	1130	23	59	140	**191**	316	440	560
Zr	ICP-MS	ppm	**3**	0	**219**	157	7.2	1010	26	60	127	**174**	283	417	505

Table 23. Chemical concentration summary statistics for map unit 24SC.

Map unit	**24SC**	**Granite (~ 1.87 Ga) - Svecofennian Domain C**
Number of samples	39	
Unit area	1736.9	km^2
Percent of bedrock	0.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

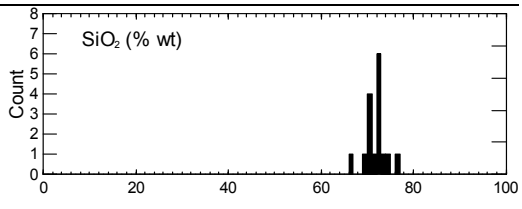


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**69.44**	4.22	58.00	75.90	60.12	62.96	67.65	**70.20**	72.60	74.02	74.31
TiO_2	XRF	%	**0.005**	0	**0.48**	0.28	0.06	1.36	0.17	0.23	0.27	**0.41**	0.63	0.92	1.03
Al_2O_3	XRF	%	**0.02**	0	**14.66**	1.11	12.50	18.60	13.03	13.60	13.93	**14.40**	15.28	15.82	16.38
FeO	XRF	%	**0.01**	0	**3.28**	1.32	1.15	6.50	1.32	1.88	2.29	**3.05**	3.93	5.24	6.29
MnO	XRF	%	**0.012**	0	**0.061**	0.031	0.027	0.159	0.029	0.034	0.039	**0.051**	0.080	0.100	0.133
MgO	XRF	%	**0.09**	2.6	**0.81**	0.48	<	2.15	0.22	0.29	0.48	**0.66**	1.02	1.46	1.81
CaO	XRF	%	**0.004**	0	**2.02**	1.10	0.53	6.83	0.83	0.96	1.44	**1.81**	2.45	3.14	3.61
Na_2O	XRF	%	**0.05**	0	**3.48**	0.78	2.32	5.96	2.59	2.83	2.96	**3.26**	3.76	4.73	5.01
K_2O	XRF	%	**0.003**	0	**4.63**	1.16	1.79	7.03	2.54	2.78	4.01	**4.74**	5.30	6.01	6.46
P_2O_5	XRF	%	**0.024**	2.6	**0.177**	0.143	<	0.765	0.042	0.058	0.089	**0.158**	0.211	0.270	0.507
C_{tot}	Leco	%	**0.05**	94.9	**-**	-	<	0.09	<	<	<	**<**	<	<	0.05
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	43.6	**0.08**	0.03	<	0.20	<	<	<	**0.07**	0.09	0.10	0.15
Al	XRF	ppm	**106**	0	**77562**	5851	66125	98394	68902	71944	73663	**76176**	80805	83688	86624
Al	ICP-AES	ppm partial	**1100**	0	**10921**	4703	2300	24000	3888	5320	7698	**10500**	13175	17600	20730
As	GFAAS	ppm partial	**3**	84.6	**-**	-	<	38	<	<	<	**<**	<	4.2	14
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**1010**	787	76	5270	264	531	683	**946**	1101	1441	1737
Ba	ICP-AES	ppm partial	**10**	0	**96**	74	14	319	29	38	45	**61**	131	209	278
Bi	GFAAS	ppm partial	**0.04**	46.2	**0.10**	0.11	<	0.63	<	<	<	**0.05**	0.11	0.22	0.31
Ca	XRF	ppm	**29**	0	**14450**	7851	3811	48835	5906	6871	10296	**12942**	17539	22451	25790
Ca	ICP-AES	ppm partial	**50**	0	**3212**	2273	700	10000	890	1182	1670	**2500**	4150	7220	8365
Ce	ICP-MS	ppm	**0.22**	0	**120**	86	19	484	35	48	68	**104**	142	196	291
Cl	XRF	ppm	**45**	10.3	**121**	71	<	340	<	<	60	**103**	167	216	263
Co	ICP-MS	ppm	**2**	10.3	**6.2**	3.5	<	17	<	<	3.2	**6.0**	8.4	11	12
Co	ICP-AES	ppm partial	**0.9**	2.6	**5.8**	2.9	<	13	1.6	2.3	3.6	**5.1**	7.7	9.1	12
Cr	XRF	ppm	**19**	35.9	**26**	10	<	59	<	<	<	**21**	34	40	43
Cr	ICP-AES	ppm partial	**5**	10.3	**14**	8.4	<	46	<	<	6.9	**11**	18	23	27
Cu	XRF	ppm	**17**	66.7	***14***	*20*	<	127	<	<	<	**<**	18	26	29
Cu	ICP-AES	ppm partial	**3**	5.1	**12**	18	<	118	<	3.8	4.5	**6.4**	15	19	20
Dy	ICP-MS	ppm	**0.55**	0	**4.9**	2.4	1.2	11	1.6	2.1	2.9	**4.9**	6.3	7.4	10
Er	ICP-MS	ppm	**0.3**	0	**2.6**	1.3	0.7	6.1	0.9	1.0	1.5	**2.4**	3.4	4.0	5.3
Eu	ICP-MS	ppm	**0.09**	0	**1.3**	1.1	0.10	7.3	0.42	0.55	0.74	**1.1**	1.4	1.8	2.7
Fe	XRF	ppm	**78**	0	**25493**	10272	8951	50505	10249	14608	17793	**23699**	30544	40699	48881
Fe	ICP-AES	ppm partial	**2300**	0	**26987**	11103	9400	55500	11040	16440	18925	**26500**	31550	43860	50950
Ga	XRF	ppm	**10**	0	**25**	4	18	34	19	20	23	**24**	27	30	32
Gd	ICP-MS	ppm	**0.5**	0	**7.2**	3.8	1.8	22.8	2.0	3.3	5.2	**6.8**	8.5	11.0	12.7
Hf	ICP-MS	ppm	**0.12**	0	**6.91**	2.89	1.91	16.3	3.22	3.45	4.97	**6.36**	9.02	10.5	11.5
Ho	ICP-MS	ppm	**0.09**	0	**0.93**	0.46	0.26	2.1	0.30	0.40	0.56	**0.92**	1.2	1.5	1.9
K	XRF	ppm	**25**	0	**38404**	9636	14857	58349	21115	23057	33308	**39342**	44015	49883	53610
K	ICP-AES	ppm partial	**100**	0	**7348**	3991	600	18800	1268	1840	5108	**7230**	9400	12760	14875
La	ICP-MS	ppm	**0.55**	0	**61**	43	10	235	17	24	34	**53**	70	101	152
La	ICP-AES	ppm partial	**1.3**	0	**60**	41	10	206	15	23	35	**51**	77	108	152
Li	ICP-AES	ppm partial	**3.5**	0	**36.1**	20.3	6.1	92.7	9.0	15.3	22.8	**31.2**	44.7	66.4	78.9
Lu	ICP-MS	ppm	**0.03**	0	**0.34**	0.18	0.11	0.83	0.11	0.13	0.18	**0.30**	0.46	0.55	0.71
Mg	XRF	ppm	**543**	2.6	**4866**	2888	<	12965	1345	1761	2876	**3980**	6139	8780	10920
Mg	ICP-AES	ppm partial	**50**	0	**4699**	2521	376	11400	1290	1640	2965	**4200**	6420	8300	9275
Mn	XRF	ppm	**93**	0	**473**	240	209	1232	225	264	302	**395**	620	775	1031
Mn	ICP-AES	ppm partial	**50**	0	**379**	181	164	905	180	191	238	**323**	491	614	768
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	82.1	**-**	-	<	4	<	<	<	**<**	<	4	4
Na	XRF	ppm	**371**	0	**25807**	5788	17214	44223	19233	20984	21963	**24189**	27862	35097	37196
Na	ICP-AES	ppm partial	**150**	0	**587**	134	400	1000	400	414	500	**600**	620	800	800
Nb	XRF	ppm	**7**	5.1	**21**	27	<	176	<	10	12	**15**	21	31	51
Nb	ICP-MS	ppm	**0.16**	0	**19**	24	3.9	154	5.5	8.6	11	**14**	16	28	46
Nd	ICP-MS	ppm	**0.2**	0	**49**	34	7.7	208	15	21	31	**43**	57	78	103
Ni	XRF	ppm	**14**	79.5	***9***	*6*	<	29	<	<	<	**<**	<	17	19
Ni	ICP-AES	ppm partial	**3.5**	10.3	**7.4**	3.9	<	21	<	<	4.5	**5.5**	9.6	13	16
P	XRF	ppm	**105**	0	**772**	623	<	3335	183	253	388	**689**	920	1177	2211
P	ICP-AES	ppm partial	**6**	0	**709**	594	28	3130	155	232	336	**588**	851	1068	2103
Pb	XRF	ppm	**14**	2.6	**37**	7	<	57	26	29	32	**36**	40	46	49
Pb	ICP-AES	ppm partial	**8.7**	56.4	***9***	*3*	<	18	<	<	<	**<**	11	12	15
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**13.7**	10.0	2.1	59.3	4.0	6.0	7.8	**12.4**	16.0	22.4	31.3
Rb	XRF	ppm	**5.5**	0	**153**	53	34	284	55	79	121	**157**	185	216	247
Rb	ICP-MS	ppm	**0.6**	0	**146**	54	31	280	50	73	109	**142**	182	199	240
S	XRF	ppm	**70**	53.8	***134***	*200*	<	1030	<	<	<	**<**	138	373	515
S	ICP-AES	ppm partial	**14.3**	12.8	**151**	207	<	957	<	<	22	**37**	184	401	612
Sc	ICP-MS	ppm	**2.8**	5.1	**8.3**	3.9	<	20	<	3.7	5.4	**7.9**	10	13	17
Sc	ICP-AES	ppm partial	**0.4**	0	**4.7**	2.9	0.90	14	0.95	1.2	2.6	**4.0**	6.5	8.3	8.6
Se	GFAAS	ppm partial	**0.055**	82.1	**-**	-	<	0.46	<	<	<	**<**	<	0.08	0.11
Sm	ICP-MS	ppm	**0.5**	0	**8.3**	4.8	1.7	31	2.7	3.9	5.5	**7.6**	10	14	14
Sr	XRF	ppm	**4**	0	**374**	774	19	4983	102	122	156	**214**	280	509	752
Sr	ICP-AES	ppm partial	**1.2**	0	**15**	39	1.7	249	3.7	4.3	6.4	**7.8**	12	17	22
Ta	ICP-MS	ppm	**0.06**	0	**1.2**	1.4	0.32	8.9	0.39	0.41	0.60	**0.90**	1.2	2.2	2.4
Tb	ICP-MS	ppm	**0.08**	0	**0.98**	0.49	0.26	2.7	0.34	0.43	0.66	**0.96**	1.2	1.5	1.9
Te	GFAAS	ppb partial	**5**	66.7	***6***	*16*	<	99	<	<	<	**<**	6	9	10
Th	ICP-MS	ppm	**0.13**	0	**15**	6.5	1.2	28	3.4	5.6	9.9	**16**	19	24	26
Th	ICP-AES	ppm partial	**5.6**	5.1	**20**	7	<	34	<	9	16	**19**	26	32	33
Ti	XRF	ppm	**30**	0	**2892**	1674	360	8160	1008	1356	1608	**2436**	3768	5526	6186
Ti	ICP-MS	ppm	**10**	0	**2683**	1581	396	7700	940	1114	1465	**2310**	3340	5156	5858
Ti	ICP-AES	ppm partial	**2**	0	**1834**	1008	263	4360	417	695	1115	**1550**	2523	3420	3599
Tm	ICP-MS	ppm	**0.03**	0	**0.36**	0.19	0.11	0.85	0.12	0.14	0.20	**0.33**	0.49	0.56	0.77
U	ICP-MS	ppm	**0.08**	0	**3.29**	3.08	0.56	18.2	1.09	1.23	1.61	**2.41**	3.66	6.11	8.52
V	XRF	ppm	**6**	2.6	**50**	31	<	139	12	19	29	**43**	62	101	122
V	ICP-MS	ppm	**2**	2.6	**30**	22	<	107	4.4	7.5	16	**22**	42	61	73
V	ICP-AES	ppm partial	**0.6**	0	**28**	18	0.7	79	2.4	6.3	15	**23**	43	48	57
Y	XRF	ppm	**2.8**	0	**28**	14	8	74	11	12	17	**27**	37	44	53
Y	ICP-MS	ppm	**0.1**	0	**28**	14	7.6	64	9.1	12	16	**26**	38	47	53
Y	ICP-AES	ppm partial	**0.15**	0	**17**	9.5	3.8	49	4.7	6.4	9.4	**15**	22	29	32
Yb	ICP-MS	ppm	**0.22**	0	**2.3**	1.3	0.74	5.8	0.75	0.88	1.2	**2.0**	3.2	3.8	4.9
Zn	XRF	ppm	**4**	0	**77**	29	39	171	42	46	57	**71**	86	122	136
Zn	ICP-AES	ppm partial	**2**	0	**65**	27	21	169	32	36	46	**62**	77	97	104
Zr	XRF	ppm	**6**	0	**303**	166	68	883	126	139	175	**262**	422	508	584
Zr	ICP-MS	ppm	**3**	0	**270**	142	68	770	117	135	155	**245**	351	452	522

Table 24. Chemical concentration summary statistics for map unit 24K.

Map unit	**24K**	**Granite (~ 1.87 Ga) - Karelian Domain**
Number of samples	16	
Unit area	985.6	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

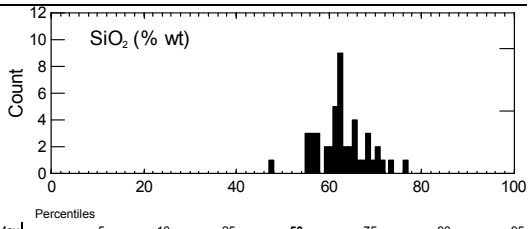


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**71.73**	2.31	66.20	76.60	-	-	70.50	**72.15**	72.85	-	-
TiO_2	XRF	%	**0.005**	0	**0.34**	0.17	0.09	0.77	-	-	0.27	**0.33**	0.40	-	-
Al_2O_3	XRF	%	**0.02**	0	**14.64**	0.74	12.90	15.80	-	-	14.10	**14.70**	15.20	-	-
FeO	XRF	%	**0.01**	0	**2.18**	0.99	0.70	4.65	-	-	1.74	**2.06**	2.65	-	-
MnO	XRF	%	**0.012**	0	**0.038**	0.013	0.017	0.058	-	-	0.028	**0.038**	0.047	-	-
MgO	XRF	%	**0.09**	0	**0.64**	0.27	0.21	1.34	-	-	0.49	**0.60**	0.78	-	-
CaO	XRF	%	**0.004**	0	**2.03**	0.61	0.88	2.96	-	-	1.67	**1.86**	2.60	-	-
Na_2O	XRF	%	**0.05**	0	**3.71**	0.48	2.77	4.48	-	-	3.38	**3.74**	4.09	-	-
K_2O	XRF	%	**0.003**	0	**3.72**	1.03	2.09	5.89	-	-	2.79	**3.89**	4.28	-	-
P_2O_5	XRF	%	**0.024**	0	**0.123**	0.080	0.025	0.356	-	-	0.083	**0.109**	0.139	-	-
C_{tot}	Leco	%	**0.05**	87.5	**-**	-	<	0.11	<	<	<	**<**	<	0.05	-
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	75	***0.05***	*0.02*	<	0.08	<	<	<	**<**	<	0.08	-
Al	XRF	ppm	**106**	0	**77467**	3893	68241	83582	-	-	74589	**77763**	80408	-	-
Al	ICP-AES	ppm partial	**1100**	0	**9258**	3654	3330	19000	-	-	7210	**9465**	10650	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**1258**	651	469	2770	-	-	923	**1085**	1375	-	-
Ba	ICP-AES	ppm partial	**10**	0	**95**	45	45	187	-	-	65	**76**	111	-	-
Bi	GFAAS	ppm partial	**0.04**	68.8	***0.03***	*0.02*	<	0.07	<	<	<	**<**	0.04	-	-
Ca	XRF	ppm	**29**	0	**14493**	4340	6278	21164	-	-	11941	**13263**	18590	-	-
Ca	ICP-AES	ppm partial	**50**	0	**2291**	1107	478	4990	-	-	1575	**2325**	2715	-	-
Ce	ICP-MS	ppm	**0.22**	0	**74**	35	24	146	-	-	45	**75**	92	-	-
Cl	XRF	ppm	**45**	6.3	**143**	58	<	272	<	-	108	**128**	183	-	-
Co	ICP-MS	ppm	**2**	6.3	**4.3**	2.2	<	10.0	<	-	2.8	**3.5**	5.3	-	-
Co	ICP-AES	ppm partial	**0.9**	0	**4.8**	2.1	1.5	9.8	-	-	3.7	**4.5**	5.6	-	-
Cr	XRF	ppm	**19**	43.8	**20**	3	<	29	<	<	<	**19**	21	-	-
Cr	ICP-AES	ppm partial	**5**	6.3	**10**	2.8	<	17	<	-	7.8	**10**	12	-	-
Cu	XRF	ppm	**17**	93.8	**-**	-	<	28	<	<	<	**<**	<	<	-
Cu	ICP-AES	ppm partial	**3**	0	**7.6**	8.1	3.3	31	-	-	3.8	**4.5**	5.9	-	-
Dy	ICP-MS	ppm	**0.55**	0	**2.1**	0.8	0.6	4.1	-	-	1.7	**2.2**	2.5	-	-
Er	ICP-MS	ppm	**0.3**	0	**1.1**	0.5	0.5	2.5	-	-	0.9	**1.0**	1.4	-	-
Eu	ICP-MS	ppm	**0.09**	0	**0.87**	0.23	0.31	1.4	-	-	0.75	**0.91**	0.95	-	-
Fe	XRF	ppm	**78**	0	**16931**	7685	5447	36146	-	-	13528	**16014**	20552	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**19771**	7690	7810	38900	-	-	16900	**18650**	24250	-	-
Ga	XRF	ppm	**10**	0	**23**	3	16	29	-	-	22	**23**	25	-	-
Gd	ICP-MS	ppm	**0.5**	0	**3.3**	1.3	1.0	5.4	-	-	2.4	**3.5**	4.3	-	-
Hf	ICP-MS	ppm	**0.12**	0	**4.98**	2.38	1.21	11.5	-	-	3.86	**4.49**	5.80	-	-
Ho	ICP-MS	ppm	**0.09**	0	**0.41**	0.17	0.16	0.84	-	-	0.32	**0.38**	0.52	-	-
K	XRF	ppm	**25**	0	**30884**	8541	17347	48887	-	-	23116	**32287**	35483	-	-
K	ICP-AES	ppm partial	**100**	0	**6333**	3011	1830	14200	-	-	4340	**6015**	7760	-	-
La	ICP-MS	ppm	**0.55**	0	**40**	19	13	77	-	-	26	**40**	49	-	-
La	ICP-AES	ppm partial	**1.3**	0	**33**	15	11	69	-	-	25	**33**	43	-	-
Li	ICP-AES	ppm partial	**3.5**	0	**17.9**	7.2	6.3	28.6	-	-	13.6	**16.8**	24.2	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.15**	0.06	0.07	0.34	-	-	0.12	**0.15**	0.17	-	-
Mg	XRF	ppm	**543**	0	**3877**	1652	1242	8080	-	-	2979	**3630**	4715	-	-
Mg	ICP-AES	ppm partial	**50**	0	**4276**	1728	1420	8600	-	-	3350	**4005**	5070	-	-
Mn	XRF	ppm	**93**	0	**295**	101	132	450	-	-	217	**295**	364	-	-
Mn	ICP-AES	ppm partial	**50**	0	**261**	91	115	456	-	-	206	**267**	309	-	-
Mo	XRF	ppm	**2.6**	87.5	**-**	-	<	3	<	<	<	**<**	<	2	-
Mo	ICP-AES	ppm partial	**2.6**	93.8	**-**	-	<	4	<	<	<	**<**	<	<	-
Na	XRF	ppm	**371**	0	**27513**	3532	20553	33242	-	-	25043	**27751**	30311	-	-
Na	ICP-AES	ppm partial	**150**	0	**681**	87	506	795	-	-	650	**676**	753	-	-
Nb	XRF	ppm	**7**	31.3	**11**	6	<	24	<	<	<	**9**	11	-	-
Nb	ICP-MS	ppm	**0.16**	0	**9.9**	6.1	1.8	23	-	-	6.2	**9.1**	11	-	-
Nd	ICP-MS	ppm	**0.2**	0	**27**	12	9.0	51	-	-	16	**29**	36	-	-
Ni	XRF	ppm	**14**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ni	ICP-AES	ppm partial	**3.5**	0	**5.7**	1.1	4.1	8.8	-	-	5.1	**5.5**	6.1	-	-
P	XRF	ppm	**105**	0	**536**	349	109	1552	-	-	362	**475**	606	-	-
P	ICP-AES	ppm partial	**6**	0	**491**	309	59	1340	-	-	332	**433**	577	-	-
Pb	XRF	ppm	**14**	0	**33**	9	19	50	-	-	28	**30**	43	-	-
Pb	ICP-AES	ppm partial	**8.7**	93.8	**-**	-	<	12	<	<	<	**<**	<	<	-
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**8.0**	3.8	2.7	15.8	-	-	4.8	**8.2**	10.3	-	-
Rb	XRF	ppm	**5.5**	0	**81**	19	49	113	-	-	66	**84**	97	-	-
Rb	ICP-MS	ppm	**0.6**	0	**85**	19	51	112	-	-	71	**85**	99	-	-
S	XRF	ppm	**70**	87.5	**-**	-	<	408	<	<	<	**<**	<	164	-
S	ICP-AES	ppm partial	**14.3**	12.5	**70**	101	<	402	<	<	16	**26**	73	-	-
Sc	ICP-MS	ppm	**2.8**	18.8	**5.3**	2.2	<	12	<	<	3.6	**4.6**	6.0	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**4.1**	1.9	0.92	8.3	-	-	2.8	**3.9**	4.7	-	-
Se	GFAAS	ppm partial	**0.055**	93.8	**-**	-	<	0.06	<	<	<	**<**	<	<	-
Sm	ICP-MS	ppm	**0.5**	0	**4.2**	1.7	1.3	6.8	-	-	2.9	**4.5**	5.7	-	-
Sr	XRF	ppm	**4**	0	**404**	90	300	592	-	-	347	**378**	450	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**10.0**	2.5	6.7	15	-	-	8.0	**9.1**	12	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.52**	0.25	0.16	1.4	-	-	0.43	**0.50**	0.56	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.44**	0.17	0.17	0.78	-	-	0.32	**0.44**	0.55	-	-
Te	GFAAS	ppb partial	**5**	93.8	**-**	-	<	9	<	<	<	**<**	<	<	-
Th	ICP-MS	ppm	**0.13**	0	**6.9**	3.0	2.2	14	-	-	4.7	**6.8**	8.6	-	-
Th	ICP-AES	ppm partial	**5.6**	12.5	**9**	2	<	13	<	<	7	**9**	11	-	-
Ti	XRF	ppm	**30**	0	**2058**	1032	516	4638	-	-	1626	**1956**	2400	-	-
Ti	ICP-MS	ppm	**10**	0	**2007**	1055	464	4700	-	-	1545	**1960**	2220	-	-
Ti	ICP-AES	ppm partial	**2**	0	**1707**	900	282	4020	-	-	1370	**1650**	1925	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.16**	0.08	0.06	0.39	-	-	0.12	**0.15**	0.19	-	-
U	ICP-MS	ppm	**0.08**	0	**1.75**	1.56	0.62	6.78	-	-	0.92	**1.16**	1.81	-	-
V	XRF	ppm	**6**	6.3	**36**	18	<	84	<	-	28	**35**	41	-	-
V	ICP-MS	ppm	**2**	0	**23**	12	4.7	56	-	-	17	**22**	27	-	-
V	ICP-AES	ppm partial	**0.6**	0	**24**	12	4.6	57	-	-	18	**23**	29	-	-
Y	XRF	ppm	**2.8**	0	**14**	6	7	30	-	-	10	**13**	17	-	-
Y	ICP-MS	ppm	**0.1**	0	**13**	5.7	5.0	26	-	-	9.2	**11**	16	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**7.0**	3.0	2.2	12	-	-	4.7	**6.6**	9.3	-	-
Yb	ICP-MS	ppm	**0.22**	0	**1.0**	0.50	0.45	2.6	-	-	0.74	**1.0**	1.1	-	-
Zn	XRF	ppm	**4**	0	**62**	24	21	114	-	-	46	**58**	79	-	-
Zn	ICP-AES	ppm partial	**2**	0	**51**	23	12	99	-	-	36	**47**	70	-	-
Zr	XRF	ppm	**6**	0	**197**	76	65	334	-	-	160	**191**	232	-	-
Zr	ICP-MS	ppm	**3**	0	**200**	107	43	490	-	-	152	**184**	231	-	-

Table 25. Chemical concentration summary statistics for map unit 25.

Map unit	**25**	**Mica schists, intercalated arkosites and conglomerates**	
Number of samples	47		
Unit area	2327.6	km^2	
Percent of bedrock	0.7	%	

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

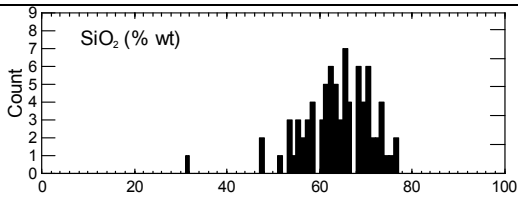


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**62.82**	5.34	47.90	76.80	55.67	56.20	59.83	**62.30**	65.88	69.82	71.92
TiO_2	XRF	%	**0.005**	0	**0.66**	0.22	0.09	1.24	0.31	0.37	0.53	**0.67**	0.78	0.92	0.99
Al_2O_3	XRF	%	**0.02**	0	**15.80**	1.69	11.70	20.00	12.57	13.10	14.80	**16.00**	16.78	17.84	18.13
FeO	XRF	%	**0.01**	0	**5.57**	1.77	1.19	9.08	2.57	3.06	4.23	**5.61**	7.10	7.44	8.32
MnO	XRF	%	**0.012**	0	**0.101**	0.053	0.028	0.309	0.050	0.054	0.069	**0.086**	0.126	0.163	0.207
MgO	XRF	%	**0.09**	0	**2.74**	1.84	0.45	12.50	0.64	1.10	1.74	**2.51**	3.18	4.31	5.15
CaO	XRF	%	**0.004**	0	**3.44**	1.73	0.25	8.46	1.19	1.52	1.98	**3.29**	4.50	5.69	6.75
Na_2O	XRF	%	**0.05**	0	**3.08**	0.88	1.19	5.79	1.73	1.98	2.39	**3.20**	3.63	4.22	4.35
K_2O	XRF	%	**0.003**	0	**2.92**	1.07	1.43	6.95	1.68	1.86	2.25	**2.66**	3.52	4.09	4.76
P_2O_5	XRF	%	**0.024**	2.1	**0.197**	0.097	<	0.605	0.064	0.107	0.145	**0.182**	0.223	0.313	0.369
C_{tot}	Leco	%	**0.05**	76.6	***0.07***	*0.12*	<	0.60	<	<	<	**<**	<	0.25	0.32
$C_{non\text{-}carb}$	Leco	%	**0.05**	78.7	***0.05***	*0.12*	<	0.58	<	<	<	**<**	<	0.19	0.28
F	Ion	%	**0.055**	36.2	**0.08**	0.03	<	0.22	<	<	<	**0.07**	0.08	0.10	0.16
Al	XRF	ppm	**106**	0	**83593**	8951	61893	105800	66495	69299	78292	**84640**	88740	94374	95908
Al	ICP-AES	ppm partial	**1100**	0	**26434**	12898	3800	77600	10455	14200	18525	**23900**	31875	41840	46355
As	GFAAS	ppm partial	**3**	76.6	***2.0***	*2.9*	<	16	<	<	<	**<**	<	5.1	7.5
Au	GFAAS	ppb partial	**2.5**	93.6	**-**	-	<	4.5	<	<	<	**<**	<	<	2.7
B	ICP-AES	ppm partial	**4.5**	95.7	**-**	-	<	8	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**740**	336	297	1870	347	380	512	**651**	936	1124	1370
Ba	ICP-AES	ppm partial	**10**	0	**300**	161	30	656	75	89	187	**261**	419	530	598
Bi	GFAAS	ppm partial	**0.04**	29.8	**0.13**	0.12	<	0.56	<	<	<	**0.08**	0.16	0.33	0.42
Ca	XRF	ppm	**29**	0	**24575**	12341	1816	60489	8494	10868	14121	**23524**	32139	40698	48241
Ca	ICP-AES	ppm partial	**50**	0	**4989**	4409	300	23000	853	1538	2285	**3700**	6475	10054	13740
Ce	ICP-MS	ppm	**0.22**	0	**59**	22	16	109	26	35	44	**57**	74	87	99
Cl	XRF	ppm	**45**	34	**89**	123	<	830	<	<	<	**52**	74	142	224
Co	ICP-MS	ppm	**2**	4.3	**17**	8.3	<	49	2.9	5.8	12	**15**	22	25	30
Co	ICP-AES	ppm partial	**0.9**	2.1	**15**	5.7	<	28	4.6	6.4	12	**16**	19	22	24
Cr	XRF	ppm	**19**	6.4	**109**	109	<	701	<	20	33	**102**	138	201	243
Cr	ICP-AES	ppm partial	**5**	2.1	**78**	67	<	321	5.8	7.3	19	**70**	110	168	194
Cu	XRF	ppm	**17**	38.3	**39**	28	<	112	<	<	<	**30**	52	85	99
Cu	ICP-AES	ppm partial	**3**	6.4	**33**	28	<	107	<	3.7	8.9	**26**	45	75	98
Dy	ICP-MS	ppm	**0.55**	0	**3.6**	0.9	1.4	5.6	1.7	2.6	3.2	**3.6**	4.0	4.5	5.2
Er	ICP-MS	ppm	**0.3**	0	**2.1**	0.5	0.8	3.5	1.0	1.3	1.8	**2.1**	2.3	2.7	3.0
Eu	ICP-MS	ppm	**0.09**	0	**1.1**	0.24	0.25	1.6	0.67	0.83	0.99	**1.1**	1.2	1.4	1.5
Fe	XRF	ppm	**78**	0	**43248**	13737	9246	70552	19953	23800	32875	**43559**	55128	57840	64646
Fe	ICP-AES	ppm partial	**2300**	0	**45183**	14660	5700	72400	24370	27280	34925	**45000**	55150	65460	69795
Ga	XRF	ppm	**10**	0	**25**	5	13	34	19	20	22	**25**	29	32	33
Gd	ICP-MS	ppm	**0.5**	0	**4.7**	1.2	1.6	7.2	2.7	3.2	4.1	**4.7**	5.3	6.6	6.6
Hf	ICP-MS	ppm	**0.12**	0	**4.18**	1.82	1.55	12.8	2.32	2.56	3.25	**3.85**	4.57	5.68	6.71
Ho	ICP-MS	ppm	**0.09**	0	**0.72**	0.18	0.29	1.2	0.35	0.48	0.64	**0.73**	0.81	0.93	1.0
K	XRF	ppm	**25**	0	**24261**	8889	11869	57685	13903	15438	18658	**22078**	29199	33964	39491
K	ICP-AES	ppm partial	**100**	0	**15777**	6496	2700	31200	6244	7946	11725	**15600**	20900	24200	25910
La	ICP-MS	ppm	**0.55**	0	**30**	11	8.6	56	12	17	22	**28**	37	46	48
La	ICP-AES	ppm partial	**1.3**	0	**27**	12	6.4	56	8.7	15	19	**25**	35	43	48
Li	ICP-AES	ppm partial	**3.5**	0	**44.8**	29.4	9.3	158	16.7	18.4	25.2	**39.1**	51.5	85.7	99.2
Lu	ICP-MS	ppm	**0.03**	0	**0.30**	0.09	0.11	0.51	0.16	0.17	0.25	**0.29**	0.34	0.42	0.44
Mg	XRF	ppm	**543**	0	**16528**	11119	2714	75375	3883	6633	10462	**15135**	19193	25977	31061
Mg	ICP-AES	ppm partial	**50**	0	**15331**	6730	1300	31500	4112	7038	10775	**14800**	20050	23940	27925
Mn	XRF	ppm	**93**	0	**783**	411	217	2395	388	419	535	**667**	977	1263	1604
Mn	ICP-AES	ppm partial	**50**	0	**552**	190	201	1120	266	354	400	**537**	642	806	908
Mo	XRF	ppm	**2.6**	95.7	**-**	-	<	6	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	97.9	**-**	-	<	4	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**22868**	6552	8830	42962	12807	14721	17734	**23744**	26912	31283	32262
Na	ICP-AES	ppm partial	**150**	0	**974**	661	300	3800	379	449	587	**800**	1175	1660	2375
Nb	XRF	ppm	**7**	10.6	**12**	5	<	30	<	<	8	**12**	15	18	19
Nb	ICP-MS	ppm	**0.16**	0	**9.7**	3.6	4.2	24	5.0	5.6	7.0	**9.6**	12	13	15
Nd	ICP-MS	ppm	**0.2**	0	**27**	8.2	7.5	48	13	17	21	**25**	33	37	41
Ni	XRF	ppm	**14**	29.8	**41**	38	<	204	<	<	<	**32**	49	66	124
Ni	ICP-AES	ppm partial	**3.5**	2.1	**32**	29	<	168	4.3	4.9	8.2	**29**	44	62	80
P	XRF	ppm	**105**	0	**859**	423	<	2638	279	467	632	**794**	972	1365	1609
P	ICP-AES	ppm partial	**6**	0	**745**	381	34	2280	235	385	559	**722**	844	1244	1417
Pb	XRF	ppm	**14**	0	**29**	6	17	43	18	22	25	**28**	35	37	39
Pb	ICP-AES	ppm partial	**8.7**	85.1	**-**	-	<	15	<	<	<	**<**	<	10	12
Pd	GFAAS	ppb partial	**5**	95.7	**-**	-	<	6	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**7.0**	2.4	1.9	12.5	3.2	4.3	5.4	**7.1**	8.6	10.4	11.4
Rb	XRF	ppm	**5.5**	0	**108**	50	40	261	47	54	71	**97**	141	171	198
Rb	ICP-MS	ppm	**0.6**	0	**103**	48	39	262	45	52	65	**91**	129	166	185
S	XRF	ppm	**70**	53.2	***536***	*1393*	<	8060	<	<	<	**<**	476	1075	2795
S	ICP-AES	ppm partial	**14.3**	8.5	**588**	1477	<	8600	<	15	22	**58**	539	1160	3086
Sc	ICP-MS	ppm	**2.8**	0	**17**	5.7	3.1	33	7.9	9.0	14	**17**	20	24	25
Sc	ICP-AES	ppm partial	**0.4**	0	**9.5**	5.0	0.80	23	3.8	4.5	5.7	**7.9**	14	17	18
Se	GFAAS	ppm partial	**0.055**	55.3	***0.17***	*0.35*	<	1.8	<	<	<	**<**	0.14	0.34	1.1
Sm	ICP-MS	ppm	**0.5**	0	**5.0**	1.3	1.5	8.0	2.9	3.5	4.2	**4.8**	5.8	6.5	7.5
Sr	XRF	ppm	**4**	0	**410**	220	42	1050	116	188	267	**342**	498	770	866
Sr	ICP-AES	ppm partial	**1.2**	0	**27**	48	3.9	327	4.1	4.6	7.8	**18**	27	47	64
Ta	ICP-MS	ppm	**0.06**	0	**0.67**	0.23	0.26	1.4	0.35	0.42	0.49	**0.61**	0.86	0.94	1.0
Tb	ICP-MS	ppm	**0.08**	0	**0.67**	0.16	0.24	1.00	0.35	0.48	0.60	**0.67**	0.76	0.87	0.95
Te	GFAAS	ppb partial	**5**	31.9	**14**	13	<	55	<	<	<	**9**	16	33	47
Th	ICP-MS	ppm	**0.13**	0	**7.8**	4.3	1.6	18	2.8	2.9	4.5	**6.9**	9.8	14	17
Th	ICP-AES	ppm partial	**5.6**	8.5	**13**	5	<	24	<	6	9	**11**	17	19	21
Ti	XRF	ppm	**30**	0	**3972**	1296	564	7440	1842	2220	3192	**4002**	4698	5538	5964
Ti	ICP-MS	ppm	**10**	0	**3774**	1254	512	7510	1706	2284	3150	**3680**	4498	5272	5672
Ti	ICP-AES	ppm partial	**2**	0	**3046**	1055	129	5910	1414	1686	2498	**2970**	3563	4390	4816
Tm	ICP-MS	ppm	**0.03**	0	**0.30**	0.08	0.12	0.50	0.15	0.17	0.26	**0.30**	0.34	0.41	0.46
U	ICP-MS	ppm	**0.08**	0	**2.24**	1.09	0.61	5.83	0.92	1.01	1.48	**1.99**	2.86	3.54	4.00
V	XRF	ppm	**6**	2.1	**127**	54	<	258	29	44	91	**142**	163	185	205
V	ICP-MS	ppm	**2**	2.1	**108**	51	<	234	18	36	76	**117**	147	162	178
V	ICP-AES	ppm partial	**0.6**	2.1	**96**	50	<	253	21	35	64	**95**	133	161	176
Y	XRF	ppm	**2.8**	0	**22**	6	7	37	9	14	19	**22**	26	30	31
Y	ICP-MS	ppm	**0.1**	0	**22**	5.3	8.6	34	11	15	20	**22**	25	29	30
Y	ICP-AES	ppm partial	**0.15**	0	**11**	4.7	1.4	21	2.6	5.2	7.4	**11**	14	17	19
Yb	ICP-MS	ppm	**0.22**	0	**2.0**	0.56	0.69	3.3	1.0	1.1	1.7	**2.0**	2.3	2.7	3.0
Zn	XRF	ppm	**4**	0	**105**	37	28	244	51	68	82	**101**	124	148	167
Zn	ICP-AES	ppm partial	**2**	0	**90**	38	15	223	37	51	65	**85**	109	125	162
Zr	XRF	ppm	**6**	0	**183**	86	58	601	108	114	135	**171**	201	258	326
Zr	ICP-MS	ppm	**3**	0	**161**	74	58	516	87	101	118	**153**	172	225	278

Table 26. Chemical concentration summary statistics for map unit 26.

Map unit	**26**	**Intermediate and felsic metavolcanic rocks with metasedimentary intercalations (1.89 - 1.88 Ga)**
Number of samples	81	
Unit area	1315.8	km^2
Percent of bedrock	0.4	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

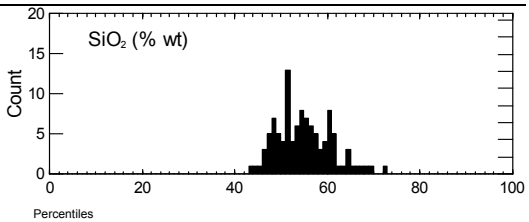


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**63.86**	7.51	31.80	76.70	52.16	55.08	59.88	**64.70**	69.30	72.88	73.84
TiO_2	XRF	%	**0.005**	0	**0.57**	0.29	0.16	1.31	0.21	0.23	0.33	**0.56**	0.79	0.98	1.12
Al_2O_3	XRF	%	**0.02**	0	**15.68**	1.68	8.43	19.10	12.90	13.82	14.78	**15.80**	16.60	17.70	18.55
FeO	XRF	%	**0.01**	0	**4.84**	2.38	1.21	11.40	1.81	2.11	2.97	**4.47**	6.75	8.15	8.53
MnO	XRF	%	**0.012**	0	**0.096**	0.046	0.012	0.289	0.032	0.045	0.070	**0.089**	0.115	0.150	0.168
MgO	XRF	%	**0.09**	0	**1.88**	1.41	0.21	6.10	0.27	0.40	0.70	**1.63**	2.53	4.09	4.60
CaO	XRF	%	**0.004**	0	**4.18**	3.76	0.36	29.90	1.08	1.29	2.40	**3.70**	4.91	6.78	7.96
Na_2O	XRF	%	**0.05**	0	**3.43**	0.89	0.37	6.11	2.04	2.36	2.96	**3.48**	3.86	4.24	5.21
K_2O	XRF	%	**0.003**	0	**3.00**	1.47	0.20	6.08	0.86	1.39	1.80	**2.74**	4.07	5.11	5.85
P_2O_5	XRF	%	**0.024**	0	**0.172**	0.104	0.029	0.506	0.038	0.050	0.102	**0.158**	0.202	0.322	0.363
C_{tot}	Leco	%	**0.05**	75.3	***0.10***	*0.69*	<	6.2	<	<	<	**<**	<	0.09	0.15
$C_{non-carb}$	Leco	%	**0.05**	80.2	**-**	-	<	0.55	<	<	<	**<**	<	0.05	0.05
F	Ion	%	**0.055**	49.4	**0.08**	0.09	<	0.83	<	<	<	**0.06**	0.08	0.10	0.14
Al	XRF	ppm	**106**	0	**82952**	8861	44595	101039	68241	73108	78160	**83582**	87814	93633	98103
Al	ICP-AES	ppm partial	**1100**	0	**15018**	7898	2160	42300	3195	5960	8368	**13900**	20275	25660	29050
As	GFAAS	ppm partial	**3**	76.5	***9.9***	*42*	<	301	<	<	<	**<**	<	6.0	55
Au	GFAAS	ppb partial	**2.5**	81.5	**-**	-	<	36.6	<	<	<	**<**	<	3.8	7.2
B	ICP-AES	ppm partial	**4.5**	90.1	**-**	-	<	8	<	<	<	**<**	<	<	5
Ba	XRF	ppm	**21**	0	**859**	453	109	2730	325	400	581	**747**	1022	1448	1759
Ba	ICP-AES	ppm partial	**10**	0	**173**	187	12	1120	19	29	41	**105**	257	440	526
Bi	GFAAS	ppm partial	**0.04**	35.8	**0.17**	0.56	<	4.9	<	<	<	**0.05**	0.11	0.22	0.38
Ca	XRF	ppm	**29**	0	**29880**	26898	2603	213785	7701	9224	17174	**26455**	35085	48506	56943
Ca	ICP-AES	ppm partial	**50**	0	**8257**	21939	382	200000	1710	2160	3375	**5060**	7505	9662	13510
Ce	ICP-MS	ppm	**0.22**	0	**57**	27	17	216	19	26	38	**57**	71	77	92
Cl	XRF	ppm	**45**	21	**99**	96	<	738	<	<	50	**60**	120	159	264
Co	ICP-MS	ppm	**2**	2.5	**13**	9.4	<	45	2.5	2.9	4.6	**9.9**	19	24	32
Co	ICP-AES	ppm partial	**0.9**	0	**11**	6.7	1.1	33	1.7	2.5	4.9	**11**	15	18	22
Cr	XRF	ppm	**19**	33.3	**46**	45	<	220	<	<	<	**25**	52	107	159
Cr	ICP-AES	ppm partial	**5**	19.8	**25**	36	<	196	<	<	5.7	**12**	25	69	97
Cu	XRF	ppm	**17**	49.4	**38**	39	<	220	<	<	<	**17**	41	86	128
Cu	ICP-AES	ppm partial	**3**	9.9	**33**	45	<	232	<	2.0	6.3	**18**	33	81	120
Dy	ICP-MS	ppm	**0.55**	0	**3.8**	1.7	0.9	13	1.6	1.8	2.8	**3.7**	4.6	5.5	6.0
Er	ICP-MS	ppm	**0.3**	0	**2.2**	1.0	0.6	7.2	0.8	1.0	1.6	**2.1**	2.6	3.3	3.6
Eu	ICP-MS	ppm	**0.09**	0	**1.0**	0.35	0.32	2.3	0.54	0.65	0.81	**0.98**	1.2	1.4	1.8
Fe	XRF	ppm	**78**	0	**37630**	18462	9402	88578	14025	16410	23038	**34747**	52455	63287	66278
Fe	ICP-AES	ppm partial	**2300**	0	**33789**	16631	7070	105000	11955	15520	22275	**31000**	40625	57960	63800
Ga	XRF	ppm	**10**	0	**24**	4	11	33	17	20	22	**24**	26	29	30
Gd	ICP-MS	ppm	**0.5**	0	**4.7**	2.1	1.2	17.1	2.1	2.5	3.5	**4.6**	5.5	6.3	7.2
Hf	ICP-MS	ppm	**0.12**	0	**4.15**	2.25	1.49	18.5	1.98	2.41	3.01	**3.82**	4.71	5.76	6.37
Ho	ICP-MS	ppm	**0.09**	0	**0.76**	0.33	0.18	2.5	0.29	0.36	0.57	**0.73**	0.91	1.1	1.2
K	XRF	ppm	**25**	0	**24925**	12209	1643	50464	7155	11504	14965	**22742**	33781	42446	48514
K	ICP-AES	ppm partial	**100**	0	**7913**	5042	300	21300	801	1218	3285	**8120**	11225	15180	16545
La	ICP-MS	ppm	**0.55**	0	**29**	14	6.9	102	8.7	11	19	**28**	36	39	47
La	ICP-AES	ppm partial	**1.3**	0	**27**	15	6.2	105	7.2	9.8	16	**26**	36	40	44
Li	ICP-AES	ppm partial	**3.5**	6.2	**25.8**	16.2	<	89.2	<	6.0	14.0	**25.1**	32.9	43.7	53.5
Lu	ICP-MS	ppm	**0.03**	0	**0.32**	0.13	0.07	0.88	0.12	0.14	0.23	**0.31**	0.37	0.48	0.52
Mg	XRF	ppm	**543**	0	**11342**	8526	1266	36783	1634	2388	4233	**9829**	15238	24687	27732
Mg	ICP-AES	ppm partial	**50**	0	**8665**	5565	201	27200	1655	2244	3775	**8780**	12225	15180	19285
Mn	XRF	ppm	**93**	0	**744**	357	93	2240	248	349	543	**690**	891	1163	1302
Mn	ICP-AES	ppm partial	**50**	2.5	**487**	173	<	964	185	291	374	**496**	597	688	768
Mo	XRF	ppm	**2.6**	92.6	**-**	-	<	25	<	<	<	**<**	<	<	3
Mo	ICP-AES	ppm partial	**2.6**	97.5	**-**	-	<	8	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**25465**	6604	2723	45336	15100	17496	21926	**25822**	28619	31476	38658
Na	ICP-AES	ppm partial	**150**	0	**848**	607	271	3950	352	401	548	**700**	919	1340	1907
Nb	XRF	ppm	**7**	13.6	**11**	4	<	24	<	<	8	**10**	13	18	20
Nb	ICP-MS	ppm	**0.16**	0	**9.2**	3.6	2.3	21	3.9	5.2	7.0	**8.9**	11	13	18
Nd	ICP-MS	ppm	**0.2**	0	**26**	11	7.9	91	10	14	18	**26**	31	36	38
Ni	XRF	ppm	**14**	58	***15***	*13*	<	61	<	<	<	**<**	19	34	48
Ni	ICP-AES	ppm partial	**3.5**	21	**11**	11	<	57	<	<	3.8	**6.6**	14	26	37
P	XRF	ppm	**105**	0	**750**	453	126	2206	166	218	445	**689**	881	1404	1583
P	ICP-AES	ppm partial	**6**	0	**669**	408	105	1990	154	184	406	**621**	784	1270	1465
Pb	XRF	ppm	**14**	2.5	**29**	16	<	161	17	18	23	**27**	32	37	41
Pb	ICP-AES	ppm partial	**8.7**	85.2	**-**	-	<	68	<	<	<	**<**	<	9	12
Pd	GFAAS	ppb partial	**5**	97.5	**-**	-	<	8	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**6.8**	3.1	2.0	24.1	2.4	3.3	4.7	**6.8**	8.4	9.2	10.2
Rb	XRF	ppm	**5.5**	0	**92**	51	8	236	16	31	51	**84**	127	153	187
Rb	ICP-MS	ppm	**0.6**	0	**88**	50	5.3	208	15	29	46	**82**	122	150	170
S	XRF	ppm	**70**	60.5	***1104***	*3362*	<	17900	<	<	<	**<**	143	3320	5765
S	ICP-AES	ppm partial	**14.3**	23.5	**1216**	3677	<	22000	<	<	16	**43**	173	3944	6014
Sc	ICP-MS	ppm	**2.8**	0	**15**	8.7	3.4	47	4.5	5.5	8.8	**13**	19	24	31
Sc	ICP-AES	ppm partial	**0.4**	0	**5.5**	3.4	0.44	19	1.1	2.3	3.0	**5.0**	7.1	9.5	12
Se	GFAAS	ppm partial	**0.055**	74.1	***0.21***	*1.3*	<	12.1	<	<	<	**<**	0.06	0.19	0.47
Sm	ICP-MS	ppm	**0.5**	0	**5.0**	2.1	1.5	17	2.3	2.8	3.5	**5.0**	6.2	6.6	7.4
Sr	XRF	ppm	**4**	0	**429**	211	58	928	128	163	273	**385**	574	781	866
Sr	ICP-AES	ppm partial	**1.2**	0	**25**	23	2.4	157	5.1	6.6	11	**19**	31	48	69
Ta	ICP-MS	ppm	**0.06**	0	**0.64**	0.24	0.16	1.4	0.24	0.29	0.48	**0.60**	0.82	0.97	1.0
Tb	ICP-MS	ppm	**0.08**	0	**0.69**	0.30	0.18	2.4	0.29	0.37	0.52	**0.67**	0.82	0.95	1.1
Te	GFAAS	ppb partial	**5**	72.8	***34***	*234*	<	2100	<	<	<	**<**	5	19	29
Th	ICP-MS	ppm	**0.13**	0	**7.1**	4.6	0.70	24	0.99	1.5	3.5	**6.6**	9.8	12	15
Th	ICP-AES	ppm partial	**5.6**	17.3	**11**	5	<	33	<	<	7	**10**	13	17	20
Ti	XRF	ppm	**30**	0	**3444**	1728	942	7860	1242	1350	1956	**3342**	4722	5850	6690
Ti	ICP-MS	ppm	**10**	0	**3222**	1667	891	7590	1107	1232	1855	**2970**	4358	5804	6434
Ti	ICP-AES	ppm partial	**2**	0	**1984**	1048	49	4910	268	624	1258	**1920**	2678	3278	3716
Tm	ICP-MS	ppm	**0.03**	0	**0.32**	0.14	0.08	0.95	0.12	0.15	0.24	**0.31**	0.39	0.48	0.54
U	ICP-MS	ppm	**0.08**	0	**2.40**	1.50	0.28	8.88	0.57	0.77	1.24	**2.19**	3.13	3.89	5.43
V	XRF	ppm	**6**	0	**104**	80	10	334	15	24	34	**87**	150	209	267
V	ICP-MS	ppm	**2**	0	**86**	78	2.1	354	5.1	9.7	25	**62**	128	180	243
V	ICP-AES	ppm partial	**0.6**	0	**57**	45	3.0	214	4.1	7.4	19	**50**	90	105	127
Y	XRF	ppm	**2.8**	0	**23**	10	4	68	8	11	17	**23**	28	36	40
Y	ICP-MS	ppm	**0.1**	0	**23**	9.6	5.9	71	8.8	11	17	**23**	26	34	38
Y	ICP-AES	ppm partial	**0.15**	0	**12**	6.3	2.4	26	3.3	4.3	7.0	**10**	15	22	25
Yb	ICP-MS	ppm	**0.22**	0	**2.1**	0.91	0.50	6.2	0.77	0.95	1.6	**2.1**	2.6	3.3	3.4
Zn	XRF	ppm	**4**	0	**97**	72	10	492	40	46	63	**84**	112	130	153
Zn	ICP-AES	ppm partial	**2**	0	**74**	69	6.4	459	17	31	47	**62**	79	101	139
Zr	XRF	ppm	**6**	0	**175**	95	49	838	86	109	131	**159**	193	244	283
Zr	ICP-MS	ppm	**3**	0	**154**	85	47	726	74	93	114	**140**	174	219	254

Table 27. Chemical concentration summary statistics for map unit 27.

Map unit	27	Mafic metavolcanic rocks (1.89 - 1.88 Ga)
Number of samples	107	
Unit area	1792.8	km^2
Percent of bedrock	0.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

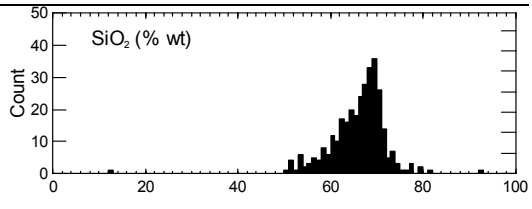


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	54.97	5.86	43.60	72.10	46.61	48.00	50.78	54.20	59.58	62.60	65.79
TiO_2	XRF	%	0.005	0	0.89	0.39	0.28	2.90	0.43	0.56	0.68	0.83	1.00	1.32	1.54
Al_2O_3	XRF	%	0.02	0	16.30	1.71	11.40	20.10	13.50	14.00	15.23	16.40	17.40	18.50	19.22
FeO	XRF	%	0.01	0	7.93	2.34	2.52	12.70	3.37	4.76	6.59	8.07	9.61	10.61	11.70
MnO	XRF	%	0.012	0	0.148	0.047	0.053	0.371	0.068	0.081	0.118	0.151	0.177	0.196	0.208
MgO	XRF	%	0.09	0	4.45	2.12	0.60	9.71	1.23	1.74	2.92	3.99	6.01	7.40	8.26
CaO	XRF	%	0.004	0	7.03	2.48	0.81	14.10	2.86	3.82	5.36	6.93	8.66	10.18	10.92
Na_2O	XRF	%	0.05	0	3.03	0.84	0.59	5.49	1.53	2.02	2.51	3.05	3.57	4.11	4.20
K_2O	XRF	%	0.003	0	1.79	1.10	0.14	5.33	0.37	0.54	1.02	1.63	2.38	3.32	4.11
P_2O_5	XRF	%	0.024	0.9	0.270	0.177	<	1.060	0.106	0.130	0.174	0.223	0.319	0.424	0.663
C_{tot}	Leco	%	0.05	85	-	-	<	0.22	<	<	<	<	<	0.07	0.13
$C_{non\text{-}carb}$	Leco	%	0.05	91.6	-	-	<	0.05	<	<	<	<	<	<	0.05
F	Ion	%	0.055	48.6	0.07	0.02	<	0.19	<	<	<	0.06	0.08	0.10	0.11
Al	XRF	ppm	106	0	86211	9035	60306	106329	71415	74060	80540	86756	92046	97865	101647
Al	ICP-AES	ppm partial	1100	0	21483	12754	3430	75700	6523	9740	14325	18700	24425	35640	47700
As	GFAAS	ppm partial	3	63.6	*3.7*	*9.2*	<	84	<	<	<	<	3.7	6.7	9.9
Au	GFAAS	ppb partial	2.5	85	-	-	<	14.4	<	<	<	<	<	3.0	5.5
B	ICP-AES	ppm partial	4.5	94.4	-	-	<	6	<	<	<	<	<	<	5
Ba	XRF	ppm	21	0	578	436	48	3392	78	204	318	499	770	1066	1250
Ba	ICP-AES	ppm partial	10	0.9	233	209	<	974	14	18	61	171	350	497	666
Bi	GFAAS	ppm partial	0.04	51.4	*0.09*	*0.35*	<	3.7	<	<	<	<	0.08	0.12	0.22
Ca	XRF	ppm	29	0	50243	17696	5756	100815	20478	27327	38288	49550	61883	72787	78042
Ca	ICP-AES	ppm partial	50	0	10993	7056	1600	41700	3955	4484	6600	8650	13600	18800	26500
Ce	ICP-MS	ppm	0.22	0	42	25	4.7	161	12	16	25	39	52	71	77
Cl	XRF	ppm	45	17.8	148	139	<	819	<	<	59	100	175	296	454
Co	ICP-MS	ppm	2	0	26	12	3.7	58	6.5	14	18	24	34	40	45
Co	ICP-AES	ppm partial	0.9	0	15	5.6	4.5	27	5.7	7.4	10	14	19	23	24
Cr	XRF	ppm	19	11.2	136	152	<	812	<	<	37	72	198	311	438
Cr	ICP-AES	ppm partial	5	7.5	49	50	<	280	<	5.8	12	33	71	108	148
Cu	XRF	ppm	17	26.2	54	44	<	275	<	<	<	41	68	114	122
Cu	ICP-AES	ppm partial	3	1.9	49	42	<	237	3.7	5.9	18	38	71	110	128
Dy	ICP-MS	ppm	0.55	0	3.5	1.2	1.2	8.3	2.0	2.3	2.7	3.2	3.9	5.0	5.7
Er	ICP-MS	ppm	0.3	0	2.0	0.7	0.6	4.5	1.1	1.3	1.6	1.8	2.2	3.0	3.3
Eu	ICP-MS	ppm	0.09	0	1.2	0.46	0.53	4.1	0.69	0.78	0.89	1.1	1.3	1.6	2.0
Fe	XRF	ppm	78	0	61647	18143	19573	98679	26154	37001	51235	62712	74693	82471	90909
Fe	ICP-AES	ppm partial	2300	0	34601	14753	9000	80500	12070	14640	23250	33800	45175	52460	59365
Ga	XRF	ppm	10	0	24	4	15	31	17	19	22	24	26	29	30
Gd	ICP-MS	ppm	0.5	0	4.3	1.8	1.2	13.6	2.3	2.8	3.5	4.1	4.7	5.9	7.5
Hf	ICP-MS	ppm	0.12	0	2.90	1.57	0.33	9.76	1.05	1.38	1.79	2.56	3.55	4.68	5.55
Ho	ICP-MS	ppm	0.09	0	0.70	0.24	0.24	1.6	0.38	0.48	0.55	0.64	0.78	1.0	1.2
K	XRF	ppm	25	0	14890	9138	1129	44239	3096	4507	8466	13529	19771	27523	34130
K	ICP-AES	ppm partial	100	0	8246	6000	155	25800	385	762	2575	8400	12150	16040	18560
La	ICP-MS	ppm	0.55	0	20	13	2.0	84	5.1	6.5	12	18	25	33	39
La	ICP-AES	ppm partial	1.3	2.8	17	12	<	80	3.2	4.3	8.6	15	22	32	36
Li	ICP-AES	ppm partial	3.5	2.8	23.2	19.2	<	171	4.3	5.9	12.9	20.1	28.2	39.4	48.8
Lu	ICP-MS	ppm	0.03	0	0.28	0.09	0.10	0.61	0.17	0.18	0.22	0.27	0.32	0.43	0.48
Mg	XRF	ppm	543	0	26803	12802	3618	58551	7405	10516	17620	24060	36210	44622	49814
Mg	ICP-AES	ppm partial	50	0	12098	5220	3400	31500	4400	5740	8073	11900	14675	18420	21915
Mn	XRF	ppm	93	0	1147	364	411	2875	527	628	915	1170	1372	1519	1612
Mn	ICP-AES	ppm partial	50	0	430	197	103	1140	170	195	289	399	511	712	812
Mo	XRF	ppm	2.6	97.2	-	-	<	6	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	97.2	-	-	<	5	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	22483	6203	4363	40736	11323	15018	18646	22631	26504	30481	31134
Na	ICP-AES	ppm partial	150	0	1627	1348	300	6900	500	600	803	1160	1798	4080	4864
Nb	XRF	ppm	7	40.2	10	5	<	33	<	<	<	8	12	18	21
Nb	ICP-MS	ppm	0.16	0	7.4	5.0	0.32	29	2.1	2.8	4.3	6.1	8.8	13	18
Nd	ICP-MS	ppm	0.2	0	21	12	3.0	90	7.8	10	14	20	25	34	40
Ni	XRF	ppm	14	25.2	40	41	<	248	<	<	<	23	53	83	110
Ni	ICP-AES	ppm partial	3.5	5.6	18	17	<	99	<	3.9	7.7	13	22	35	47
P	XRF	ppm	105	0	1177	772	<	4622	462	567	759	972	1391	1849	2891
P	ICP-AES	ppm partial	6	0	1061	705	62	4010	425	519	682	875	1258	1648	2745
Pb	XRF	ppm	14	3.7	24	9	<	67	14	15	18	23	27	34	39
Pb	ICP-AES	ppm partial	8.7	86.9	-	-	<	19	<	<	<	<	<	9	10
Pd	GFAAS	ppb partial	5	87.9	-	-	<	12	<	<	<	<	<	5	7
Pr	ICP-MS	ppm	0.74	0.9	5.3	3.0	<	21.2	1.7	2.3	3.3	5.0	6.2	8.6	9.6
Rb	XRF	ppm	5.5	5.6	56	39	<	213	<	10	26	52	76	111	127
Rb	ICP-MS	ppm	0.6	0	53	38	1.0	204	4.7	8.9	25	50	72	105	126
S	XRF	ppm	70	49.5	566	1380	<	10000	<	<	<	70	384	1280	2895
S	ICP-AES	ppm partial	14.3	12.1	622	1570	<	11300	<	<	28	71	484	1468	2851
Sc	ICP-MS	ppm	2.8	0	27	11	6.8	59	8.7	12	19	28	34	39	45
Sc	ICP-AES	ppm partial	0.4	0	5.3	2.8	1.7	17	2.3	2.6	3.6	4.6	6.0	8.7	11
Se	GFAAS	ppm partial	0.055	63.6	*0.09*	*0.19*	<	0.92	<	<	<	<	0.08	0.24	0.68
Sm	ICP-MS	ppm	0.5	0	4.4	2.0	0.97	17	1.9	2.5	3.3	4.1	5.0	6.4	8.2
Sr	XRF	ppm	4	0	566	275	95	1430	238	295	380	482	724	990	1098
Sr	ICP-AES	ppm partial	1.2	0	57	75	5.0	495	9.2	12	20	30	58	133	174
Ta	ICP-MS	ppm	0.06	0.9	0.49	0.27	<	1.6	0.14	0.21	0.30	0.44	0.58	0.83	0.99
Tb	ICP-MS	ppm	0.08	0	0.63	0.23	0.19	1.6	0.36	0.41	0.51	0.59	0.71	0.88	1.0
Te	GFAAS	ppb partial	5	63.6	*19*	*80*	<	753	<	<	<	<	9	26	74
Th	ICP-MS	ppm	0.13	0.9	3.7	3.2	<	17	0.46	0.73	1.4	2.8	5.0	7.9	9.7
Th	ICP-AES	ppm partial	5.6	51.4	7	*4*	<	22	<	<	<	<	9	13	14
Ti	XRF	ppm	30	0	5346	2328	1686	17400	2580	3348	4068	4956	6000	7920	9234
Ti	ICP-MS	ppm	10	0	5162	2401	1600	17400	2307	3168	3783	4750	5833	7438	9114
Ti	ICP-AES	ppm partial	2	0	2405	1061	343	5380	636	1128	1573	2360	3153	3690	4289
Tm	ICP-MS	ppm	0.03	0	0.29	0.10	0.10	0.66	0.16	0.19	0.23	0.27	0.32	0.43	0.50
U	ICP-MS	ppm	0.08	0.9	1.43	1.16	<	8.09	0.25	0.44	0.62	1.18	1.66	2.91	3.50
V	XRF	ppm	6	0	208	91	34	566	61	90	157	209	259	299	332
V	ICP-MS	ppm	2	0	187	92	23	551	43	60	133	183	238	289	323
V	ICP-AES	ppm partial	0.6	0	85	42	22	248	29	35	54	80	106	146	162
Y	XRF	ppm	2.8	0	20	7	7	43	10	12	16	19	23	29	33
Y	ICP-MS	ppm	0.1	0	21	7.1	6.7	48	11	14	17	20	23	30	36
Y	ICP-AES	ppm partial	0.15	0	7.5	4.5	0.70	27	2.1	2.9	4.3	6.6	9.8	15	16
Yb	ICP-MS	ppm	0.22	0	1.9	0.64	0.63	4.1	1.1	1.2	1.5	1.8	2.1	2.9	3.1
Zn	XRF	ppm	4	0	113	61	47	655	67	76	92	105	120	142	169
Zn	ICP-AES	ppm partial	2	0	58	33	8.7	189	14	16	37	55	75	93	122
Zr	XRF	ppm	6	0	125	71	10	416	43	56	78	112	152	200	239
Zr	ICP-MS	ppm	3	0	109	66	13	392	38	46	65	97	127	180	225

Table 28. Chemical concentration summary statistics for map unit 28.

Map unit	**28**	**Mica gneisses and mica schists with black schist intercalations**
Number of samples	319	
Unit area	18380.6	km^2
Percent of bedrock	5.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

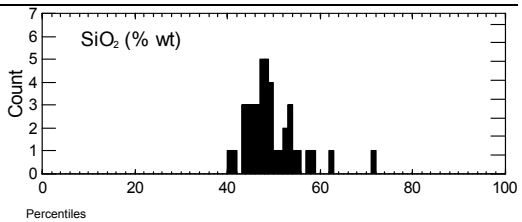


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**65.91**	6.28	12.30	92.80	55.35	58.40	62.93	**67.20**	69.48	71.36	73.40
TiO_2	XRF	%	**0.005**	0.3	**0.68**	0.22	<	2.11	0.44	0.50	0.59	**0.65**	0.75	0.84	0.96
Al_2O_3	XRF	%	**0.02**	0	**14.67**	2.12	0.07	20.80	12.40	12.94	13.50	**14.50**	15.90	17.10	17.86
FeO	XRF	%	**0.01**	0	**5.28**	1.67	0.17	13.41	3.21	3.62	4.26	**4.98**	5.97	7.35	8.70
MnO	XRF	%	**0.012**	0.3	**0.079**	0.033	<	0.296	0.041	0.046	0.060	**0.073**	0.088	0.113	0.128
MgO	XRF	%	**0.09**	0	**2.55**	1.16	0.26	17.30	1.24	1.65	2.05	**2.41**	2.94	3.60	4.08
CaO	XRF	%	**0.004**	0	**2.39**	2.02	0.33	31.70	0.99	1.18	1.64	**2.09**	2.57	3.52	5.02
Na_2O	XRF	%	**0.05**	0.6	**2.78**	0.80	<	9.22	1.49	2.03	2.48	**2.84**	3.08	3.36	3.65
K_2O	XRF	%	**0.003**	0	**2.89**	0.87	0.01	7.34	1.78	2.03	2.36	**2.80**	3.31	3.90	4.42
P_2O_5	XRF	%	**0.024**	0.6	**0.156**	0.091	<	0.975	0.064	0.081	0.126	**0.149**	0.169	0.206	0.255
C_{tot}	Leco	%	**0.05**	54.9	***0.13***	*0.55*	<	9.7	<	<	<	**<**	0.14	0.29	0.37
$C_{non-carb}$	Leco	%	**0.05**	56.1	***0.09***	*0.13*	<	0.80	<	<	<	**<**	0.12	0.27	0.35
F	Ion	%	**0.055**	30.1	**0.07**	0.02	<	0.20	<	<	<	**0.06**	0.08	0.10	0.11
Al	XRF	ppm	**106**	0	**77578**	11188	370	110032	65596	68453	71415	**76705**	84111	90459	94453
Al	ICP-AES	ppm partial	**1100**	0.6	**27866**	10915	<	114000	13385	18140	22650	**26300**	31400	37960	42355
As	GFAAS	ppm partial	**3**	78.7	***4.3***	*26*	<	333	<	<	<	**<**	<	4.8	10
Au	GFAAS	ppb partial	**2.5**	93.1	**-**	-	<	5010.0	<	<	<	**<**	<	<	3.3
B	ICP-AES	ppm partial	**4.5**	92.8	**-**	-	<	19	<	<	<	**<**	<	<	5
Ba	XRF	ppm	**21**	0.3	**616**	233	<	2000	305	363	469	**590**	730	887	1002
Ba	ICP-AES	ppm partial	**10**	0.3	**273**	163	<	1210	70	101	156	**252**	362	451	537
Bi	GFAAS	ppm partial	**0.04**	17.6	**0.17**	0.67	<	12	<	<	0.05	**0.11**	0.17	0.25	0.37
Ca	XRF	ppm	**29**	0	**17103**	14422	2374	226655	7050	8437	11690	**14944**	18376	25168	35900
Ca	ICP-AES	ppm partial	**50**	0	**3559**	13068	259	220000	541	716	1100	**1600**	2700	5808	8613
Ce	ICP-MS	ppm	**0.22**	0	**71**	18	0.57	186	43	51	63	**71**	79	91	102
Cl	XRF	ppm	**45**	45.1	**78**	79	<	737	<	<	<	**50**	75	140	198
Co	ICP-MS	ppm	**2**	0.9	**17**	6.1	<	42	7.7	9.9	13	**16**	20	24	27
Co	ICP-AES	ppm partial	**0.9**	0.6	**17**	5.3	<	42	8.6	11	14	**16**	19	22	25
Cr	XRF	ppm	**19**	2.2	**107**	38	<	252	35	62	88	**104**	129	152	172
Cr	ICP-AES	ppm partial	**5**	0.9	**86**	34	<	223	19	46	71	**84**	103	125	142
Cu	XRF	ppm	**17**	40.8	**37**	41	<	406	<	<	<	**23**	42	66	98
Cu	ICP-AES	ppm partial	**3**	2.8	**34**	42	<	417	4.5	6.8	13	**25**	42	65	93
Dy	ICP-MS	ppm	**0.55**	0.6	**3.9**	0.8	<	6.6	2.7	3.0	3.4	**3.8**	4.3	4.9	5.6
Er	ICP-MS	ppm	**0.3**	0.6	**2.2**	0.5	<	4.7	1.4	1.6	1.9	**2.1**	2.4	2.9	3.3
Eu	ICP-MS	ppm	**0.09**	0.6	**1.1**	0.23	<	2.9	0.85	0.92	1.0	**1.1**	1.2	1.4	1.4
Fe	XRF	ppm	**78**	0	**41041**	12960	1321	104172	24965	28120	33124	**38664**	46364	57133	67591
Fe	ICP-AES	ppm partial	**2300**	0.3	**43820**	12988	<	107000	24100	30900	36900	**42200**	49875	58380	69160
Ga	XRF	ppm	**10**	0.6	**24**	4	<	40	18	19	21	**24**	27	29	31
Gd	ICP-MS	ppm	**0.5**	0.6	**5.1**	1.0	<	10.0	3.5	4.0	4.5	**5.1**	5.6	6.3	6.7
Hf	ICP-MS	ppm	**0.12**	0.6	**4.73**	1.19	<	9.24	3.04	3.39	4.02	**4.57**	5.28	6.40	6.86
Ho	ICP-MS	ppm	**0.09**	0.6	**0.77**	0.17	<	1.4	0.50	0.58	0.67	**0.75**	0.85	0.98	1.1
K	XRF	ppm	**25**	0	**24020**	7221	75	60922	14757	16832	19588	**23240**	27473	32337	36661
K	ICP-AES	ppm partial	**100**	0	**17233**	5357	100	36000	7969	10100	14700	**17600**	20150	23400	25800
La	ICP-MS	ppm	**0.55**	0.3	**35**	8.9	<	77	20	25	31	**36**	40	44	51
La	ICP-AES	ppm partial	**1.3**	0.6	**26**	8.0	<	64	14	16	21	**26**	30	35	38
Li	ICP-AES	ppm partial	**3.5**	0.9	**40.3**	24.6	<	260	16.2	20.6	27.6	**35.8**	47.5	61.0	77.2
Lu	ICP-MS	ppm	**0.03**	0.3	**0.32**	0.09	<	0.89	0.21	0.23	0.27	**0.31**	0.36	0.41	0.45
Mg	XRF	ppm	**543**	0	**15383**	7001	1580	104319	7477	9974	12362	**14532**	17716	21684	24608
Mg	ICP-AES	ppm partial	**50**	0	**15525**	5805	500	78600	7240	10300	13025	**15200**	17500	21200	23555
Mn	XRF	ppm	**93**	0.3	**612**	256	<	2294	318	357	465	**566**	682	876	992
Mn	ICP-AES	ppm partial	**50**	0.3	**410**	172	<	925	134	159	260	**446**	535	603	655
Mo	XRF	ppm	**2.6**	95.6	**-**	-	<	42	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	95.6	**-**	-	<	86	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0.6	**20620**	5929	<	68412	11085	15077	18416	**21073**	22854	24902	27098
Na	ICP-AES	ppm partial	**150**	0.6	**735**	634	<	6980	391	426	500	**577**	701	1154	1573
Nb	XRF	ppm	**7**	3.8	**13**	4	<	35	7	8	10	**12**	14	17	19
Nb	ICP-MS	ppm	**0.16**	0.3	**10**	3.0	<	30	6.9	7.5	9.0	**10.0**	12	14	15
Nd	ICP-MS	ppm	**0.2**	0	**31**	7.7	0.45	86	20	23	27	**31**	34	39	43
Ni	XRF	ppm	**14**	4.4	**46**	21	<	178	15	23	34	**42**	55	68	79
Ni	ICP-AES	ppm partial	**3.5**	1.3	**41**	20	<	182	13	19	31	**39**	50	63	71
P	XRF	ppm	**105**	0	**680**	397	<	4251	279	353	549	**650**	737	898	1112
P	ICP-AES	ppm partial	**6**	0	**533**	391	18	3760	105	149	357	**519**	623	775	1011
Pb	XRF	ppm	**14**	1.3	**31**	8	<	106	21	24	27	**31**	34	40	43
Pb	ICP-AES	ppm partial	**8.7**	83.7	**-**	-	<	60	<	<	<	**<**	<	10	13
Pd	GFAAS	ppb partial	**5**	97.2	**-**	-	<	17	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0.6	**8.3**	2.1	<	23.4	5.0	6.0	7.3	**8.2**	9.3	10.6	11.9
Rb	XRF	ppm	**5.5**	0.9	**122**	40	<	287	60	72	97	**118**	145	174	202
Rb	ICP-MS	ppm	**0.6**	0.3	**117**	40	<	270	57	70	92	**114**	142	170	192
S	XRF	ppm	**70**	21	**1137**	3061	<	48200	<	<	104	**418**	1078	2574	4490
S	ICP-AES	ppm partial	**14.3**	2.5	**1245**	3314	<	52300	21	43	146	**488**	1208	2774	4953
Sc	ICP-MS	ppm	**2.8**	0.6	**17**	5.3	<	40	9.3	11	14	**16**	20	23	27
Sc	ICP-AES	ppm partial	**0.4**	0.6	**11**	4.3	<	23	3.9	5.4	7.9	**11**	14	16	18
Se	GFAAS	ppm partial	**0.055**	31.3	**0.18**	0.28	<	3.0	<	<	<	**0.09**	0.19	0.32	0.53
Sm	ICP-MS	ppm	**0.5**	0.6	**5.7**	1.2	<	14	3.9	4.3	5.0	**5.6**	6.2	7.0	7.6
Sr	XRF	ppm	**4**	0	**274**	132	6	1390	152	171	213	**250**	290	374	504
Sr	ICP-AES	ppm partial	**1.2**	0	**14**	39	2.3	540	4.0	4.3	5.1	**6.2**	10	23	42
Ta	ICP-MS	ppm	**0.06**	0.6	**0.78**	0.19	<	1.6	0.46	0.54	0.67	**0.77**	0.87	0.97	1.1
Tb	ICP-MS	ppm	**0.08**	0.6	**0.73**	0.14	<	1.3	0.53	0.59	0.65	**0.72**	0.80	0.90	1.00
Te	GFAAS	ppb partial	**5**	14.4	**21**	22	<	225	<	<	9	**14**	26	37	54
Th	ICP-MS	ppm	**0.13**	0.3	**10**	3.3	<	20	4.7	5.8	8.6	**10**	12	14	16
Th	ICP-AES	ppm partial	**5.6**	6.6	**13**	4	<	28	<	7	10	**13**	15	18	19
Ti	XRF	ppm	**30**	0.3	**4092**	1320	<	12660	2634	2970	3540	**3900**	4488	5040	5754
Ti	ICP-MS	ppm	**10**	0	**3908**	1312	95	12200	2495	2870	3320	**3730**	4288	4966	5749
Ti	ICP-AES	ppm partial	**2**	0	**3521**	1005	6.4	7110	1803	2508	3020	**3530**	4110	4556	5156
Tm	ICP-MS	ppm	**0.03**	0.6	**0.32**	0.08	<	0.78	0.20	0.24	0.27	**0.31**	0.36	0.41	0.47
U	ICP-MS	ppm	**0.08**	0	**2.51**	0.83	0.26	5.92	1.20	1.51	2.00	**2.49**	2.94	3.47	3.79
V	XRF	ppm	**6**	0.3	**127**	43	<	303	65	82	104	**120**	147	176	209
V	ICP-MS	ppm	**2**	0	**105**	40	3.3	321	47	67	84	**99**	122	152	178
V	ICP-AES	ppm partial	**0.6**	0	**103**	38	1.7	306	49	66	82	**101**	120	145	169
Y	XRF	ppm	**2.8**	0.6	**24**	6	<	47	16	18	21	**24**	28	32	34
Y	ICP-MS	ppm	**0.1**	0	**23**	5.3	1.2	41	16	18	20	**23**	25	30	33
Y	ICP-AES	ppm partial	**0.15**	0	**8.5**	3.3	0.60	20	4.0	4.6	6.1	**8.2**	10	13	15
Yb	ICP-MS	ppm	**0.22**	0.6	**2.1**	0.57	<	5.7	1.4	1.6	1.8	**2.1**	2.4	2.8	3.1
Zn	XRF	ppm	**4**	0	**97**	34	9	238	54	63	74	**91**	112	144	168
Zn	ICP-AES	ppm partial	**2**	0.6	**83**	28	<	219	47	53	65	**79**	96	120	133
Zr	XRF	ppm	**6**	0.6	**198**	49	<	432	133	144	169	**193**	218	252	281
Zr	ICP-MS	ppm	**3**	0.6	**180**	46	<	385	114	127	152	**175**	199	237	257

Table 29. Chemical concentration summary statistics for map unit 30.

Map unit	30	Mafic metavolcanic rocks (~ 1.90 Ga)
Number of samples	41	
Unit area	743.3	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics: 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

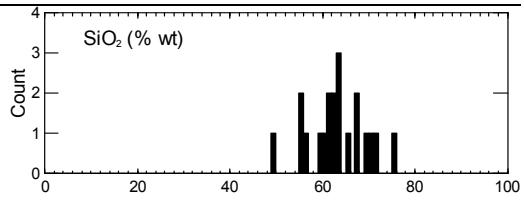


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	49.38	5.77	40.90	71.00	42.65	43.70	45.58	48.30	52.20	56.26	60.22
TiO_2	XRF	%	0.005	0	1.46	0.71	0.31	3.46	0.51	0.72	0.89	1.31	1.73	2.56	2.94
Al_2O_3	XRF	%	0.02	0	13.87	2.62	6.99	19.90	9.73	10.56	12.95	13.50	15.18	17.48	18.33
FeO	XRF	%	0.01	0	10.81	3.30	2.93	17.30	5.64	5.99	8.53	11.34	13.48	14.74	15.97
MnO	XRF	%	0.012	0	0.178	0.051	0.034	0.260	0.088	0.115	0.141	0.184	0.220	0.240	0.244
MgO	XRF	%	0.09	0	6.08	2.82	0.81	13.10	2.51	3.24	3.80	5.84	7.40	10.12	12.20
CaO	XRF	%	0.004	0	9.12	3.90	0.82	20.10	3.49	5.02	6.21	9.25	10.63	12.82	18.43
Na_2O	XRF	%	0.05	0	2.65	0.88	1.07	5.31	1.25	1.48	2.10	2.65	3.11	3.65	4.23
K_2O	XRF	%	0.003	0	0.96	1.18	0.09	6.57	0.13	0.15	0.26	0.48	1.30	2.16	2.66
P_2O_5	XRF	%	0.024	0	0.234	0.177	0.029	0.934	0.052	0.084	0.122	0.196	0.293	0.396	0.623
C_{tot}	Leco	%	0.05	61.0	*0.26*	*0.78*	<	4.5	<	<	<	<	0.15	0.44	1.6
$C_{non\text{-}carb}$	Leco	%	0.05	65.9	*0.12*	*0.50*	<	3.2	<	<	<	<	0.05	0.12	0.40
F	Ion	%	0.055	68.3	*0.04*	*0.04*	<	0.18	<	<	<	<	0.06	0.08	0.16
Al	XRF	ppm	106	0	73372	13849	36977	105271	51451	55862	68506	71415	80276	92469	96939
Al	ICP-AES	ppm partial	1100	0	16139	10167	4200	45500	4355	5560	8693	14500	22075	28180	39220
As	GFAAS	ppm partial	3	56.1	*21*	*65*	<	393	<	<	<	<	6.7	67	103
Au	GFAAS	ppb partial	2.5	75.6	*5.2*	*20.1*	<	126.0	<	<	<	<	<	7.2	25.1
B	ICP-AES	ppm partial	4.5	90.2	-	-	<	10	<	<	<	<	<	<	6
Ba	XRF	ppm	21	0	264	257	35	949	40	53	77	137	471	666	774
Ba	ICP-AES	ppm partial	10	7.3	135	205	<	806	<	11	19	39	127	463	618
Bi	GFAAS	ppm partial	0.04	63.4	*0.10*	*0.25*	<	1.1	<	<	<	<	0.06	0.16	0.86
Ca	XRF	ppm	29	0	65179	27871	5877	143715	24918	35893	44423	66138	75969	91663	131739
Ca	ICP-AES	ppm partial	50	0	14720	16402	2000	104000	3822	4644	7950	11500	15300	23580	38750
Ce	ICP-MS	ppm	0.22	0	33	28	4.6	134	5.7	7.4	16	29	40	62	104
Cl	XRF	ppm	45	61.0	*125*	*258*	<	1350	<	<	<	<	80	393	621
Co	ICP-MS	ppm	2	0	43	17	4.9	83	12	20	31	47	55	61	63
Co	ICP-AES	ppm partial	0.9	0	19	13	3.4	85	5.3	8.3	11	17	21	31	38
Cr	XRF	ppm	19	4.9	265	330	<	1307	13	27	57	118	299	825	1070
Cr	ICP-AES	ppm partial	5	9.8	75	145	<	867	<	3.4	13	39	77	121	324
Cu	XRF	ppm	17	4.9	104	88	<	327	9	20	38	73	152	254	309
Cu	ICP-AES	ppm partial	3	2.4	99	86	<	331	14	17	36	67	146	228	320
Dy	ICP-MS	ppm	0.55	0	4.4	1.5	1.9	8.4	2.1	2.6	3.5	4.2	5.5	6.5	7.4
Er	ICP-MS	ppm	0.3	0	2.5	0.8	1.2	4.7	1.2	1.5	1.9	2.4	2.8	3.6	4.3
Eu	ICP-MS	ppm	0.09	0	1.4	0.52	0.55	2.6	0.69	0.84	0.96	1.3	1.6	2.3	2.4
Fe	XRF	ppm	78	0	84001	25657	22766	134421	43807	46527	66270	88096	104740	114530	124087
Fe	ICP-AES	ppm partial	2300	0	31820	23977	5300	131000	9490	11260	15400	26200	39850	59120	79240
Ga	XRF	ppm	10	0	24	5	15	34	16	17	20	23	26	31	33
Gd	ICP-MS	ppm	0.5	0	5.0	2.1	2.0	10.7	2.3	2.6	3.7	4.6	5.9	7.9	9.1
Hf	ICP-MS	ppm	0.12	0	2.91	1.58	0.70	7.79	0.87	1.19	1.87	2.60	3.69	4.34	6.68
Ho	ICP-MS	ppm	0.09	0	0.87	0.30	0.41	1.7	0.42	0.54	0.65	0.81	1.0	1.3	1.5
K	XRF	ppm	25	0	7935	9753	764	54531	1038	1270	2125	3959	10790	17961	22061
K	ICP-AES	ppm partial	100	0	4425	6272	105	20700	173	200	313	1300	5658	16200	19430
La	ICP-MS	ppm	0.55	0	15	14	1.3	62	1.8	2.7	6.4	12	17	29	52
La	ICP-AES	ppm partial	1.3	12.2	12	12	<	55	<	<	3.6	8.3	14	22	46
Li	ICP-AES	ppm partial	3.5	14.6	23.0	24.1	<	110	<	<	7.3	13.1	30.6	52.0	83.1
Lu	ICP-MS	ppm	0.03	0	0.33	0.11	0.16	0.66	0.17	0.20	0.24	0.34	0.38	0.49	0.55
Mg	XRF	ppm	543	0	36656	17005	4884	78993	15129	19549	22914	35215	44634	61048	73536
Mg	ICP-AES	ppm partial	50	0	9159	4903	1100	23300	2565	4330	5375	8200	11625	15940	18295
Mn	XRF	ppm	93	0	1380	395	264	2015	682	891	1093	1426	1705	1860	1891
Mn	ICP-AES	ppm partial	50	0	310	139	65	708	112	150	209	277	388	490	559
Mo	XRF	ppm	2.6	97.6	-	-	<	44	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	97.6	-	-	<	30	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	19663	6493	7939	39400	9245	11011	15567	19663	23091	27113	31372
Na	ICP-AES	ppm partial	150	0	1523	1073	400	4400	412	560	800	1100	1743	3340	4172
Nb	XRF	ppm	7	29.3	13	10	<	48	<	<	<	10	13	27	42
Nb	ICP-MS	ppm	0.16	0	10	9.5	1.7	38	1.8	2.3	5.1	7.5	11	24	37
Nd	ICP-MS	ppm	0.2	0	19	12	4.2	66	5.5	6.5	11	18	22	29	46
Ni	XRF	ppm	14	7.3	118	161	<	884	<	18	28	70	131	243	442
Ni	ICP-AES	ppm partial	3.5	0	63	142	4.0	854	6.8	8.6	14	25	51	86	273
P	XRF	ppm	105	0	1020	772	126	4072	227	366	532	855	1277	1727	2716
P	ICP-AES	ppm partial	6	0	926	696	115	3630	199	331	476	765	1135	1630	2418
Pb	XRF	ppm	14	19.5	19	5	<	32	<	<	14	18	21	27	32
Pb	ICP-AES	ppm partial	8.7	97.6	-	-	<	19	<	<	<	<	<	<	<
Pd	GFAAS	ppb partial	5	80.5	-	-	<	26	<	<	<	<	<	10	17
Pr	ICP-MS	ppm	0.74	2.4	4.4	3.3	<	16.8	0.96	1.3	2.4	4.0	5.2	7.6	11.8
Rb	XRF	ppm	5.5	31.7	26	28	<	121	<	<	<	11	35	75	89
Rb	ICP-MS	ppm	0.6	0	23	28	0.8	116	1.4	1.8	3.9	9.9	35	71	89
S	XRF	ppm	70	24.4	4054	12109	<	67800	<	<	66	672	1670	4582	29320
S	ICP-AES	ppm partial	14.3	0	4422	12854	15	70700	16	25	112	731	1960	5614	32930
Sc	ICP-MS	ppm	2.8	0	34	13	5.5	55	11	17	24	35	43	49	53
Sc	ICP-AES	ppm partial	0.4	2.4	5.0	2.9	<	19	1.6	2.3	3.4	4.6	5.7	7.3	9.3
Se	GFAAS	ppm partial	0.055	31.7	0.71	2.3	<	14.0	<	<	<	0.09	0.40	0.80	3.4
Sm	ICP-MS	ppm	0.5	0	4.5	2.3	1.4	12	1.5	2.2	3.0	4.2	5.3	7.4	9.4
Sr	XRF	ppm	4	0	314	180	64	996	116	143	191	257	404	532	635
Sr	ICP-AES	ppm partial	1.2	0	36	46	2.0	234	3.7	5.3	7.9	17	39	80	138
Ta	ICP-MS	ppm	0.06	0	0.60	0.52	0.08	2.6	0.11	0.15	0.29	0.46	0.66	1.2	1.9
Tb	ICP-MS	ppm	0.08	0	0.76	0.28	0.33	1.4	0.36	0.41	0.60	0.70	0.95	1.2	1.3
Te	GFAAS	ppb partial	5	29.3	26	63	<	390	<	<	<	9	21	48	89
Th	ICP-MS	ppm	0.13	7.3	2.0	2.4	<	13	<	0.29	0.53	1.2	2.5	4.5	7.5
Th	ICP-AES	ppm partial	5.6	68.3	*5*	*4*	<	19	<	<	<	<	7	12	16
Ti	XRF	ppm	30	0	8760	4272	1884	20760	3060	4326	5364	7860	10380	15348	17658
Ti	ICP-MS	ppm	10	0	8625	4321	1720	20400	3138	4140	5330	7890	10625	15780	17715
Ti	ICP-AES	ppm partial	2	0	2089	1204	592	5330	672	801	1160	1810	2955	3604	4817
Tm	ICP-MS	ppm	0.03	0	0.35	0.12	0.17	0.68	0.18	0.21	0.27	0.32	0.39	0.51	0.59
U	ICP-MS	ppm	0.08	7.3	1.04	1.96	<	12.4	<	0.10	0.22	0.48	1.10	2.29	2.70
V	XRF	ppm	6	0	326	141	22	597	103	172	229	290	427	513	554
V	ICP-MS	ppm	2	0	296	136	15	597	89	133	195	285	396	487	508
V	ICP-AES	ppm partial	0.6	0	84	77	2.5	414	20	28	42	70	94	127	235
Y	XRF	ppm	2.8	0	24	8	11	45	13	13	18	22	30	34	41
Y	ICP-MS	ppm	0.1	0	25	8.3	12	46	13	16	19	25	29	37	42
Y	ICP-AES	ppm partial	0.15	0	6.1	3.9	1.6	21	2.0	2.3	3.0	5.2	8.4	11	13
Yb	ICP-MS	ppm	0.22	0	2.3	0.78	0.93	4.7	1.2	1.4	1.7	2.3	2.5	3.4	3.8
Zn	XRF	ppm	4	0	157	194	43	1282	69	76	99	119	142	186	347
Zn	ICP-AES	ppm partial	2	0	62	147	3.6	951	8.8	11	17	27	53	98	153
Zr	XRF	ppm	6	0	133	87	23	430	31	43	86	112	153	228	353
Zr	ICP-MS	ppm	3	0	114	76	23	366	25	38	68	95	139	194	310

Table 30. Chemical concentration summary statistics for map unit 32.

Map unit	32	Pyroxene granitoid and mafic dykes (1.885 Ga)
Number of samples	20	
Unit area	706.1	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

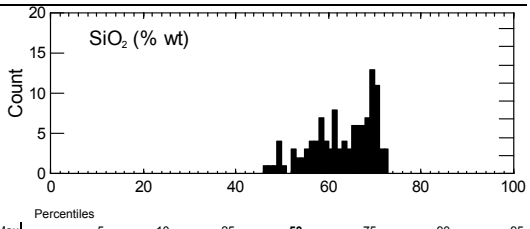


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	63.04	6.21	49.40	75.30	52.50	55.65	59.75	62.70	67.55	70.75	73.20
TiO_2	XRF	%	0.005	0	0.76	0.29	0.24	1.28	0.28	0.36	0.56	0.74	0.97	1.19	1.28
Al_2O_3	XRF	%	0.02	0	16.18	1.44	13.00	20.00	13.85	14.75	15.45	15.95	17.05	17.50	18.75
FeO	XRF	%	0.01	0	5.59	2.37	2.00	10.30	2.11	2.40	3.69	5.44	6.76	9.07	9.88
MnO	XRF	%	0.012	0	0.094	0.041	0.041	0.179	0.042	0.044	0.057	0.092	0.119	0.155	0.167
MgO	XRF	%	0.09	0	1.67	1.14	0.34	4.34	0.37	0.45	0.88	1.19	2.69	3.30	3.96
CaO	XRF	%	0.004	0	3.84	1.77	1.94	8.32	1.95	1.97	2.40	3.22	4.99	6.17	7.49
Na_2O	XRF	%	0.05	0	3.71	0.47	3.15	5.11	3.15	3.24	3.40	3.60	3.92	4.30	4.79
K_2O	XRF	%	0.003	0	3.62	1.51	1.16	6.44	1.27	1.56	2.76	3.31	4.91	5.89	6.22
P_2O_5	XRF	%	0.024	0	0.263	0.132	0.051	0.629	0.081	0.112	0.177	0.267	0.313	0.422	0.533
C_{tot}	Leco	%	0.05	90	-	-	<	0.11	<	<	<	<	<	<	0.09
$C_{non\text{-}carb}$	Leco	%	0.05	95	-	-	<	0.07	<	<	<	<	<	<	<
F	Ion	%	0.055	55	*0.06*	*0.02*	<	0.10	<	<	<	<	0.07	0.08	0.09
Al	XRF	ppm	106	0	85592	7591	68770	105800	73267	78028	81731	84376	90195	92575	99188
Al	ICP-AES	ppm partial	1100	0	9705	3954	3100	16600	3750	4900	6350	10250	12050	15600	16250
As	GFAAS	ppm partial	3	90	-	-	<	3.1	<	<	<	<	<	<	3.1
Au	GFAAS	ppb partial	2.5	95	-	-	<	3.1	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	1434	917	433	4374	535	679	745	1278	1762	2568	3487
Ba	ICP-AES	ppm partial	10	0	228	136	43	549	44	49	141	229	280	428	496
Bi	GFAAS	ppm partial	0.04	80	*0.04*	*0.00*	<	0.04	<	<	<	<	<	0.04	0.04
Ca	XRF	ppm	29	0	27470	12677	13871	59488	13943	14086	17160	23023	35679	44116	53518
Ca	ICP-AES	ppm partial	50	0	4399	1935	1800	8000	1850	2000	3085	3900	5950	7550	7900
Ce	ICP-MS	ppm	0.22	0	79	44	32	217	37	43	48	66	97	133	176
Cl	XRF	ppm	45	5	163	154	<	700	<	55	70	100	230	315	520
Co	ICP-MS	ppm	2	0	14	6.7	2.4	29	4.0	5.6	9.2	13	16	24	27
Co	ICP-AES	ppm partial	0.9	0	9.4	4.8	2.6	21	2.7	3.4	6.2	7.9	13	15	19
Cr	XRF	ppm	19	20	41	21	<	87	<	<	23	32	59	69	79
Cr	ICP-AES	ppm partial	5	5	25	19	<	66	<	6.8	9.3	19	38	60	66
Cu	XRF	ppm	17	35	26	10	<	55	<	<	<	21	32	39	49
Cu	ICP-AES	ppm partial	3	5	19	11	<	40	<	4.2	10	18	24	37	40
Dy	ICP-MS	ppm	0.55	0	3.8	1.9	1.0	7.6	1.0	1.2	2.5	3.7	5.2	6.4	7.2
Er	ICP-MS	ppm	0.3	0	2.0	1.0	0.5	4.0	0.5	0.7	1.3	1.8	2.9	3.5	3.7
Eu	ICP-MS	ppm	0.09	0	1.7	0.94	0.52	4.9	0.58	0.79	1.2	1.5	1.9	2.5	3.9
Fe	XRF	ppm	78	0	43434	18399	15540	80031	16356	18609	28702	42269	52486	70435	76729
Fe	ICP-AES	ppm partial	2300	0	29235	11711	9800	69000	13300	17000	24000	28950	33200	36950	53100
Ga	XRF	ppm	10	0	26	4	16	33	19	22	25	27	28	31	33
Gd	ICP-MS	ppm	0.5	0	5.5	2.8	1.7	12.5	1.7	1.9	3.8	6.1	6.8	8.9	11.6
Hf	ICP-MS	ppm	0.12	0	6.90	3.97	2.38	15.6	2.54	2.85	3.62	6.16	9.43	13.3	14.7
Ho	ICP-MS	ppm	0.09	0	0.73	0.38	0.17	1.5	0.19	0.23	0.47	0.72	1.0	1.3	1.4
K	XRF	ppm	25	0	30071	12558	9628	53452	10500	12907	22867	27432	40753	48887	51585
K	ICP-AES	ppm partial	100	0	6884	3152	1800	12500	2250	2750	4200	7200	9135	11550	12050
La	ICP-MS	ppm	0.55	0	41	23	18	111	19	21	26	33	52	71	91
La	ICP-AES	ppm partial	1.3	0	32	21	9.0	77	9.2	11	19	23	39	74	76
Li	ICP-AES	ppm partial	3.5	10	11.6	6.8	<	29.5	<	<	6.8	9.2	13.7	22.8	29.0
Lu	ICP-MS	ppm	0.03	0	0.29	0.15	0.09	0.58	0.10	0.11	0.21	0.24	0.41	0.52	0.57
Mg	XRF	ppm	543	0	10088	6898	2050	26170	2201	2714	5288	7176	16221	19899	23849
Mg	ICP-AES	ppm partial	50	0	6343	3682	1500	13500	1550	2100	3500	5280	8450	12950	13250
Mn	XRF	ppm	93	0	729	318	318	1387	326	341	442	713	922	1201	1294
Mn	ICP-AES	ppm partial	50	0	274	96	131	459	143	162	201	243	366	406	437
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	65	*2*	*2*	<	8	<	<	<	<	3	5	6
Na	XRF	ppm	371	0	27491	3517	23373	37916	23373	24004	25191	26712	29086	31869	35542
Na	ICP-AES	ppm partial	150	0	870	260	500	1500	550	600	650	850	1050	1200	1350
Nb	XRF	ppm	7	10	14	7	<	31	<	<	9	12	17	25	30
Nb	ICP-MS	ppm	0.16	0	12	6.4	3.4	28	3.6	4.9	7.1	10	15	20	25
Nd	ICP-MS	ppm	0.2	0	35	19	13	91	14	17	22	31	40	59	76
Ni	XRF	ppm	14	45	18	4	<	28	<	<	<	16	19	24	27
Ni	ICP-AES	ppm partial	3.5	5	12	6.5	<	24	<	4.1	7.2	11	16	22	24
P	XRF	ppm	105	0	1147	576	222	2742	353	488	772	1164	1365	1840	2324
P	ICP-AES	ppm partial	6	0	1050	524	193	2590	320	469	763	1050	1205	1660	2150
Pb	XRF	ppm	14	0	30	8	19	49	19	21	24	30	35	38	44
Pb	ICP-AES	ppm partial	8.7	85	-	-	<	9	<	<	<	<	<	9	9
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	9.1	4.8	3.5	24.2	3.9	4.7	6.0	7.8	10.6	14.7	19.6
Rb	XRF	ppm	5.5	0	78	31	16	139	19	27	60	80	97	113	128
Rb	ICP-MS	ppm	0.6	0	71	28	14	124	17	27	55	77	87	105	115
S	XRF	ppm	70	15	412	336	<	1080	<	<	115	300	660	925	1060
S	ICP-AES	ppm partial	14.3	5	451	365	<	1280	<	52	159	381	700	971	1165
Sc	ICP-MS	ppm	2.8	0	16	7.8	5.2	31	5.2	5.3	11	16	20	28	31
Sc	ICP-AES	ppm partial	0.4	0	4.7	1.9	1.5	8.1	1.7	2.2	3.4	4.3	6.1	7.6	8.1
Se	GFAAS	ppm partial	0.055	55	*0.07*	*0.05*	<	0.23	<	<	<	<	0.09	0.13	0.19
Sm	ICP-MS	ppm	0.5	0	6.1	3.1	2.1	14	2.2	2.4	4.1	5.9	7.4	10	13
Sr	XRF	ppm	4	0	432	229	185	924	195	205	260	335	588	796	890
Sr	ICP-AES	ppm partial	1.2	0	14	7.5	5.8	28	5.9	6.2	8.0	12	21	25	28
Ta	ICP-MS	ppm	0.06	0	0.57	0.28	0.17	1.3	0.22	0.27	0.33	0.57	0.70	0.91	1.2
Tb	ICP-MS	ppm	0.08	0	0.74	0.36	0.21	1.5	0.22	0.24	0.51	0.79	0.93	1.2	1.5
Te	GFAAS	ppb partial	5	65	*5*	*8*	<	34	<	<	<	<	5	16	26
Th	ICP-MS	ppm	0.13	0	5.4	4.8	0.76	20	1.1	1.5	2.0	4.1	6.5	12	16
Th	ICP-AES	ppm partial	5.6	30	9	5	<	20	<	<	<	7	12	18	20
Ti	XRF	ppm	30	0	4530	1764	1434	7680	1680	2154	3372	4458	5838	7140	7650
Ti	ICP-MS	ppm	10	0	4325	1753	1250	7950	1510	2120	3090	4080	5870	6580	7540
Ti	ICP-AES	ppm partial	2	0	2533	1092	579	4840	767	1027	1685	2665	3315	3825	4350
Tm	ICP-MS	ppm	0.03	0	0.29	0.15	0.07	0.55	0.09	0.11	0.20	0.27	0.44	0.50	0.53
U	ICP-MS	ppm	0.08	0	1.14	0.69	0.39	3.38	0.43	0.51	0.82	0.99	1.18	1.97	2.95
V	XRF	ppm	6	0	105	62	22	266	28	41	54	97	133	189	240
V	ICP-MS	ppm	2	0	81	60	14	240	19	27	41	60	115	168	227
V	ICP-AES	ppm partial	0.6	0	64	46	14	209	15	18	32	48	84	107	159
Y	XRF	ppm	2.8	0	21	11	3	43	5	8	14	20	31	38	42
Y	ICP-MS	ppm	0.1	0	22	11	6.0	43	6.1	7.0	15	20	30	36	40
Y	ICP-AES	ppm partial	0.15	0	12	7.7	3.4	32	3.6	4.4	6.3	11	17	23	29
Yb	ICP-MS	ppm	0.22	0	1.9	1.0	0.51	3.9	0.55	0.68	1.3	1.7	2.8	3.5	3.8
Zn	XRF	ppm	4	0	100	40	31	208	39	49	71	101	127	135	172
Zn	ICP-AES	ppm partial	2	0	55	19	21	92	23	30	41	55	64	85	91
Zr	XRF	ppm	6	0	356	227	109	848	111	118	177	309	531	709	781
Zr	ICP-MS	ppm	3	0	301	193	96	711	98	107	151	257	400	644	700

Table 31. Chemical concentration summary statistics for map unit 35.

Map unit	**35**	**Mica gneiss and mica schist with intercalated carbonate rocks**
Number of samples	113	
Unit area	6197.2	km^2
Percent of bedrock	1.8	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

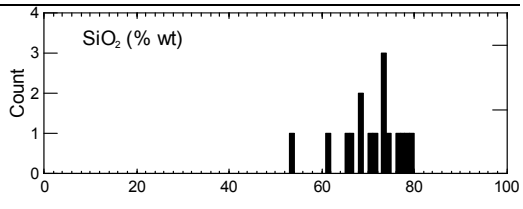


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**62.99**	6.72	46.10	72.20	49.63	53.38	58.25	**64.20**	69.13	70.44	71.07
TiO_2	XRF	%	**0.005**	0	**0.82**	0.46	0.17	3.28	0.27	0.42	0.59	**0.74**	0.88	1.13	1.79
Al_2O_3	XRF	%	**0.02**	0	**15.64**	1.75	12.80	21.20	13.12	13.38	14.30	**15.50**	16.73	17.94	18.60
FeO	XRF	%	**0.01**	0	**6.38**	2.51	1.37	13.20	2.48	3.03	4.85	**5.90**	8.10	9.85	10.59
MnO	XRF	%	**0.012**	0	**0.100**	0.042	0.033	0.237	0.042	0.053	0.075	**0.090**	0.116	0.169	0.182
MgO	XRF	%	**0.09**	0	**2.84**	1.25	0.27	7.13	0.57	1.16	2.16	**2.71**	3.79	4.64	4.79
CaO	XRF	%	**0.004**	0	**3.41**	1.88	0.44	10.10	1.33	1.81	2.22	**2.66**	4.64	6.17	7.07
Na_2O	XRF	%	**0.05**	0	**3.03**	0.82	0.70	5.96	1.75	2.18	2.68	**2.97**	3.30	4.05	4.26
K_2O	XRF	%	**0.003**	0	**2.78**	0.84	1.05	4.69	1.49	1.71	2.15	**2.77**	3.39	3.91	4.33
P_2O_5	XRF	%	**0.024**	0	**0.216**	0.249	0.035	1.590	0.059	0.066	0.108	**0.150**	0.197	0.405	0.729
C_{tot}	Leco	%	**0.05**	69.9	***0.07***	*0.08*	<	0.44	<	<	<	**<**	0.07	0.16	0.24
$C_{non\text{-}carb}$	Leco	%	**0.05**	73.5	***0.05***	*0.07*	<	0.41	<	<	<	**<**	0.05	0.15	0.19
F^-	Ion	%	**0.055**	30.1	**0.08**	0.03	<	0.24	<	<	<	**0.07**	0.09	0.11	0.12
Al	XRF	ppm	**106**	0	**82709**	9258	67712	112148	69378	70780	75647	**81995**	88475	94903	98394
Al	ICP-AES	ppm partial	**1100**	0	**27082**	13926	4310	101000	8024	10980	18925	**26100**	31600	45900	52945
As	GFAAS	ppm partial	**3**	88.5	**-**	-	<	11	<	<	<	**<**	<	3.0	4.0
Au	GFAAS	ppb partial	**2.5**	85	**-**	-	<	11.9	<	<	<	**<**	<	2.7	4.0
B	ICP-AES	ppm partial	**4.5**	98.2	**-**	-	<	6	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**663**	262	165	1412	317	354	481	**617**	826	986	1187
Ba	ICP-AES	ppm partial	**10**	0	**353**	241	15	1330	58	101	214	**298**	453	647	759
Bi	GFAAS	ppm partial	**0.04**	38.1	**0.09**	0.06	<	0.29	<	<	<	**0.05**	0.12	0.19	0.23
Ca	XRF	ppm	**29**	0	**24346**	13456	3175	72215	9531	12956	15873	**19019**	33197	44130	50522
Ca	ICP-AES	ppm partial	**50**	0	**4732**	5742	300	40300	700	1100	1500	**2400**	5750	10580	18025
Ce	ICP-MS	ppm	**0.22**	0	**68**	29	7.4	176	21	31	53	**69**	80	97	127
Cl	XRF	ppm	**45**	14.2	**187**	211	<	1360	<	<	60	**106**	225	390	680
Co	ICP-MS	ppm	**2**	0	**19**	8.8	3.4	52	6.7	7.8	13	**19**	25	31	35
Co	ICP-AES	ppm partial	**0.9**	0	**17**	7.5	2.1	37	4.1	6.7	14	**17**	22	28	30
Cr	XRF	ppm	**19**	9.7	**97**	61	<	315	<	16	46	**93**	129	164	225
Cr	ICP-AES	ppm partial	**5**	3.5	**78**	57	<	265	5.5	8.4	28	**78**	111	140	190
Cu	XRF	ppm	**17**	27.4	**47**	43	<	273	<	<	<	**31**	57	98	145
Cu	ICP-AES	ppm partial	**3**	8.8	**41**	43	<	240	<	3.6	12	**29**	56	90	142
Dy	ICP-MS	ppm	**0.55**	0	**4.0**	1.5	0.6	13	1.8	2.7	3.3	**3.9**	4.3	5.2	7.1
Er	ICP-MS	ppm	**0.3**	0.9	**2.3**	1.0	<	9.0	0.9	1.4	1.9	**2.2**	2.5	3.0	3.6
Eu	ICP-MS	ppm	**0.09**	0.9	**1.2**	0.43	<	3.4	0.71	0.87	1.0	**1.1**	1.3	1.6	1.8
Fe	XRF	ppm	**78**	0	**49557**	19503	10629	102564	19285	23574	37646	**45866**	62953	76503	82245
Fe	ICP-AES	ppm partial	**2300**	0	**45458**	16337	12400	84400	19080	22900	34625	**46900**	56100	66520	72805
Ga	XRF	ppm	**10**	0	**25**	4	13	39	19	20	22	**24**	27	31	33
Gd	ICP-MS	ppm	**0.5**	0	**5.2**	1.8	0.7	13.4	3.2	3.5	4.1	**5.1**	5.6	6.6	9.0
Hf	ICP-MS	ppm	**0.12**	0	**4.54**	1.89	1.10	14.5	2.05	2.48	3.45	**4.39**	5.14	6.31	8.43
Ho	ICP-MS	ppm	**0.09**	0	**0.80**	0.32	0.09	2.9	0.32	0.53	0.67	**0.77**	0.90	1.0	1.3
K	XRF	ppm	**25**	0	**23107**	6964	8715	38927	12384	14160	17804	**22991**	28162	32420	35947
K	ICP-AES	ppm partial	**100**	0	**16809**	7153	1000	35500	4860	7260	12125	**17200**	21900	25760	28525
La	ICP-MS	ppm	**0.55**	0	**34**	15	3.7	92	9.7	15	26	**35**	40	48	63
La	ICP-AES	ppm partial	**1.3**	0.9	**27**	16	<	105	6.7	11	17	**25**	31	44	50
Li	ICP-AES	ppm partial	**3.5**	0	**32.3**	15.4	4.6	97.5	11.8	14.4	22.5	**30.7**	39.5	52.5	62.3
Lu	ICP-MS	ppm	**0.03**	0	**0.32**	0.14	0.03	1.23	0.10	0.18	0.27	**0.32**	0.37	0.44	0.51
Mg	XRF	ppm	**543**	0	**17143**	7550	1628	42994	3413	7007	13025	**16341**	22854	27967	28878
Mg	ICP-AES	ppm partial	**50**	0	**15775**	6605	1700	33400	3035	6028	12725	**15700**	19125	25900	27095
Mn	XRF	ppm	**93**	0	**775**	326	256	1837	326	411	581	**698**	899	1310	1411
Mn	ICP-AES	ppm partial	**50**	0	**473**	199	108	1120	162	196	308	**479**	614	690	769
Mo	XRF	ppm	**2.6**	96.5	**-**	-	<	7	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	85.8	**-**	-	<	9	<	<	<	**<**	<	3	5
Na	XRF	ppm	**371**	0	**22512**	6055	5172	44223	12992	16161	19849	**22037**	24449	30081	31609
Na	ICP-AES	ppm partial	**150**	0	**998**	701	400	4800	500	500	600	**754**	1200	1600	2226
Nb	XRF	ppm	**7**	8.8	**13**	6	<	45	<	7	9	**11**	14	17	24
Nb	ICP-MS	ppm	**0.16**	0	**11**	5.7	1.6	40	3.7	5.5	8.2	**9.7**	12	15	22
Nd	ICP-MS	ppm	**0.2**	0	**30**	12	3.8	84	11	16	25	**30**	34	41	55
Ni	XRF	ppm	**14**	19.5	**45**	33	<	189	<	<	18	**40**	58	90	105
Ni	ICP-AES	ppm partial	**3.5**	3.5	**40**	32	<	162	3.8	5.1	15	**37**	56	77	99
P	XRF	ppm	**105**	0	**942**	1086	153	6932	257	288	471	**654**	859	1766	3178
P	ICP-AES	ppm partial	**6**	0	**808**	1004	44	6150	96	151	320	**558**	741	1600	2858
Pb	XRF	ppm	**14**	0	**29**	8	15	64	19	20	23	**28**	32	36	38
Pb	ICP-AES	ppm partial	**8.7**	66.4	***8***	*5*	<	41	<	<	<	**<**	10	13	15
Pd	GFAAS	ppb partial	**5**	95.6	**-**	-	<	18	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**8.0**	3.2	0.92	21.2	2.8	3.9	6.4	**8.1**	9.2	11.0	14.5
Rb	XRF	ppm	**5.5**	0	**108**	43	15	292	41	55	83	**104**	131	167	175
Rb	ICP-MS	ppm	**0.6**	0	**102**	41	16	249	37	50	74	**98**	127	151	172
S	XRF	ppm	**70**	22.1	**1218**	1718	<	9290	<	<	110	**510**	1500	3256	4209
S	ICP-AES	ppm partial	**14.3**	3.5	**1333**	1901	<	10600	16	20	125	**563**	1623	3550	4867
Sc	ICP-MS	ppm	**2.8**	0.9	**19**	7.9	<	45	5.4	8.0	14	**17**	24	29	32
Sc	ICP-AES	ppm partial	**0.4**	0	**11**	5.7	1.2	25	2.3	3.1	5.8	**10**	15	17	21
Se	GFAAS	ppm partial	**0.055**	31.9	**0.22**	0.33	<	2.9	<	<	<	**0.10**	0.24	0.48	0.72
Sm	ICP-MS	ppm	**0.5**	0	**5.6**	1.9	0.85	15	2.7	3.4	4.6	**5.4**	6.2	7.3	9.3
Sr	XRF	ppm	**4**	0	**370**	211	69	1210	147	175	237	**284**	482	661	823
Sr	ICP-AES	ppm partial	**1.2**	0	**25**	66	3.6	680	4.9	5.2	6.4	**10**	24	45	70
Ta	ICP-MS	ppm	**0.06**	0	**0.69**	0.32	0.11	1.9	0.18	0.33	0.48	**0.67**	0.82	1.0	1.3
Tb	ICP-MS	ppm	**0.08**	0	**0.74**	0.26	0.12	1.8	0.42	0.52	0.62	**0.71**	0.82	0.94	1.4
Te	GFAAS	ppb partial	**5**	34.5	**17**	20	<	106	<	<	<	**8**	23	38	68
Th	ICP-MS	ppm	**0.13**	0	**8.9**	5.3	0.36	37	1.2	2.4	4.4	**9.7**	12	13	15
Th	ICP-AES	ppm partial	**5.6**	14.2	**12**	5	<	40	<	<	7	**12**	15	18	21
Ti	XRF	ppm	**30**	0	**4902**	2742	990	19680	1638	2490	3558	**4452**	5280	6756	10734
Ti	ICP-MS	ppm	**10**	0	**4647**	2705	1240	18400	1545	2358	3188	**4100**	5203	6982	10954
Ti	ICP-AES	ppm partial	**2**	0	**3555**	1407	676	9940	1100	1788	2803	**3500**	4483	5142	5458
Tm	ICP-MS	ppm	**0.03**	0	**0.33**	0.15	0.04	1.33	0.12	0.19	0.27	**0.32**	0.37	0.46	0.54
U	ICP-MS	ppm	**0.08**	0	**2.13**	1.44	0.12	11.5	0.39	0.72	1.35	**2.00**	2.71	3.42	4.28
V	XRF	ppm	**6**	0	**151**	71	15	414	31	61	115	**141**	184	246	283
V	ICP-MS	ppm	**2**	0	**124**	65	5.9	381	23	42	86	**114**	156	219	237
V	ICP-AES	ppm partial	**0.6**	0	**112**	55	5.7	298	23	30	86	**110**	137	179	219
Y	XRF	ppm	**2.8**	0	**24**	10	4	94	10	16	21	**23**	27	30	38
Y	ICP-MS	ppm	**0.1**	0	**24**	10	3.2	97	9.0	16	20	**23**	27	32	40
Y	ICP-AES	ppm partial	**0.15**	0	**9.2**	4.6	1.3	25	3.4	3.9	5.8	**8.4**	12	15	18
Yb	ICP-MS	ppm	**0.22**	0	**2.2**	0.93	0.27	8.6	0.79	1.2	1.8	**2.1**	2.4	3.0	3.5
Zn	XRF	ppm	**4**	0	**105**	42	39	299	49	58	75	**103**	127	166	172
Zn	ICP-AES	ppm partial	**2**	0	**80**	30	21	160	33	42	60	**74**	97	120	141
Zr	XRF	ppm	**6**	0	**193**	75	49	462	82	114	149	**183**	215	302	360
Zr	ICP-MS	ppm	**3**	0	**177**	81	41	625	80	98	132	**167**	198	260	336

Table 32. Chemical concentration summary statistics for map unit 36.

Map unit	36	Felsic and intermadiate metavolcanic rocks (~ 1.92 Ga)
Number of samples	16	
Unit area	396.9	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics: 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

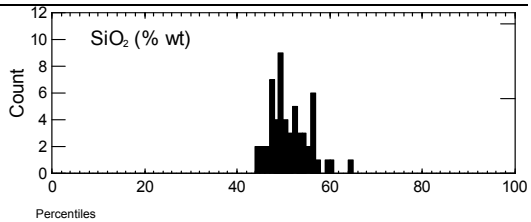


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**70.73**	6.76	53.00	79.20	-	-	67.45	**72.25**	75.30	-	-
TiO_2	XRF	%	**0.005**	0	**0.43**	0.23	0.12	0.82	-	-	0.28	**0.39**	0.63	-	-
Al_2O_3	XRF	%	**0.02**	0	**13.90**	2.17	11.10	19.00	-	-	12.30	**13.80**	15.10	-	-
FeO	XRF	%	**0.01**	0	**3.87**	2.27	1.07	8.56	-	-	2.04	**3.36**	4.92	-	-
MnO	XRF	%	**0.012**	0	**0.085**	0.059	0.015	0.235	-	-	0.051	**0.061**	0.086	-	-
MgO	XRF	%	**0.09**	0	**1.35**	0.84	0.25	2.85	-	-	0.67	**1.24**	1.81	-	-
CaO	XRF	%	**0.004**	0	**2.65**	1.47	0.70	6.43	-	-	1.66	**2.49**	3.53	-	-
Na_2O	XRF	%	**0.05**	0	**4.27**	1.40	0.67	6.51	-	-	3.64	**4.42**	5.01	-	-
K_2O	XRF	%	**0.003**	0	**1.67**	1.38	0.27	5.59	-	-	0.56	**1.25**	2.45	-	-
P_2O_5	XRF	%	**0.024**	12.5	**0.138**	0.141	<	0.561	<	<	0.041	**0.089**	0.193	-	-
C_{tot}	Leco	%	**0.05**	87.5	**-**	-	<	0.10	<	<	<	**<**	<	0.05	-
$C_{non\text{-}carb}$	Leco	%	**0.05**	93.8	**-**	-	<	0.05	<	<	<	**<**	<	<	-
F	Ion	%	**0.055**	56.3	***0.06***	*0.03*	<	0.13	<	<	<	**<**	0.08	-	-
Al	XRF	ppm	**106**	0	**73531**	11485	58719	100510	-	-	65067	**73002**	79879	-	-
Al	ICP-AES	ppm partial	**1100**	0	**11287**	6375	3300	25400	-	-	6250	**9400**	15750	-	-
As	GFAAS	ppm partial	**3**	93.8	**-**	-	<	4.0	<	<	<	**<**	<	<	-
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**493**	350	105	1440	-	-	245	**437**	625	-	-
Ba	ICP-AES	ppm partial	**10**	0	**176**	131	30	514	-	-	72	**156**	257	-	-
Bi	GFAAS	ppm partial	**0.04**	87.5	**-**	-	<	0.07	<	<	<	**<**	<	0.05	-
Ca	XRF	ppm	**29**	0	**18948**	10525	5034	45975	-	-	11833	**17768**	25240	-	-
Ca	ICP-AES	ppm partial	**50**	0	**3614**	3173	492	10800	-	-	1550	**2870**	3820	-	-
Ce	ICP-MS	ppm	**0.22**	0	**47**	23	19	96	-	-	36	**39**	58	-	-
Cl	XRF	ppm	**45**	25	**77**	34	<	150	<	<	<	**57**	101	-	-
Co	ICP-MS	ppm	**2**	18.8	**7.5**	5.5	<	22	<	<	3.1	**6.2**	10	-	-
Co	ICP-AES	ppm partial	**0.9**	12.5	**6.1**	5.3	<	21	<	<	2.7	**4.9**	8.2	-	-
Cr	XRF	ppm	**19**	62.5	***18***	*13*	<	47	<	<	<	**<**	22	-	-
Cr	ICP-AES	ppm partial	**5**	31.3	**11**	9.7	<	35	<	<	<	**6.1**	10	-	-
Cu	XRF	ppm	**17**	81.3	**-**	-	<	115	<	<	<	**<**	<	50	-
Cu	ICP-AES	ppm partial	**3**	0	**17**	28	3.2	113	-	-	3.9	**6.8**	13	-	-
Dy	ICP-MS	ppm	**0.55**	0	**4.8**	1.8	2.3	8.4	-	-	3.3	**4.7**	6.2	-	-
Er	ICP-MS	ppm	**0.3**	0	**3.1**	1.3	1.2	6.2	-	-	2.0	**3.0**	3.8	-	-
Eu	ICP-MS	ppm	**0.09**	0	**1.1**	0.43	0.46	1.9	-	-	0.85	**1.1**	1.4	-	-
Fe	XRF	ppm	**78**	0	**30070**	17661	8314	66488	-	-	15851	**26107**	38213	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**27194**	14167	8200	57700	-	-	16050	**24250**	36800	-	-
Ga	XRF	ppm	**10**	0	**21**	3	15	27	-	-	19	**21**	23	-	-
Gd	ICP-MS	ppm	**0.5**	0	**5.1**	1.8	2.5	8.3	-	-	3.9	**4.8**	6.1	-	-
Hf	ICP-MS	ppm	**0.12**	0	**4.37**	1.67	2.92	9.28	-	-	3.26	**3.91**	4.67	-	-
Ho	ICP-MS	ppm	**0.09**	0	**1.0**	0.43	0.45	2.0	-	-	0.65	**1.0**	1.3	-	-
K	XRF	ppm	**25**	0	**13828**	11454	2224	46397	-	-	4615	**10334**	20335	-	-
K	ICP-AES	ppm partial	**100**	0	**6708**	4447	300	15600	-	-	3700	**4550**	9600	-	-
La	ICP-MS	ppm	**0.55**	0	**22**	11	9.1	51	-	-	16	**19**	24	-	-
La	ICP-AES	ppm partial	**1.3**	0	**19**	11	7.3	49	-	-	13	**17**	22	-	-
Li	ICP-AES	ppm partial	**3.5**	18.8	**24.6**	23.5	<	86.6	<	<	8.4	**17.5**	26.9	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.49**	0.20	0.17	0.95	-	-	0.31	**0.48**	0.62	-	-
Mg	XRF	ppm	**543**	0	**8147**	5065	1508	17186	-	-	4010	**7447**	10914	-	-
Mg	ICP-AES	ppm partial	**50**	0	**6824**	4913	1700	19200	-	-	3725	**5305**	7915	-	-
Mn	XRF	ppm	**93**	0	**659**	457	116	1821	-	-	395	**473**	667	-	-
Mn	ICP-AES	ppm partial	**50**	0	**377**	201	75	920	-	-	258	**350**	479	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**31683**	10373	4971	48304	-	-	26972	**32759**	37137	-	-
Na	ICP-AES	ppm partial	**150**	0	**859**	306	400	1550	-	-	700	**778**	900	-	-
Nb	XRF	ppm	**7**	25	**12**	8	<	33	<	<	<	**9**	16	-	-
Nb	ICP-MS	ppm	**0.16**	0	**11**	7.2	4.0	31	-	-	6.1	**7.7**	13	-	-
Nd	ICP-MS	ppm	**0.2**	0	**23**	9.8	9.8	43	-	-	18	**20**	27	-	-
Ni	XRF	ppm	**14**	87.5	**-**	-	<	16	<	<	<	**<**	<	14	-
Ni	ICP-AES	ppm partial	**3.5**	37.5	**5.8**	3.6	<	16	<	<	<	**4.0**	5.8	-	-
P	XRF	ppm	**105**	0	**602**	615	<	2446	<	<	179	**388**	841	-	-
P	ICP-AES	ppm partial	**6**	0	**529**	598	23	2390	-	-	102	**360**	722	-	-
Pb	XRF	ppm	**14**	25	**18**	6	<	33	<	<	<	**16**	20	-	-
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	93.8	**-**	-	<	6	<	<	<	**<**	<	<	-
Pr	ICP-MS	ppm	**0.74**	0	**5.9**	2.7	2.3	11.4	-	-	4.4	**5.1**	6.8	-	-
Rb	XRF	ppm	**5.5**	12.5	**41**	35	<	120	<	<	9	**32**	71	-	-
Rb	ICP-MS	ppm	**0.6**	0	**39**	32	4.8	104	-	-	7.9	**30**	69	-	-
S	XRF	ppm	**70**	43.8	**596**	716	<	2240	<	<	<	**125**	1054	-	-
S	ICP-AES	ppm partial	**14.3**	6.3	**611**	810	<	2630	<	-	36	**163**	1124	-	-
Sc	ICP-MS	ppm	**2.8**	0	**12**	5.4	4.8	26	-	-	7.8	**13**	16	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**4.6**	3.1	2.0	14	-	-	2.6	**3.8**	5.1	-	-
Se	GFAAS	ppm partial	**0.055**	75	***0.06***	*0.08*	<	0.24	<	<	<	**<**	<	0.22	-
Sm	ICP-MS	ppm	**0.5**	0	**4.9**	1.7	2.2	7.9	-	-	4.0	**4.5**	5.9	-	-
Sr	XRF	ppm	**4**	0	**240**	285	38	1170	-	-	82	**137**	294	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**11**	16	2.2	65	-	-	3.6	**7.1**	11	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.63**	0.44	0.20	1.8	-	-	0.37	**0.48**	0.63	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.79**	0.28	0.42	1.3	-	-	0.56	**0.79**	0.94	-	-
Te	GFAAS	ppb partial	**5**	43.8	**9**	11	<	46	<	<	<	**5**	6	-	-
Th	ICP-MS	ppm	**0.13**	0	**3.9**	1.9	0.36	7.2	-	-	2.4	**4.0**	5.7	-	-
Th	ICP-AES	ppm partial	**5.6**	37.5	**7**	2	<	12	<	<	<	**6**	8	-	-
Ti	XRF	ppm	**30**	0	**2568**	1356	732	4932	-	-	1650	**2316**	3786	-	-
Ti	ICP-MS	ppm	**10**	0	**2400**	1258	629	4600	-	-	1425	**2295**	3325	-	-
Ti	ICP-AES	ppm partial	**2**	0	**1759**	1364	493	5740	-	-	818	**1585**	2040	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.46**	0.19	0.16	0.91	-	-	0.31	**0.47**	0.59	-	-
U	ICP-MS	ppm	**0.08**	0	**1.31**	0.77	0.26	2.78	-	-	0.78	**1.05**	2.00	-	-
V	XRF	ppm	**6**	6.3	**55**	52	<	202	<	-	23	**40**	69	-	-
V	ICP-MS	ppm	**2**	6.3	**37**	46	<	175	<	-	5.2	**21**	52	-	-
V	ICP-AES	ppm partial	**0.6**	0	**35**	46	1.0	169	-	-	3.7	**21**	39	-	-
Y	XRF	ppm	**2.8**	0	**30**	13	12	57	-	-	21	**27**	40	-	-
Y	ICP-MS	ppm	**0.1**	0	**32**	14	14	63	-	-	21	**30**	42	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**12**	5.5	3.7	26	-	-	7.4	**11**	14	-	-
Yb	ICP-MS	ppm	**0.22**	0	**3.2**	1.3	1.1	6.3	-	-	2.1	**3.1**	4.0	-	-
Zn	XRF	ppm	**4**	0	**62**	40	10	145	-	-	33	**42**	87	-	-
Zn	ICP-AES	ppm partial	**2**	0	**44**	27	9.4	103	-	-	25	**37**	64	-	-
Zr	XRF	ppm	**6**	0	**190**	80	114	443	-	-	142	**174**	211	-	-
Zr	ICP-MS	ppm	**3**	0	**171**	74	102	403	-	-	123	**153**	185	-	-

Table 33. Chemical concentration summary statistics for map unit 37.

Map unit	37	Mafic metavolcanic rocks (~ 1.92 Ga)
Number of samples	56	
Unit area	764.2	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

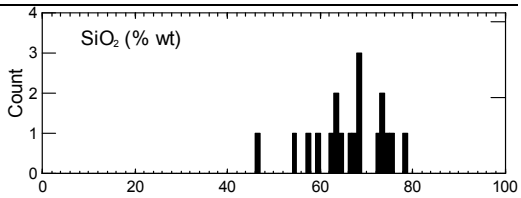


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	51.46	4.22	44.50	64.40	45.49	46.59	48.35	50.45	54.35	56.40	59.18
TiO_2	XRF	%	0.005	0	1.14	0.54	0.37	3.43	0.41	0.57	0.82	1.07	1.33	1.78	2.06
Al_2O_3	XRF	%	0.02	0	15.91	1.66	12.90	20.10	13.23	13.62	14.75	15.80	17.20	18.08	18.47
FeO	XRF	%	0.01	0	10.05	2.27	5.16	14.80	6.30	7.36	8.65	9.96	11.33	13.38	14.05
MnO	XRF	%	0.012	0	0.181	0.049	0.079	0.380	0.087	0.128	0.158	0.186	0.209	0.230	0.235
MgO	XRF	%	0.09	0	5.49	2.13	1.45	11.40	2.35	2.90	4.19	5.22	6.75	8.53	9.02
CaO	XRF	%	0.004	0	8.43	2.60	0.32	16.60	3.83	5.39	7.25	8.37	9.66	11.09	12.32
Na_2O	XRF	%	0.05	0	2.97	0.94	0.23	5.31	1.10	1.55	2.46	3.11	3.56	3.90	4.37
K_2O	XRF	%	0.003	0	1.22	0.90	0.10	3.44	0.17	0.33	0.46	0.98	1.84	2.62	3.13
P_2O_5	XRF	%	0.024	0	0.286	0.202	0.030	1.170	0.072	0.092	0.152	0.249	0.360	0.482	0.618
C_{tot}	Leco	%	0.05	76.8	*0.04*	*0.08*	<	0.41	<	<	<	<	<	0.10	0.22
$C_{non\text{-}carb}$	Leco	%	0.05	91.1	-	-	<	0.26	<	<	<	<	<	<	0.05
F	Ion	%	0.055	48.2	0.07	0.03	<	0.19	<	<	<	0.06	0.08	0.11	0.11
Al	XRF	ppm	106	0	84148	8771	68241	106329	69987	72050	78028	83582	90988	95643	97706
Al	ICP-AES	ppm partial	1100	0	20117	18201	4400	83300	5630	6920	9050	16250	23600	35240	72550
As	GFAAS	ppm partial	3	87.5	-	-	<	74	<	<	<	<	<	3.3	5.3
Au	GFAAS	ppb partial	2.5	85.7	-	-	<	10.3	<	<	<	<	<	3.0	4.2
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	361	275	22	1283	45	86	144	327	473	772	860
Ba	ICP-AES	ppm partial	10	1.8	189	188	<	834	14	16	28	92	344	436	516
Bi	GFAAS	ppm partial	0.04	62.5	*0.04*	*0.03*	<	0.14	<	<	<	<	0.05	0.08	0.11
Ca	XRF	ppm	29	0	60246	18619	2288	118690	27370	38546	51838	59810	69069	79294	88088
Ca	ICP-AES	ppm partial	50	0	13920	9195	1900	47400	5190	6882	8950	11500	15000	25830	38880
Ce	ICP-MS	ppm	0.22	0	38	25	4.7	107	8.8	12	20	33	47	70	98
Cl	XRF	ppm	45	10.7	194	196	<	1050	<	<	79	139	253	351	613
Co	ICP-MS	ppm	2	0	35	12	7.8	67	17	20	26	34	44	49	52
Co	ICP-AES	ppm partial	0.9	0	16	6.8	3.9	42	5.9	9.2	12	16	18	25	29
Cr	XRF	ppm	19	5.4	135	145	<	635	<	20	39	84	169	339	474
Cr	ICP-AES	ppm partial	5	7.1	42	54	<	320	<	6.6	11	25	52	86	164
Cu	XRF	ppm	17	16.1	81	67	<	291	<	<	29	68	110	179	234
Cu	ICP-AES	ppm partial	3	1.8	75	63	<	251	3.1	7.8	28	62	104	170	222
Dy	ICP-MS	ppm	0.55	0	4.0	1.2	1.3	7.5	1.6	2.3	3.5	4.0	4.7	5.6	6.0
Er	ICP-MS	ppm	0.3	0	2.3	0.7	0.4	3.9	1.0	1.3	2.0	2.3	2.7	3.1	3.6
Eu	ICP-MS	ppm	0.09	0	1.3	0.56	0.36	3.2	0.52	0.76	0.98	1.2	1.5	1.8	2.7
Fe	XRF	ppm	78	0	78104	17607	40093	114996	48951	57218	67179	77389	88065	103963	109200
Fe	ICP-AES	ppm partial	2300	0	33743	17089	6300	74400	11110	14000	21150	30250	44500	60850	69680
Ga	XRF	ppm	10	0	23	4	13	34	16	18	20	23	26	29	31
Gd	ICP-MS	ppm	0.5	0	4.6	1.7	1.2	10.0	1.9	2.9	3.6	4.6	5.5	6.4	7.0
Hf	ICP-MS	ppm	0.12	0	2.47	1.18	0.32	6.82	0.64	1.15	1.63	2.47	3.24	3.65	4.51
Ho	ICP-MS	ppm	0.09	0	0.80	0.25	0.17	1.4	0.32	0.49	0.68	0.82	0.94	1.1	1.2
K	XRF	ppm	25	0	10126	7462	789	28552	1394	2731	3810	8142	15231	21763	25954
K	ICP-AES	ppm partial	100	0	6024	6322	200	25300	230	378	873	3795	9720	16120	18380
La	ICP-MS	ppm	0.55	0	17	12	1.9	54	3.7	5.5	8.4	15	21	33	45
La	ICP-AES	ppm partial	1.3	5.4	12	11	<	49	<	1.9	4.0	10.0	17	26	30
Li	ICP-AES	ppm partial	3.5	25	16.6	15.5	<	78.6	<	<	<	10.3	25.7	36.0	43.6
Lu	ICP-MS	ppm	0.03	0	0.31	0.10	0.05	0.59	0.13	0.18	0.27	0.31	0.36	0.46	0.50
Mg	XRF	ppm	543	0	33093	12832	8744	68742	14164	17499	25266	31477	40672	51442	54391
Mg	ICP-AES	ppm partial	50	0	10436	5213	2100	23300	2890	3760	6460	10350	14250	16770	20080
Mn	XRF	ppm	93	0	1403	380	612	2945	674	992	1225	1442	1620	1783	1821
Mn	ICP-AES	ppm partial	50	0	380	221	88	1030	98	123	213	342	509	712	830
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	98.2	-	-	<	3	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	22000	6945	1707	39400	8140	11523	18253	23039	26415	28901	32425
Na	ICP-AES	ppm partial	150	0	1905	1234	600	6700	830	916	1200	1585	2060	2869	5250
Nb	XRF	ppm	7	39.3	12	9	<	59	<	<	<	8	13	20	24
Nb	ICP-MS	ppm	0.16	0	9.3	9.0	1.2	50	2.0	2.9	4.2	6.9	10	18	22
Nd	ICP-MS	ppm	0.2	0	21	12	3.3	61	6.3	8.5	13	20	25	31	50
Ni	XRF	ppm	14	16.1	55	41	<	146	<	<	20	38	90	121	134
Ni	ICP-AES	ppm partial	3.5	1.8	26	27	<	146	4.3	5.4	8.7	17	34	60	84
P	XRF	ppm	105	0	1247	881	131	5101	314	401	663	1086	1570	2102	2694
P	ICP-AES	ppm partial	6	0	1151	810	121	4570	289	370	620	969	1510	2000	2428
Pb	XRF	ppm	14	14.3	20	5	<	33	<	<	16	18	22	28	30
Pb	ICP-AES	ppm partial	8.7	96.4	-	-	<	12	<	<	<	<	<	<	<
Pd	GFAAS	ppb partial	5	78.6	*5*	*5*	<	24	<	<	<	<	<	13	15
Pr	ICP-MS	ppm	0.74	1.8	4.9	3.0	<	14.6	1.4	1.7	2.8	4.5	6.2	8.5	12.6
Rb	XRF	ppm	5.5	12.5	36	37	<	165	<	<	9	20	54	94	98
Rb	ICP-MS	ppm	0.6	1.8	34	36	<	155	1.9	2.6	7.0	18	53	84	96
S	XRF	ppm	70	19.6	1303	2540	<	15500	<	<	111	599	1185	2780	3684
S	ICP-AES	ppm partial	14.3	3.6	1429	2896	<	17300	17	40	103	616	1300	3158	4177
Sc	ICP-MS	ppm	2.8	0	32	10	10	53	15	20	26	32	41	46	49
Sc	ICP-AES	ppm partial	0.4	0	5.6	2.4	0.60	13	2.1	2.9	4.1	5.3	6.8	9.5	10
Se	GFAAS	ppm partial	0.055	26.8	0.17	0.14	<	0.62	<	<	<	0.12	0.23	0.33	0.55
Sm	ICP-MS	ppm	0.5	0	4.5	2.0	0.93	11	1.8	2.5	3.3	4.3	5.2	7.2	9.2
Sr	XRF	ppm	4	0	448	377	6	2803	103	157	220	447	571	652	751
Sr	ICP-AES	ppm partial	1.2	0	45	76	3.5	543	5.4	6.9	15	23	45	87	134
Ta	ICP-MS	ppm	0.06	0	0.53	0.48	0.07	2.8	0.11	0.21	0.27	0.42	0.59	0.92	1.2
Tb	ICP-MS	ppm	0.08	0	0.70	0.23	0.21	1.4	0.30	0.37	0.60	0.69	0.82	0.96	1.0
Te	GFAAS	ppb partial	5	39.3	38	170	<	1260	<	<	<	7	13	26	84
Th	ICP-MS	ppm	0.13	3.6	2.3	3.7	<	24	0.16	0.33	0.51	1.1	2.4	5.7	7.5
Th	ICP-AES	ppm partial	5.6	78.6	*4*	*4*	<	26	<	<	<	<	<	9	13
Ti	XRF	ppm	30	0	6810	3216	2208	20580	2460	3408	4932	6390	7980	10692	12360
Ti	ICP-MS	ppm	10	0	6589	3183	2060	20000	2375	3483	4625	6320	7720	10502	12120
Ti	ICP-AES	ppm partial	2	0	2256	1281	225	5660	548	809	1295	1990	3150	4136	4685
Tm	ICP-MS	ppm	0.03	0	0.33	0.10	0.05	0.59	0.15	0.19	0.27	0.34	0.38	0.46	0.50
U	ICP-MS	ppm	0.08	3.6	0.81	0.75	<	2.90	0.10	0.12	0.30	0.48	1.02	2.05	2.54
V	XRF	ppm	6	0	261	82	71	451	140	154	216	255	312	369	416
V	ICP-MS	ppm	2	0	234	79	47	402	118	137	182	230	289	328	374
V	ICP-AES	ppm partial	0.6	0	91	47	5.1	213	23	35	55	83	114	166	180
Y	XRF	ppm	2.8	0	23	7	6	40	9	11	19	22	28	31	34
Y	ICP-MS	ppm	0.1	0	24	7.3	5.8	42	10	15	20	24	28	33	35
Y	ICP-AES	ppm partial	0.15	0	6.8	4.3	0.40	25	1.8	2.2	3.9	6.2	8.1	12	14
Yb	ICP-MS	ppm	0.22	0	2.1	0.65	0.36	3.5	0.97	1.3	1.7	2.1	2.4	3.1	3.2
Zn	XRF	ppm	4	0	124	43	44	354	81	89	103	117	134	172	189
Zn	ICP-AES	ppm partial	2	0	46	31	5.5	150	8.1	15	22	40	59	93	109
Zr	XRF	ppm	6	0	110	61	10	318	22	40	67	109	146	188	205
Zr	ICP-MS	ppm	3	0	96	53	12	306	19	36	57	100	127	155	180

Table 34. Chemical concentration summary statistics for map unit 38.

Map unit	38	Gneissic tonalite and granodiorite (1.93 - 1.91 Ga)
Number of samples	19	
Unit area	659.2	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

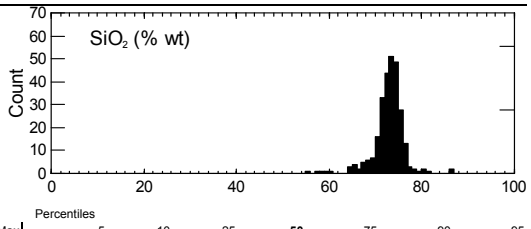


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**66.15**	7.87	46.80	78.10	-	-	62.53	**67.60**	72.93	-	-
TiO_2	XRF	%	**0.005**	0	**0.54**	0.36	0.18	1.42	-	-	0.25	**0.43**	0.68	-	-
Al_2O_3	XRF	%	**0.02**	0	**15.15**	1.75	11.90	20.00	-	-	14.18	**15.30**	15.95	-	-
FeO	XRF	%	**0.01**	0	**4.50**	2.59	1.61	10.70	-	-	2.58	**4.02**	6.11	-	-
MnO	XRF	%	**0.012**	0	**0.088**	0.048	0.031	0.177	-	-	0.049	**0.074**	0.131	-	-
MgO	XRF	%	**0.09**	0	**1.79**	1.49	0.30	6.17	-	-	0.73	**1.41**	2.30	-	-
CaO	XRF	%	**0.004**	0	**3.92**	1.95	1.24	8.53	-	-	2.26	**4.02**	5.27	-	-
Na_2O	XRF	%	**0.05**	0	**3.95**	0.80	2.81	5.99	-	-	3.37	**3.79**	4.53	-	-
K_2O	XRF	%	**0.003**	0	**2.34**	1.34	0.68	5.81	-	-	1.33	**2.21**	3.21	-	-
P_2O_5	XRF	%	**0.024**	5.3	**0.190**	0.186	<	0.787	<	-	0.069	**0.130**	0.224	-	-
C_{tot}	Leco	%	**0.05**	84.2	**-**	-	<	0.08	<	<	<	**<**	<	0.06	-
$C_{non\text{-}carb}$	Leco	%	**0.05**	89.5	**-**	-	<	0.05	<	<	<	**<**	<	0.03	-
F	Ion	%	**0.055**	63.2	***0.06***	*0.02*	<	0.09	<	<	<	**<**	0.07	-	-
Al	XRF	ppm	**106**	0	**80128**	9236	62951	105800	-	-	74986	**80937**	84376	-	-
Al	ICP-AES	ppm partial	**1100**	0	**12509**	5232	5000	22100	-	-	7950	**12800**	16825	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	94.7	**-**	-	<	2.6	<	<	<	**<**	<	<	-
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**712**	340	202	1249	-	-	338	**682**	992	-	-
Ba	ICP-AES	ppm partial	**10**	0	**198**	206	50	823	-	-	76	**122**	230	-	-
Bi	GFAAS	ppm partial	**0.04**	89.5	**-**	-	<	0.05	<	<	<	**<**	<	0.02	-
Ca	XRF	ppm	**29**	0	**28042**	13921	8866	60990	-	-	16180	**28743**	37681	-	-
Ca	ICP-AES	ppm partial	**50**	0	**5051**	3736	400	12900	-	-	1775	**3800**	7775	-	-
Ce	ICP-MS	ppm	**0.22**	0	**50**	25	27	135	-	-	33	**41**	62	-	-
Cl	XRF	ppm	**45**	0	**244**	184	49	630	-	-	80	**210**	373	-	-
Co	ICP-MS	ppm	**2**	5.3	**13**	8.8	<	36	<	-	5.7	**11**	18	-	-
Co	ICP-AES	ppm partial	**0.9**	0	**8.5**	5.1	2.2	20	-	-	4.1	**7.3**	12	-	-
Cr	XRF	ppm	**19**	36.8	**40**	31	<	120	<	<	<	**21**	56	-	-
Cr	ICP-AES	ppm partial	**5**	15.8	**21**	19	<	60	<	<	6.6	**12**	32	-	-
Cu	XRF	ppm	**17**	68.4	***17***	*31*	<	134	<	<	<	**<**	20	-	-
Cu	ICP-AES	ppm partial	**3**	21.1	**17**	27	<	119	<	<	3.8	**7.2**	17	-	-
Dy	ICP-MS	ppm	**0.55**	0	**3.7**	2.4	0.7	11	-	-	2.6	**3.2**	4.5	-	-
Er	ICP-MS	ppm	**0.3**	0	**2.2**	2.0	0.4	9.3	-	-	1.4	**1.9**	2.5	-	-
Eu	ICP-MS	ppm	**0.09**	0	**1.0**	0.67	0.45	3.4	-	-	0.70	**0.82**	1.1	-	-
Fe	XRF	ppm	**78**	0	**34926**	20124	12510	83139	-	-	20054	**31235**	47451	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**28100**	9012	14800	42000	-	-	18250	**29400**	36675	-	-
Ga	XRF	ppm	**10**	0	**23**	5	15	38	-	-	21	**22**	26	-	-
Gd	ICP-MS	ppm	**0.5**	0	**4.3**	2.3	1.4	12.2	-	-	3.5	**3.8**	4.7	-	-
Hf	ICP-MS	ppm	**0.12**	0	**3.75**	0.96	1.51	4.93	-	-	3.18	**4.11**	4.44	-	-
Ho	ICP-MS	ppm	**0.09**	0	**0.76**	0.59	0.14	2.8	-	-	0.52	**0.65**	0.91	-	-
K	XRF	ppm	**25**	0	**19455**	11114	5669	48223	-	-	10998	**18343**	26626	-	-
K	ICP-AES	ppm partial	**100**	0	**8210**	3513	3300	15600	-	-	4950	**8900**	9950	-	-
La	ICP-MS	ppm	**0.55**	0	**24**	11	12	56	-	-	16	**20**	31	-	-
La	ICP-AES	ppm partial	**1.3**	0	**22**	8.6	11	37	-	-	16	**19**	29	-	-
Li	ICP-AES	ppm partial	**3.5**	0	**25.5**	12.5	5.7	56.9	-	-	18.0	**21.3**	32.6	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.33**	0.31	0.07	1.47	-	-	0.18	**0.27**	0.33	-	-
Mg	XRF	ppm	**543**	0	**10770**	8985	1809	37205	-	-	4390	**8502**	13869	-	-
Mg	ICP-AES	ppm partial	**50**	0	**8241**	4740	2200	17300	-	-	4725	**6200**	12650	-	-
Mn	XRF	ppm	**93**	0	**682**	372	240	1372	-	-	380	**574**	1015	-	-
Mn	ICP-AES	ppm partial	**50**	0	**426**	121	216	624	-	-	320	**418**	511	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**29324**	5966	20850	44446	-	-	25028	**28122**	33613	-	-
Na	ICP-AES	ppm partial	**150**	0	**878**	299	400	1600	-	-	700	**800**	1075	-	-
Nb	XRF	ppm	**7**	42.1	**9**	2	<	15	<	<	<	**8**	11	-	-
Nb	ICP-MS	ppm	**0.16**	0	**7.1**	2.5	3.5	13	-	-	5.1	**7.2**	8.4	-	-
Nd	ICP-MS	ppm	**0.2**	0	**23**	15	9.7	79	-	-	16	**19**	26	-	-
Ni	XRF	ppm	**14**	73.7	***15***	*9*	<	39	<	<	<	**<**	15	-	-
Ni	ICP-AES	ppm partial	**3.5**	10.5	**9.3**	6.2	<	22	<	<	4.3	**6.6**	16	-	-
P	XRF	ppm	**105**	0	**828**	811	<	3431	<	-	301	**567**	977	-	-
P	ICP-AES	ppm partial	**6**	0	**736**	742	38	3110	-	-	279	**509**	854	-	-
Pb	XRF	ppm	**14**	15.8	**23**	8	<	44	<	<	17	**21**	27	-	-
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**6.0**	3.4	3.0	18.5	-	-	4.1	**4.9**	6.9	-	-
Rb	XRF	ppm	**5.5**	5.3	**72**	46	<	175	<	-	42	**55**	102	-	-
Rb	ICP-MS	ppm	**0.6**	0	**66**	44	3.9	162	-	-	39	**53**	96	-	-
S	XRF	ppm	**70**	52.6	***142***	*253*	<	1060	<	<	<	**<**	153	-	-
S	ICP-AES	ppm partial	**14.3**	5.3	**169**	285	<	1190	<	-	20	**84**	155	-	-
Sc	ICP-MS	ppm	**2.8**	10.5	**13**	9.0	<	38	<	<	6.4	**10**	17	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**4.3**	2.2	0.80	7.9	-	-	2.4	**4.0**	6.0	-	-
Se	GFAAS	ppm partial	**0.055**	89.5	**-**	-	<	0.19	<	<	<	**<**	<	0.05	-
Sm	ICP-MS	ppm	**0.5**	0	**4.4**	2.8	1.6	15	-	-	3.5	**4.0**	4.7	-	-
Sr	XRF	ppm	**4**	0	**510**	330	71	1273	-	-	252	**474**	625	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**16**	11	1.9	45	-	-	6.1	**16**	23	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.49**	0.16	0.21	0.73	-	-	0.33	**0.49**	0.63	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.63**	0.35	0.19	1.5	-	-	0.51	**0.56**	0.72	-	-
Te	GFAAS	ppb partial	**5**	84.2	**-**	-	<	24	<	<	<	**<**	<	7	-
Th	ICP-MS	ppm	**0.13**	0	**5.5**	4.7	0.72	16	-	-	2.0	**3.1**	9.4	-	-
Th	ICP-AES	ppm partial	**5.6**	21.1	**10**	6	<	23	<	<	6	**7**	12	-	-
Ti	XRF	ppm	**30**	0	**3240**	2184	1050	8520	-	-	1524	**2568**	4098	-	-
Ti	ICP-MS	ppm	**10**	0	**3013**	2098	809	8460	-	-	1528	**2280**	3615	-	-
Ti	ICP-AES	ppm partial	**2**	0	**1867**	790	564	3170	-	-	1193	**1790**	2590	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.34**	0.31	0.05	1.46	-	-	0.19	**0.29**	0.36	-	-
U	ICP-MS	ppm	**0.08**	0	**1.50**	1.46	0.46	6.73	-	-	0.53	**1.21**	1.67	-	-
V	XRF	ppm	**6**	0	**94**	79	12	310	-	-	30	**68**	124	-	-
V	ICP-MS	ppm	**2**	0	**73**	71	4.6	275	-	-	19	**53**	98	-	-
V	ICP-AES	ppm partial	**0.6**	0	**50**	35	5.1	123	-	-	21	**41**	73	-	-
Y	XRF	ppm	**2.8**	0	**22**	16	3	76	-	-	13	**21**	25	-	-
Y	ICP-MS	ppm	**0.1**	0	**23**	19	4.2	89	-	-	14	**20**	26	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**8.7**	4.2	2.0	17	-	-	5.2	**8.6**	11	-	-
Yb	ICP-MS	ppm	**0.22**	0	**2.2**	2.0	0.49	9.5	-	-	1.3	**1.9**	2.4	-	-
Zn	XRF	ppm	**4**	0	**70**	36	27	155	-	-	43	**61**	95	-	-
Zn	ICP-AES	ppm partial	**2**	0	**47**	15	28	75	-	-	33	**48**	59	-	-
Zr	XRF	ppm	**6**	0	**160**	40	73	219	-	-	148	**156**	182	-	-
Zr	ICP-MS	ppm	**3**	0	**141**	36	58	195	-	-	121	**146**	170	-	-

Table 35. Chemical concentration summary statistics for map unit 39.

Map unit	**39**	**Granite and granodiorite with gneissic inclusions**
Number of samples	277	
Unit area	22592.0	km^2
Percent of bedrock	6.7	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

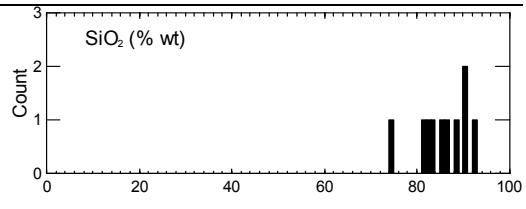


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**72.86**	3.48	55.10	86.70	66.48	69.44	71.58	**73.30**	74.53	75.80	76.80
TiO_2	XRF	%	**0.005**	0.4	**0.24**	0.20	<	1.43	0.03	0.05	0.11	**0.20**	0.33	0.46	0.60
Al_2O_3	XRF	%	**0.02**	0	**14.38**	1.26	7.46	19.40	12.50	13.20	13.90	**14.40**	14.90	15.70	16.27
FeO	XRF	%	**0.01**	0	**1.65**	1.06	0.19	6.98	0.45	0.57	0.88	**1.48**	2.09	2.68	3.68
MnO	XRF	%	**0.012**	10.8	**0.030**	0.020	<	0.144	<	<	0.015	**0.024**	0.036	0.053	0.068
MgO	XRF	%	**0.09**	15.2	**0.49**	0.61	<	6.60	<	<	0.17	**0.35**	0.60	0.98	1.23
CaO	XRF	%	**0.004**	0	**1.37**	0.76	0.08	6.66	0.49	0.65	0.93	**1.21**	1.67	2.14	2.72
Na_2O	XRF	%	**0.05**	0	**4.00**	0.70	1.31	6.68	3.01	3.31	3.58	**3.95**	4.32	4.92	5.26
K_2O	XRF	%	**0.003**	0	**4.35**	1.06	1.16	6.50	1.99	2.72	3.94	**4.63**	5.03	5.45	5.74
P_2O_5	XRF	%	**0.024**	21.7	**0.075**	0.073	<	0.705	<	<	0.025	**0.057**	0.095	0.139	0.200
C_{tot}	Leco	%	**0.05**	97.8	**-**	-	<	0.21	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	74.4	***0.05***	*0.03*	<	0.18	<	<	<	**<**	0.06	0.08	0.10
Al	XRF	ppm	**106**	0	**76081**	6681	39463	102626	66125	69828	73531	**76176**	78821	83053	86042
Al	ICP-AES	ppm partial	**1100**	0	**5048**	3301	1100	27200	1635	1900	2800	**4300**	6400	8500	10930
As	GFAAS	ppm partial	**3**	98.9	**-**	-	<	6.7	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	99.3	**-**	-	<	5	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**863**	527	22	2964	58	237	499	**807**	1150	1490	1900
Ba	ICP-AES	ppm partial	**10**	1.8	**63**	64	<	703	13	16	29	**47**	74	128	166
Bi	GFAAS	ppm partial	**0.04**	88.4	**-**	-	<	13	<	<	<	**<**	<	0.04	0.06
Ca	XRF	ppm	**29**	0	**9788**	5405	543	47619	3468	4662	6628	**8652**	11941	15287	19412
Ca	ICP-AES	ppm partial	**50**	0	**1500**	1385	100	9600	200	300	500	**1200**	2000	3100	4365
Ce	ICP-MS	ppm	**0.22**	0	**80**	59	0.67	370	7.2	13	31	**74**	113	165	180
Cl	XRF	ppm	**45**	5.8	**146**	111	<	970	<	60	80	**120**	180	250	353
Co	ICP-MS	ppm	**2**	31.8	**3.8**	2.9	<	22	<	<	<	**2.8**	4.5	6.6	9.6
Co	ICP-AES	ppm partial	**0.9**	9.4	**3.5**	2.9	<	23	<	0.9	1.4	**2.9**	4.8	6.6	8.6
Cr	XRF	ppm	**19**	68.2	***16***	27	<	291	<	<	<	**<**	20	28	50
Cr	ICP-AES	ppm partial	**5**	40.8	**12**	22	<	267	<	<	<	**5.9**	9.6	18	33
Cu	XRF	ppm	**17**	88.4	**-**	-	<	46	<	<	<	**<**	<	18	24
Cu	ICP-AES	ppm partial	**3**	21.3	**6.9**	6.5	<	38	<	<	3.0	**4.1**	8.0	15	22
Dy	ICP-MS	ppm	**0.55**	11.6	**2.3**	1.9	<	12	<	<	0.9	**1.7**	3.2	4.7	5.6
Er	ICP-MS	ppm	**0.3**	14.4	**1.3**	1.2	<	8.1	<	<	0.4	**0.9**	1.8	2.7	3.2
Eu	ICP-MS	ppm	**0.09**	2.5	**0.67**	0.48	<	3.4	0.11	0.24	0.38	**0.56**	0.78	1.2	1.6
Fe	XRF	ppm	**78**	0	**12828**	8221	1500	54235	3497	4460	6861	**11500**	16255	20855	28617
Fe	ICP-AES	ppm partial	**2300**	0.4	**14564**	8422	<	65400	4135	5400	8375	**13500**	18925	23920	28960
Ga	XRF	ppm	**10**	0	**24**	4	12	37	19	20	22	**24**	27	29	30
Gd	ICP-MS	ppm	**0.5**	4.7	**3.4**	2.5	<	14.8	0.5	0.9	1.7	**2.7**	4.7	6.4	7.6
Hf	ICP-MS	ppm	**0.12**	0	**4.59**	2.33	0.32	14.7	1.47	2.07	3.06	**4.28**	5.62	7.52	8.96
Ho	ICP-MS	ppm	**0.09**	10.8	**0.43**	0.38	<	2.4	<	<	0.16	**0.30**	0.61	0.90	1.1
K	XRF	ppm	**25**	0	**36130**	8765	9628	53950	16500	22543	32661	**38429**	41749	45252	47617
K	ICP-AES	ppm partial	**100**	0	**3311**	2668	400	20800	754	900	1400	**2700**	4500	6494	8095
La	ICP-MS	ppm	**0.55**	0.7	**45**	33	<	215	3.8	6.3	17	**40**	65	89	104
La	ICP-AES	ppm partial	**1.3**	1.1	**43**	34	<	215	2.9	5.1	15	**38**	63	87	107
Li	ICP-AES	ppm partial	**3.5**	8.3	**15.2**	13.1	<	126	<	3.6	6.8	**12.6**	19.4	27.3	38.3
Lu	ICP-MS	ppm	**0.03**	5.1	**0.19**	0.20	<	1.72	<	0.04	0.07	**0.13**	0.25	0.37	0.44
Mg	XRF	ppm	**543**	15.2	**2961**	3654	<	39798	<	<	1013	**2111**	3618	5897	7393
Mg	ICP-AES	ppm partial	**50**	0	**2890**	2740	100	21000	300	500	1000	**2300**	3800	6180	7600
Mn	XRF	ppm	**93**	10.8	**233**	155	<	1116	<	<	116	**186**	279	411	527
Mn	ICP-AES	ppm partial	**50**	3.2	**171**	100	<	607	58	70	97	**147**	217	316	361
Mo	XRF	ppm	**2.6**	99.3	**-**	-	<	3	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	97.5	**-**	-	<	5	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**29687**	5172	9720	49566	22312	24560	26564	**29309**	32017	36477	39000
Na	ICP-AES	ppm partial	**150**	0	**527**	160	300	2600	400	400	500	**500**	600	630	700
Nb	XRF	ppm	**7**	45.1	**12**	8	<	69	<	<	<	**7**	15	22	24
Nb	ICP-MS	ppm	**0.16**	0	**9.1**	8.1	0.29	53	1.1	1.7	3.5	**6.5**	13	19	22
Nd	ICP-MS	ppm	**0.2**	0	**27**	20	0.24	116	2.6	4.5	12	**22**	37	54	65
Ni	XRF	ppm	**14**	91.3	**-**	-	<	70	<	<	<	**<**	<	<	20
Ni	ICP-AES	ppm partial	**3.5**	29.6	**6.3**	6.6	<	74	<	<	<	**4.4**	6.5	9.6	14
P	XRF	ppm	**105**	0	**327**	318	<	3074	<	<	109	**249**	414	606	872
P	ICP-AES	ppm partial	**6**	0	**286**	322	6.4	2860	15	24	75	**214**	376	631	807
Pb	XRF	ppm	**14**	0	**38**	14	14	93	19	22	28	**35**	45	57	62
Pb	ICP-AES	ppm partial	**8.7**	59.9	***9***	*4*	<	27	<	<	<	**<**	11	14	17
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	5.1	**8.3**	6.2	<	37.2	<	1.3	3.5	**6.9**	11.5	17.1	19.3
Rb	XRF	ppm	**5.5**	0	**153**	62	33	519	65	81	113	**147**	182	231	261
Rb	ICP-MS	ppm	**0.6**	0	**142**	58	30	496	60	78	103	**134**	172	213	251
S	XRF	ppm	**70**	86.6	**-**	-	<	1160	<	<	<	**<**	<	90	193
S	ICP-AES	ppm partial	**14.3**	53.8	***48***	*145*	<	1620	<	<	<	**<**	29	111	250
Sc	ICP-MS	ppm	**2.8**	44.8	**4.2**	2.3	<	18	<	<	<	**3.0**	4.5	7.3	8.7
Sc	ICP-AES	ppm partial	**0.4**	6.5	**2.1**	1.8	<	14	<	0.50	0.90	**1.6**	2.9	4.3	5.6
Se	GFAAS	ppm partial	**0.055**	97.5	**-**	-	<	0.23	<	<	<	**<**	<	<	<
Sm	ICP-MS	ppm	**0.5**	4.7	**4.0**	3.0	<	18	0.52	0.97	1.9	**3.3**	5.7	7.9	9.4
Sr	XRF	ppm	**4**	0	**225**	174	8	1030	28	53	109	**186**	299	433	567
Sr	ICP-AES	ppm partial	**1.2**	2.9	**6.7**	6.1	<	71	1.6	2.1	3.7	**5.5**	8.3	12	14
Ta	ICP-MS	ppm	**0.06**	6.1	**0.76**	0.86	<	8.3	<	0.09	0.20	**0.46**	1.0	1.7	2.0
Tb	ICP-MS	ppm	**0.08**	6.5	**0.46**	0.35	<	2.1	<	0.12	0.21	**0.36**	0.61	0.93	1.1
Te	GFAAS	ppb partial	**5**	91	**-**	-	<	14	<	<	<	**<**	<	<	6
Th	ICP-MS	ppm	**0.13**	0	**22**	15	0.17	92	1.7	3.1	11	**21**	30	41	51
Th	ICP-AES	ppm partial	**5.6**	10.8	**28**	17	<	103	<	<	14	**25**	36	49	62
Ti	XRF	ppm	**30**	0.4	**1452**	1170	<	8580	180	294	636	**1200**	1962	2766	3606
Ti	ICP-MS	ppm	**10**	0	**1369**	1090	15	7630	171	284	602	**1100**	1803	2798	3498
Ti	ICP-AES	ppm partial	**2**	0	**883**	801	4.9	4930	43	103	271	**672**	1263	1980	2460
Tm	ICP-MS	ppm	**0.03**	7.2	**0.18**	0.19	<	1.44	<	0.03	0.06	**0.13**	0.25	0.40	0.46
U	ICP-MS	ppm	**0.08**	0	**3.18**	3.07	0.08	18.1	0.46	0.70	1.12	**2.24**	4.11	7.22	9.89
V	XRF	ppm	**6**	8.3	**28**	25	<	170	<	6	12	**23**	37	50	79
V	ICP-MS	ppm	**2**	7.9	**18**	18	<	113	<	2.6	5.8	**14**	23	35	52
V	ICP-AES	ppm partial	**0.6**	5.1	**17**	18	<	127	<	1.6	4.8	**13**	24	39	47
Y	XRF	ppm	**2.8**	9	**14**	12	<	85	<	3	6	**10**	19	28	33
Y	ICP-MS	ppm	**0.1**	0	**14**	12	0.59	83	1.8	2.6	5.2	**9.7**	20	28	35
Y	ICP-AES	ppm partial	**0.15**	0	**8.2**	7.1	0.20	47	0.90	1.5	3.2	**5.9**	12	18	23
Yb	ICP-MS	ppm	**0.22**	10.5	**1.2**	1.3	<	11	<	<	0.42	**0.82**	1.7	2.6	3.0
Zn	XRF	ppm	**4**	0.7	**28**	18	<	107	7	9	14	**24**	37	55	65
Zn	ICP-AES	ppm partial	**2**	2.5	**23**	16	<	99	3.0	4.8	9.0	**19**	32	46	54
Zr	XRF	ppm	**6**	0	**183**	116	10	657	42	54	106	**166**	235	316	395
Zr	ICP-MS	ppm	**3**	0	**173**	109	12	659	39	51	97	**162**	221	299	383

Table 36. Chemical concentration summary statistics for map unit 40.

Map unit	**40**	**Quartzite and conglometare**
Number of samples	10	
Unit area	407.7	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

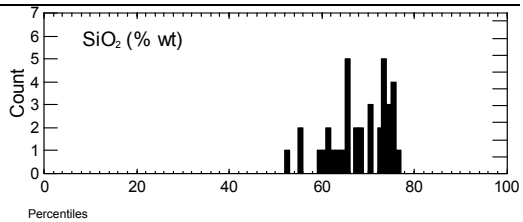


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**85.62**	5.31	74.80	92.30	-	-	82.50	**86.00**	90.50	-	-
TiO_2	XRF	%	**0.005**	0	**0.22**	0.15	0.06	0.47	-	-	0.09	**0.20**	0.31	-	-
Al_2O_3	XRF	%	**0.02**	0	**7.51**	2.47	3.83	11.20	-	-	5.37	**7.60**	9.42	-	-
FeO	XRF	%	**0.01**	0	**1.50**	0.95	0.55	3.52	-	-	0.74	**1.32**	1.83	-	-
MnO	XRF	%	**0.012**	40	**0.018**	0.007	<	0.032	<	<	<	**0.015**	0.019	-	-
MgO	XRF	%	**0.09**	10	**0.49**	0.65	<	2.28	<	<	0.15	**0.26**	0.48	-	-
CaO	XRF	%	**0.004**	0	**0.11**	0.07	0.00	0.22	-	-	0.05	**0.11**	0.18	-	-
Na_2O	XRF	%	**0.05**	10	**0.76**	0.95	<	3.11	<	<	0.07	**0.44**	1.09	-	-
K_2O	XRF	%	**0.003**	0	**2.19**	0.82	1.07	3.29	-	-	1.47	**2.34**	2.96	-	-
P_2O_5	XRF	%	**0.024**	20	**0.081**	0.029	<	0.113	<	<	0.048	**0.093**	0.105	-	-
C_{tot}	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Al	XRF	ppm	**106**	0	**39723**	13061	20261	59248	-	-	28407	**40178**	49832	-	-
Al	ICP-AES	ppm partial	**1100**	10	**3561**	4502	<	16200	<	<	1710	**2050**	2600	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	90	**-**	-	<	8.9	<	<	<	**<**	<	<	-
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**280**	177	89	617	-	-	108	**260**	358	-	-
Ba	ICP-AES	ppm partial	**10**	0	**31**	24	13	93	-	-	17	**21**	36	-	-
Bi	GFAAS	ppm partial	**0.04**	90	**-**	-	<	0.21	<	<	<	**<**	<	<	-
Ca	XRF	ppm	**29**	0	**794**	522	29	1594	-	-	358	**787**	1251	-	-
Ca	ICP-AES	ppm partial	**50**	0	**717**	446	100	1600	-	-	400	**800**	900	-	-
Ce	ICP-MS	ppm	**0.22**	0	**27**	6.8	16	36	-	-	23	**28**	33	-	-
Cl	XRF	ppm	**45**	10	**487**	544	<	1460	<	<	91	**200**	930	-	-
Co	ICP-MS	ppm	**2**	50	***2.7***	*2.0*	<	6.8	<	<	<	**<**	3.4	-	-
Co	ICP-AES	ppm partial	**0.9**	60	***1.8***	*1.8*	<	5.1	<	<	<	**<**	2.6	-	-
Cr	XRF	ppm	**19**	0	**45**	22	20	77	-	-	25	**39**	70	-	-
Cr	ICP-AES	ppm partial	**5**	30	**9.8**	9.0	<	34	<	<	<	**5.8**	11	-	-
Cu	XRF	ppm	**17**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Cu	ICP-AES	ppm partial	**3**	60	***2.8***	*1.6*	<	5.8	<	<	<	**<**	4.0	-	-
Dy	ICP-MS	ppm	**0.55**	0	**1.6**	0.5	0.7	2.4	-	-	1.4	**1.7**	1.8	-	-
Er	ICP-MS	ppm	**0.3**	0	**0.9**	0.3	0.5	1.5	-	-	0.7	**0.9**	1.1	-	-
Eu	ICP-MS	ppm	**0.09**	0	**0.45**	0.12	0.25	0.67	-	-	0.44	**0.47**	0.48	-	-
Fe	XRF	ppm	**78**	0	**11686**	7397	4274	27335	-	-	5750	**10256**	14219	-	-
Fe	ICP-AES	ppm partial	**2300**	20	**7854**	9022	<	30700	<	<	2580	**4000**	11000	-	-
Ga	XRF	ppm	**10**	20	**15**	4	<	24	<	<	12	**15**	17	-	-
Gd	ICP-MS	ppm	**0.5**	0	**2.0**	0.6	1.0	2.8	-	-	1.8	**2.2**	2.3	-	-
Hf	ICP-MS	ppm	**0.12**	0	**2.39**	1.15	1.24	4.68	-	-	1.63	**1.81**	3.33	-	-
Ho	ICP-MS	ppm	**0.09**	0	**0.32**	0.11	0.13	0.53	-	-	0.27	**0.33**	0.36	-	-
K	XRF	ppm	**25**	0	**18177**	6798	8881	27307	-	-	12201	**19422**	24568	-	-
K	ICP-AES	ppm partial	**100**	0	**1369**	391	600	2000	-	-	1100	**1400**	1600	-	-
La	ICP-MS	ppm	**0.55**	0	**13**	3.0	8.7	17	-	-	12	**13**	16	-	-
La	ICP-AES	ppm partial	**1.3**	0	**12**	3.3	9.0	19	-	-	10	**11**	15	-	-
Li	ICP-AES	ppm partial	**3.5**	80	***2.9***	*2.9*	<	9.6	<	<	<	**<**	<	7.9	-
Lu	ICP-MS	ppm	**0.03**	0	**0.14**	0.06	0.05	0.24	-	-	0.11	**0.14**	0.16	-	-
Mg	XRF	ppm	**543**	10	**2961**	3944	<	13748	<	<	905	**1580**	2900	-	-
Mg	ICP-AES	ppm partial	**50**	0	**1601**	4092	100	13200	-	-	100	**155**	700	-	-
Mn	XRF	ppm	**93**	40	**140**	54	<	248	<	<	<	**116**	147	-	-
Mn	ICP-AES	ppm partial	**50**	30	**121**	63	<	266	<	<	<	**94**	138	-	-
Mo	XRF	ppm	**2.6**	90	**-**	-	<	4	<	<	<	**<**	<	<	-
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	10	**5669**	7027	<	23076	<	<	519	**3257**	8088	-	-
Na	ICP-AES	ppm partial	**150**	10	**312**	184	<	723	<	<	200	**244**	400	-	-
Nb	XRF	ppm	**7**	90	**-**	-	<	8	<	<	<	**<**	<	<	-
Nb	ICP-MS	ppm	**0.16**	0	**2.9**	1.7	0.99	5.8	-	-	1.6	**2.5**	3.6	-	-
Nd	ICP-MS	ppm	**0.2**	0	**12**	2.8	7.2	16	-	-	10	**12**	14	-	-
Ni	XRF	ppm	**14**	40	**20**	10	<	44	<	<	<	**14**	22	-	-
Ni	ICP-AES	ppm partial	**3.5**	50	***7.4***	*11*	<	36	<	<	<	**<**	11	-	-
P	XRF	ppm	**105**	0	**353**	126	<	493	<	<	209	**405**	458	-	-
P	ICP-AES	ppm partial	**6**	0	**298**	148	74	470	-	-	182	**368**	418	-	-
Pb	XRF	ppm	**14**	50	***14***	*3*	<	18	<	<	<	**<**	16	-	-
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**3.2**	0.75	1.9	4.4	-	-	2.8	**3.2**	3.7	-	-
Rb	XRF	ppm	**5.5**	0	**69**	33	31	118	-	-	38	**65**	106	-	-
Rb	ICP-MS	ppm	**0.6**	0	**64**	28	32	101	-	-	37	**63**	97	-	-
S	XRF	ppm	**70**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
S	ICP-AES	ppm partial	**14.3**	70	***18***	*16*	<	52	<	<	<	**<**	26	-	-
Sc	ICP-MS	ppm	**2.8**	40	**4.7**	3.2	<	12	<	<	<	**3.1**	5.6	-	-
Sc	ICP-AES	ppm partial	**0.4**	50	***0.59***	*1.1*	<	3.6	<	<	<	**<**	0.50	-	-
Se	GFAAS	ppm partial	**0.055**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Sm	ICP-MS	ppm	**0.5**	0	**2.1**	0.54	1.3	2.9	-	-	1.9	**2.1**	2.7	-	-
Sr	XRF	ppm	**4**	10	**20**	17	<	65	<	<	9	**14**	26	-	-
Sr	ICP-AES	ppm partial	**1.2**	10	**2.8**	1.9	<	7.8	<	<	1.7	**2.1**	3.0	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.30**	0.17	0.10	0.55	-	-	0.17	**0.25**	0.45	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.28**	0.08	0.15	0.42	-	-	0.26	**0.29**	0.34	-	-
Te	GFAAS	ppb partial	**5**	50	***8***	*15*	<	50	<	<	<	**<**	6	-	-
Th	ICP-MS	ppm	**0.13**	0	**4.9**	1.6	3.2	7.6	-	-	3.3	**4.6**	6.3	-	-
Th	ICP-AES	ppm partial	**5.6**	40	**7**	1	<	9	<	<	<	**6**	8	-	-
Ti	XRF	ppm	**30**	0	**1338**	882	336	2820	-	-	534	**1224**	1842	-	-
Ti	ICP-MS	ppm	**10**	0	**1153**	760	281	2350	-	-	446	**1111**	1420	-	-
Ti	ICP-AES	ppm partial	**2**	0	**71**	94	8.4	291	-	-	11	**22**	110	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.13**	0.06	0.04	0.23	-	-	0.11	**0.13**	0.15	-	-
U	ICP-MS	ppm	**0.08**	0	**1.26**	0.41	0.67	2.04	-	-	0.91	**1.31**	1.45	-	-
V	XRF	ppm	**6**	0	**34**	19	11	70	-	-	17	**36**	48	-	-
V	ICP-MS	ppm	**2**	0	**25**	19	5.2	66	-	-	11	**23**	37	-	-
V	ICP-AES	ppm partial	**0.6**	20	**6.6**	11	<	35	<	<	0.6	**2.4**	8.5	-	-
Y	XRF	ppm	**2.8**	0	**11**	3	5	15	-	-	9	**12**	13	-	-
Y	ICP-MS	ppm	**0.1**	0	**10**	3.3	4.7	15	-	-	8.4	**10**	11	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**3.0**	1.1	1.9	5.0	-	-	2.1	**2.9**	3.7	-	-
Yb	ICP-MS	ppm	**0.22**	0	**0.94**	0.32	0.39	1.5	-	-	0.83	**1.0**	1.1	-	-
Zn	XRF	ppm	**4**	30	**12**	10	<	33	<	<	<	**6**	18	-	-
Zn	ICP-AES	ppm partial	**2**	60	***3.0***	*4.9*	<	14	<	<	<	**<**	2.3	-	-
Zr	XRF	ppm	**6**	0	**107**	51	56	225	-	-	70	**95**	124	-	-
Zr	ICP-MS	ppm	**3**	0	**92**	49	44	197	-	-	57	**72**	118	-	-

Table 37. Chemical concentration summary statistics for map unit 41.

Map unit	41	Granite and granodiorite (~ 1.86 Ga)
Number of samples	37	
Unit area	1291.9	km^2
Percent of bedrock	0.4	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

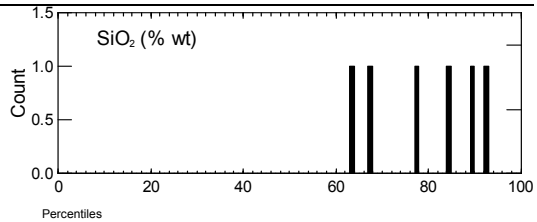


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	68.24	6.42	52.90	76.00	55.10	59.90	64.50	68.90	73.60	75.48	75.63
TiO_2	XRF	%	0.005	0	0.48	0.37	0.01	1.24	0.05	0.05	0.16	0.40	0.68	1.04	1.16
Al_2O_3	XRF	%	0.02	0	15.56	1.64	13.30	19.60	13.57	13.70	14.00	15.40	16.90	17.56	18.42
FeO	XRF	%	0.01	0	3.24	2.15	0.50	7.79	0.64	0.69	1.39	3.01	4.56	6.47	7.54
MnO	XRF	%	0.012	0	0.055	0.029	0.017	0.132	0.019	0.021	0.034	0.050	0.070	0.097	0.116
MgO	XRF	%	0.09	10.8	1.10	0.93	<	3.53	<	<	0.28	0.80	1.62	2.37	3.12
CaO	XRF	%	0.004	0	2.81	1.78	0.51	7.63	0.80	0.85	1.26	2.44	4.06	5.23	6.22
Na_2O	XRF	%	0.05	0	4.19	0.58	3.24	5.54	3.33	3.55	3.67	4.17	4.54	5.00	5.33
K_2O	XRF	%	0.003	0	3.21	1.75	0.50	8.97	1.32	1.47	1.73	2.53	4.29	5.50	5.78
P_2O_5	XRF	%	0.024	16.2	0.189	0.167	<	0.769	<	<	0.050	0.142	0.290	0.424	0.492
C_{tot}	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	67.6	*0.05*	*0.03*	<	0.13	<	<	<	<	0.06	0.10	0.11
Al	XRF	ppm	106	0	82323	8660	70357	103684	71785	72473	74060	81466	89401	92892	97442
Al	ICP-AES	ppm partial	1100	0	11501	5957	1950	22600	3058	3362	6128	11300	16000	19380	21575
As	GFAAS	ppm partial	3	97.3	-	-	<	4.1	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	97.3	-	-	<	3.8	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	1152	689	230	2886	276	346	631	973	1559	2236	2519
Ba	ICP-AES	ppm partial	10	0	293	336	11	1700	14	23	63	196	354	729	826
Bi	GFAAS	ppm partial	0.04	83.8	-	-	<	0.25	<	<	<	<	<	0.05	0.09
Ca	XRF	ppm	29	0	20077	12720	3661	54555	5720	6070	9030	17446	29050	37366	44487
Ca	ICP-AES	ppm partial	50	0	2901	2491	109	9000	203	246	887	2400	4025	6840	8506
Ce	ICP-MS	ppm	0.22	0	74	46	8.2	195	17	23	33	64	107	134	146
Cl	XRF	ppm	45	2.7	184	102	<	530	67	70	86	163	243	304	351
Co	ICP-MS	ppm	2	24.3	8.7	6.8	<	24	<	<	1.5	6.9	15	19	22
Co	ICP-AES	ppm partial	0.9	10.8	6.9	4.6	<	17	<	<	2.4	6.6	10	14	15
Cr	XRF	ppm	19	45.9	27	15	<	83	<	<	<	19	27	44	66
Cr	ICP-AES	ppm partial	5	24.3	13	12	<	51	<	<	3.8	9.8	16	24	46
Cu	XRF	ppm	17	86.5	-	-	<	31	<	<	<	<	<	19	22
Cu	ICP-AES	ppm partial	3	13.5	8.4	8.1	<	38	<	<	3.6	4.6	10.0	22	26
Dy	ICP-MS	ppm	0.55	0	3.5	2.5	0.6	13	0.7	1.2	2.2	3.1	3.6	5.7	9.8
Er	ICP-MS	ppm	0.3	0	1.9	1.5	0.4	6.7	0.5	0.6	1.1	1.5	1.9	3.1	6.5
Eu	ICP-MS	ppm	0.09	2.7	1.0	0.50	<	2.2	0.24	0.33	0.67	1.1	1.2	1.7	2.0
Fe	XRF	ppm	78	0	25198	16737	3869	60528	5004	5369	10800	23388	35455	50272	58601
Fe	ICP-AES	ppm partial	2300	0	24749	13056	4070	53900	7081	7402	13650	25000	35350	39440	49185
Ga	XRF	ppm	10	0	25	3	20	31	21	21	23	25	28	30	31
Gd	ICP-MS	ppm	0.5	0	4.5	2.0	1.2	10.2	1.5	1.9	3.2	4.2	5.7	7.2	7.4
Hf	ICP-MS	ppm	0.12	0	4.25	2.24	0.93	9.98	1.33	1.50	2.47	4.14	5.78	7.01	8.55
Ho	ICP-MS	ppm	0.09	0	0.67	0.52	0.13	2.5	0.15	0.23	0.39	0.55	0.68	1.1	2.1
K	XRF	ppm	25	0	26610	14542	4117	74451	10989	12234	14359	20999	35582	45650	47982
K	ICP-AES	ppm partial	100	0	8009	4744	1130	19500	1590	1806	3675	8060	11750	13980	16030
La	ICP-MS	ppm	0.55	0	40	27	4.3	105	8.7	10	15	37	60	80	89
La	ICP-AES	ppm partial	1.3	0	34	27	2.8	106	4.7	7.9	13	31	40	74	98
Li	ICP-AES	ppm partial	3.5	0	21.0	13.7	4.4	77.5	7.7	8.8	13.2	19.7	23.5	30.7	50.5
Lu	ICP-MS	ppm	0.03	0	0.25	0.20	0.05	0.92	0.08	0.09	0.13	0.20	0.25	0.51	0.83
Mg	XRF	ppm	543	10.8	6627	5596	<	21286	<	<	1713	4824	9751	14291	18808
Mg	ICP-AES	ppm partial	50	0	6080	4222	127	14600	445	662	2038	5300	9750	11300	12800
Mn	XRF	ppm	93	0	426	225	132	1023	147	163	264	388	543	752	899
Mn	ICP-AES	ppm partial	50	0	316	155	70	706	124	129	204	258	410	490	637
Mo	XRF	ppm	2.6	94.6	-	-	<	3	<	<	<	<	<	<	2
Mo	ICP-AES	ppm partial	2.6	97.3	-	-	<	3	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	31068	4304	24041	41107	24738	26356	27231	30941	33709	37085	39526
Na	ICP-AES	ppm partial	150	0	764	243	400	1700	488	518	602	700	900	980	1221
Nb	XRF	ppm	7	21.6	12	5	<	25	<	<	8	10	14	21	23
Nb	ICP-MS	ppm	0.16	0	11	5.2	1.9	24	3.4	4.4	7.2	11	12	18	21
Nd	ICP-MS	ppm	0.2	0	29	15	4.2	67	7.5	9.0	17	27	40	47	53
Ni	XRF	ppm	14	86.5	-	-	<	25	<	<	<	<	<	19	24
Ni	ICP-AES	ppm partial	3.5	18.9	7.6	5.7	<	26	<	<	4.0	5.7	8.2	16	24
P	XRF	ppm	105	0	824	728	<	3353	<	<	218	619	1264	1849	2145
P	ICP-AES	ppm partial	6	0	726	691	11	2980	21	27	156	579	1163	1668	2098
Pb	XRF	ppm	14	0	37	20	16	117	19	21	25	32	46	61	70
Pb	ICP-AES	ppm partial	8.7	86.5	-	-	<	50	<	<	<	<	<	10	11
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	8.2	4.6	1.0	20.2	2.1	2.7	4.2	7.2	11.9	14.1	15.2
Rb	XRF	ppm	5.5	0	68	35	6	177	25	32	47	62	87	114	137
Rb	ICP-MS	ppm	0.6	0	67	37	5.1	179	23	29	39	57	83	115	141
S	XRF	ppm	70	64.9	*99*	*108*	<	441	<	<	<	<	125	275	362
S	ICP-AES	ppm partial	14.3	24.3	103	129	<	438	<	<	11	37	164	337	416
Sc	ICP-MS	ppm	2.8	10.8	7.0	4.6	<	19	<	<	3.5	5.4	9.1	16	18
Sc	ICP-AES	ppm partial	0.4	0	3.8	2.7	0.66	16	1.2	1.7	2.5	3.3	4.0	5.6	8.7
Se	GFAAS	ppm partial	0.055	91.9	-	-	<	0.09	<	<	<	<	<	<	0.08
Sm	ICP-MS	ppm	0.5	0	5.0	2.1	1.1	8.8	1.8	1.9	3.4	5.0	6.4	7.7	8.5
Sr	XRF	ppm	4	0	469	302	62	1286	83	125	251	406	593	945	1076
Sr	ICP-AES	ppm partial	1.2	0	14	12	2.0	49	2.5	2.9	5.1	9.8	19	32	42
Ta	ICP-MS	ppm	0.06	0	0.60	0.42	0.18	1.8	0.22	0.25	0.29	0.45	0.81	1.2	1.6
Tb	ICP-MS	ppm	0.08	0	0.65	0.36	0.16	2.0	0.19	0.26	0.42	0.61	0.73	1.1	1.4
Te	GFAAS	ppb partial	5	89.2	-	-	<	15	<	<	<	<	<	4	9
Th	ICP-MS	ppm	0.13	0	6.3	4.9	0.43	21	1.0	1.3	2.9	4.2	8.7	13	17
Th	ICP-AES	ppm partial	5.6	29.7	10	6	<	29	<	<	<	7	12	15	26
Ti	XRF	ppm	30	0	2868	2196	54	7440	270	294	948	2376	4056	6252	6966
Ti	ICP-MS	ppm	10	0	2718	2203	42	8270	241	287	909	2230	3840	5634	7412
Ti	ICP-AES	ppm partial	2	0	1857	1159	25	4750	163	240	881	1890	2613	3358	3590
Tm	ICP-MS	ppm	0.03	0	0.27	0.23	0.05	1.02	0.06	0.09	0.15	0.20	0.26	0.50	0.94
U	ICP-MS	ppm	0.08	0	1.46	1.34	0.27	5.97	0.33	0.39	0.50	0.99	1.66	3.63	4.34
V	XRF	ppm	6	5.4	59	48	<	165	<	7	21	44	84	128	162
V	ICP-MS	ppm	2	13.5	39	36	<	135	<	<	10	28	54	96	121
V	ICP-AES	ppm partial	0.6	2.7	32	25	<	99	0.9	1.8	10	31	49	60	80
Y	XRF	ppm	2.8	0	20	17	4	75	5	7	12	16	21	36	69
Y	ICP-MS	ppm	0.1	0	21	18	4.1	75	4.5	7.0	12	17	20	36	73
Y	ICP-AES	ppm partial	0.15	0	9.0	8.3	1.3	47	2.0	3.2	4.1	6.7	9.8	17	25
Yb	ICP-MS	ppm	0.22	0	1.7	1.4	0.27	6.4	0.43	0.60	0.94	1.4	1.7	3.5	5.7
Zn	XRF	ppm	4	0	73	28	18	129	29	39	50	74	97	106	121
Zn	ICP-AES	ppm partial	2	0	59	24	18	106	19	24	40	68	77	84	102
Zr	XRF	ppm	6	0	180	102	22	368	29	47	93	192	244	341	364
Zr	ICP-MS	ppm	3	0	169	99	23	357	34	45	84	183	238	311	323

Table 38. Chemical concentration summary statistics for map unit 42.

Map unit	42	Quartzite and conglomerate
Number of samples	6	
Unit area	521.1	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

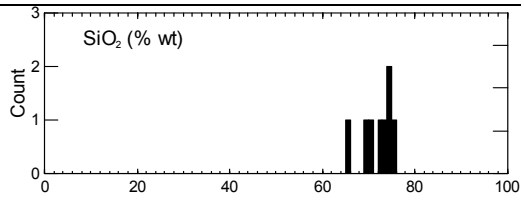


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	79.25	11.90	63.80	92.80	-	-	-	81.20	-	-	-
TiO_2	XRF	%	0.005	0	0.53	0.34	0.10	0.83	-	-	-	0.66	-	-	-
Al_2O_3	XRF	%	0.02	0	9.41	6.23	3.63	18.30	-	-	-	6.29	-	-	-
FeO	XRF	%	0.01	0	3.70	1.97	0.84	5.73	-	-	-	3.88	-	-	-
MnO	XRF	%	0.012	16.7	0.072	0.066	<	0.195	<	<	-	0.058	-	-	-
MgO	XRF	%	0.09	0	1.37	1.05	0.17	2.97	-	-	-	1.44	-	-	-
CaO	XRF	%	0.004	0	1.07	1.74	0.02	4.54	-	-	-	0.41	-	-	-
Na_2O	XRF	%	0.05	16.7	1.18	0.86	<	1.99	<	<	-	1.34	-	-	-
K_2O	XRF	%	0.003	0	2.24	1.67	0.79	5.12	-	-	-	1.44	-	-	-
P_2O_5	XRF	%	0.024	16.7	0.105	0.061	<	0.187	<	<	-	0.084	-	-	-
C_{tot}	Leco	%	0.05	66.7	-	-	<	0.43	<	<	<	<	0.09	-	-
$C_{non\text{-}carb}$	Leco	%	0.05	83.3	-	-	<	0.37	<	<	<	<	<	-	-
F	Ion	%	0.055	66.7	-	-	<	0.10	<	<	<	<	0.08	-	-
Al	XRF	ppm	106	0	49763	32936	19203	96807	-	-	-	33248	-	-	-
Al	ICP-AES	ppm partial	1100	0	13583	12431	1400	31000	-	-	-	8850	-	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	66.7	-	-	<	2.8	<	<	<	<	2.5	-	-
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	369	284	91	763	-	-	-	278	-	-	-
Ba	ICP-AES	ppm partial	10	0	111	98	12	256	-	-	-	96	-	-	-
Bi	GFAAS	ppm partial	0.04	83.3	-	-	<	0.70	<	<	<	<	<	-	-
Ca	XRF	ppm	29	0	7622	12405	143	32461	-	-	-	2903	-	-	-
Ca	ICP-AES	ppm partial	50	0	1883	2701	100	7300	-	-	-	1100	-	-	-
Ce	ICP-MS	ppm	0.22	0	44	33	13	88	-	-	-	29	-	-	-
Cl	XRF	ppm	45	0	510	821	90	2170	-	-	-	150	-	-	-
Co	ICP-MS	ppm	2	16.7	7.9	6.2	<	17	<	<	-	6.9	-	-	-
Co	ICP-AES	ppm partial	0.9	16.7	7.5	6.2	<	16	<	<	-	6.8	-	-	-
Cr	XRF	ppm	19	0	87	51	24	135	-	-	-	102	-	-	-
Cr	ICP-AES	ppm partial	5	0	47	29	9.1	84	-	-	-	57	-	-	-
Cu	XRF	ppm	17	66.7	-	-	<	174	<	<	<	<	43	-	-
Cu	ICP-AES	ppm partial	3	33.3	37	71	<	171	<	<	<	3.8	-	-	-
Dy	ICP-MS	ppm	0.55	0	2.6	1.5	1.1	4.4	-	-	-	2.2	-	-	-
Er	ICP-MS	ppm	0.3	0	1.4	0.8	0.7	2.4	-	-	-	1.3	-	-	-
Eu	ICP-MS	ppm	0.09	0	0.66	0.38	0.23	1.1	-	-	-	0.64	-	-	-
Fe	XRF	ppm	78	0	28726	15299	6527	44522	-	-	-	30148	-	-	-
Fe	ICP-AES	ppm partial	2300	0	24217	15238	4300	45500	-	-	-	19800	-	-	-
Ga	XRF	ppm	10	0	18	9	10	32	-	-	-	15	-	-	-
Gd	ICP-MS	ppm	0.5	0	3.2	2.0	1.2	5.8	-	-	-	2.6	-	-	-
Hf	ICP-MS	ppm	0.12	0	2.83	1.51	1.36	4.99	-	-	-	2.50	-	-	-
Ho	ICP-MS	ppm	0.09	0	0.48	0.25	0.22	0.79	-	-	-	0.44	-	-	-
K	XRF	ppm	25	0	18592	13869	6549	42496	-	-	-	11952	-	-	-
K	ICP-AES	ppm partial	100	0	8517	7699	800	18800	-	-	-	5600	-	-	-
La	ICP-MS	ppm	0.55	0	21	16	6.2	43	-	-	-	14	-	-	-
La	ICP-AES	ppm partial	1.3	0	20	16	5.7	41	-	-	-	12	-	-	-
Li	ICP-AES	ppm partial	3.5	16.7	16.1	15.6	<	40.6	<	<	-	7.6	-	-	-
Lu	ICP-MS	ppm	0.03	0	0.20	0.12	0.08	0.35	-	-	-	0.17	-	-	-
Mg	XRF	ppm	543	0	8243	6344	1025	17909	-	-	-	8653	-	-	-
Mg	ICP-AES	ppm partial	50	0	8067	7259	300	20200	-	-	-	7400	-	-	-
Mn	XRF	ppm	93	16.7	558	512	<	1511	<	<	-	450	-	-	-
Mn	ICP-AES	ppm partial	50	0	357	268	53	802	-	-	-	310	-	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	16.7	8778	6389	<	14766	<	<	-	9943	-	-	-
Na	ICP-AES	ppm partial	150	0	550	446	200	1400	-	-	-	450	-	-	-
Nb	XRF	ppm	7	50	*9*	*6*	<	18	<	<	<	<	14	-	-
Nb	ICP-MS	ppm	0.16	0	6.3	5.2	1.3	14	-	-	-	4.8	-	-	-
Nd	ICP-MS	ppm	0.2	0	19	14	5.9	36	-	-	-	13	-	-	-
Ni	XRF	ppm	14	33.3	39	11	<	52	<	<	<	37	-	-	-
Ni	ICP-AES	ppm partial	3.5	0	26	15	3.7	40	-	-	-	30	-	-	-
P	XRF	ppm	105	0	458	266	<	815	<	<	-	366	-	-	-
P	ICP-AES	ppm partial	6	0	341	227	45	625	-	-	-	330	-	-	-
Pb	XRF	ppm	14	33.3	15	2	<	19	<	<	<	14	-	-	-
Pb	ICP-AES	ppm partial	8.7	100	-	-	<	<	<	<	<	<	<	<	<
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	4.9	3.6	1.6	9.5	-	-	-	3.3	-	-	-
Rb	XRF	ppm	5.5	0	94	92	19	258	-	-	-	62	-	-	-
Rb	ICP-MS	ppm	0.6	0	84	80	17	227	-	-	-	59	-	-	-
S	XRF	ppm	70	83.3	-	-	<	200	<	<	<	<	<	-	-
S	ICP-AES	ppm partial	14.3	50	*23*	*32*	<	85	<	<	<	<	25	-	-
Sc	ICP-MS	ppm	2.8	16.7	10	6.6	<	18	<	<	-	9.0	-	-	-
Sc	ICP-AES	ppm partial	0.4	16.7	3.5	2.9	<	8.4	<	<	-	2.6	-	-	-
Se	GFAAS	ppm partial	0.055	83.3	-	-	<	0.35	<	<	<	<	<	-	-
Sm	ICP-MS	ppm	0.5	0	3.3	2.3	1.1	6.3	-	-	-	2.5	-	-	-
Sr	XRF	ppm	4	0	38	33	5	93	-	-	-	37	-	-	-
Sr	ICP-AES	ppm partial	1.2	33.3	3.6	3.8	<	11	<	<	<	2.2	-	-	-
Ta	ICP-MS	ppm	0.06	0	0.55	0.43	0.13	1.1	-	-	-	0.41	-	-	-
Tb	ICP-MS	ppm	0.08	0	0.42	0.25	0.16	0.74	-	-	-	0.36	-	-	-
Te	GFAAS	ppb partial	5	50	*11*	*15*	<	40	<	<	<	<	15	-	-
Th	ICP-MS	ppm	0.13	0	6.8	4.6	2.8	13	-	-	-	4.5	-	-	-
Th	ICP-AES	ppm partial	5.6	33.3	11	7	<	20	<	<	<	6	-	-	-
Ti	XRF	ppm	30	0	3204	2040	600	4998	-	-	-	3972	-	-	-
Ti	ICP-MS	ppm	10	0	2892	1844	525	4590	-	-	-	3515	-	-	-
Ti	ICP-AES	ppm partial	2	0	1525	1286	80	3200	-	-	-	1257	-	-	-
Tm	ICP-MS	ppm	0.03	0	0.21	0.13	0.08	0.39	-	-	-	0.18	-	-	-
U	ICP-MS	ppm	0.08	0	1.76	1.44	0.62	3.82	-	-	-	1.00	-	-	-
V	XRF	ppm	6	0	101	64	17	165	-	-	-	126	-	-	-
V	ICP-MS	ppm	2	0	74	48	12	122	-	-	-	95	-	-	-
V	ICP-AES	ppm partial	0.6	0	47	33	4.0	96	-	-	-	55	-	-	-
Y	XRF	ppm	2.8	0	16	9	6	30	-	-	-	14	-	-	-
Y	ICP-MS	ppm	0.1	0	16	8.9	7.4	27	-	-	-	13	-	-	-
Y	ICP-AES	ppm partial	0.15	0	5.1	3.3	2.0	8.6	-	-	-	4.8	-	-	-
Yb	ICP-MS	ppm	0.22	0	1.3	0.74	0.53	2.4	-	-	-	1.2	-	-	-
Zn	XRF	ppm	4	16.7	22	24	<	64	<	<	-	15	-	-	-
Zn	ICP-AES	ppm partial	2	16.7	17	20	<	54	<	<	-	8.4	-	-	-
Zr	XRF	ppm	6	0	131	73	51	233	-	-	-	113	-	-	-
Zr	ICP-MS	ppm	3	0	106	57	48	175	-	-	-	93	-	-	-

Table 39. Chemical concentration summary statistics for map unit 44.

Map unit	44	Granite (1.89 - 1.88 Ga)
Number of samples	8	
Unit area	340.8	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

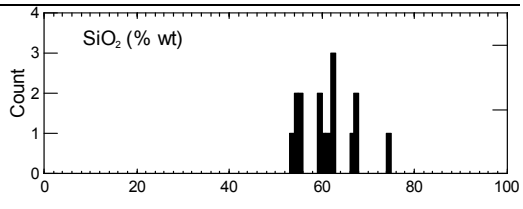


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	71.85	3.20	65.60	75.20	-	-	-	72.90	-	-	-
TiO_2	XRF	%	0.005	0	0.29	0.20	0.10	0.65	-	-	-	0.20	-	-	-
Al_2O_3	XRF	%	0.02	0	14.64	1.05	13.30	16.50	-	-	-	14.50	-	-	-
FeO	XRF	%	0.01	0	2.02	0.90	0.95	3.36	-	-	-	1.83	-	-	-
MnO	XRF	%	0.012	0	0.039	0.013	0.017	0.054	-	-	-	0.041	-	-	-
MgO	XRF	%	0.09	0	0.58	0.40	0.24	1.35	-	-	-	0.38	-	-	-
CaO	XRF	%	0.004	0	1.82	0.94	0.78	3.12	-	-	-	1.37	-	-	-
Na_2O	XRF	%	0.05	0	4.23	0.39	3.78	4.99	-	-	-	4.19	-	-	-
K_2O	XRF	%	0.003	0	3.62	1.06	2.24	4.99	-	-	-	3.64	-	-	-
P_2O_5	XRF	%	0.024	12.5	0.104	0.087	<	0.289	<	<	-	0.069	-	-	-
C_{tot}	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F^-	Ion	%	0.055	75	-	-	<	0.15	<	<	<	<	<	-	-
Al	XRF	ppm	106	0	77430	5576	70357	87285	-	-	-	76705	-	-	-
Al	ICP-AES	ppm partial	1100	0	7590	3839	3820	13300	-	-	-	5900	-	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	100	-	-	<	<	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	1204	506	655	1947	-	-	-	1074	-	-	-
Ba	ICP-AES	ppm partial	10	0	124	109	25	327	-	-	-	76	-	-	-
Bi	GFAAS	ppm partial	0.04	100	-	-	<	<	<	<	<	<	<	<	<
Ca	XRF	ppm	29	0	13034	6685	5584	22308	-	-	-	9760	-	-	-
Ca	ICP-AES	ppm partial	50	0	2142	1294	705	4600	-	-	-	1550	-	-	-
Ce	ICP-MS	ppm	0.22	0	75	38	11	128	-	-	-	74	-	-	-
Cl	XRF	ppm	45	0	95	34	68	171	-	-	-	80	-	-	-
Co	ICP-MS	ppm	2	25	5.0	5.8	<	19	<	<	<	2.3	-	-	-
Co	ICP-AES	ppm partial	0.9	0	4.1	3.2	1.5	10	-	-	-	2.6	-	-	-
Cr	XRF	ppm	19	87.5	-	-	<	36	<	<	<	<	<	-	-
Cr	ICP-AES	ppm partial	5	37.5	8.8	6.2	<	23	<	<	<	6.7	-	-	-
Cu	XRF	ppm	17	87.5	-	-	<	29	<	<	<	<	<	-	-
Cu	ICP-AES	ppm partial	3	37.5	7.6	9.0	<	28	<	<	<	3.5	-	-	-
Dy	ICP-MS	ppm	0.55	12.5	2.3	1.6	<	5.8	<	<	-	2.1	-	-	-
Er	ICP-MS	ppm	0.3	12.5	1.2	0.9	<	2.9	<	<	-	1.1	-	-	-
Eu	ICP-MS	ppm	0.09	0	0.83	0.38	0.37	1.5	-	-	-	0.77	-	-	-
Fe	XRF	ppm	78	0	15711	7016	7382	26076	-	-	-	14219	-	-	-
Fe	ICP-AES	ppm partial	2300	0	17763	7966	8500	30800	-	-	-	14850	-	-	-
Ga	XRF	ppm	10	0	25	3	21	31	-	-	-	25	-	-	-
Gd	ICP-MS	ppm	0.5	0	3.6	2.2	0.5	8.2	-	-	-	3.2	-	-	-
Hf	ICP-MS	ppm	0.12	0	4.42	1.58	2.81	7.37	-	-	-	3.85	-	-	-
Ho	ICP-MS	ppm	0.09	12.5	0.44	0.32	<	1.1	<	<	-	0.39	-	-	-
K	XRF	ppm	25	0	30013	8773	18592	41417	-	-	-	30171	-	-	-
K	ICP-AES	ppm partial	100	0	4839	3684	1300	10500	-	-	-	3400	-	-	-
La	ICP-MS	ppm	0.55	0	42	21	5.6	71	-	-	-	44	-	-	-
La	ICP-AES	ppm partial	1.3	0	45	23	5.2	72	-	-	-	47	-	-	-
Li	ICP-AES	ppm partial	3.5	0	15.4	8.0	6.8	28.9	-	-	-	13.6	-	-	-
Lu	ICP-MS	ppm	0.03	0	0.16	0.11	0.03	0.32	-	-	-	0.17	-	-	-
Mg	XRF	ppm	543	0	3491	2388	1447	8141	-	-	-	2291	-	-	-
Mg	ICP-AES	ppm partial	50	0	3954	2724	1500	9200	-	-	-	2650	-	-	-
Mn	XRF	ppm	93	0	302	101	132	419	-	-	-	318	-	-	-
Mn	ICP-AES	ppm partial	50	0	277	112	112	417	-	-	-	292	-	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	31357	2886	28048	37026	-	-	-	31090	-	-	-
Na	ICP-AES	ppm partial	150	0	700	82	600	826	-	-	-	700	-	-	-
Nb	XRF	ppm	7	25	10	2	<	14	<	<	<	11	-	-	-
Nb	ICP-MS	ppm	0.16	0	7.6	3.8	1.2	11	-	-	-	8.8	-	-	-
Nd	ICP-MS	ppm	0.2	0	28	15	3.8	48	-	-	-	24	-	-	-
Ni	XRF	ppm	14	87.5	-	-	<	16	<	<	<	<	<	-	-
Ni	ICP-AES	ppm partial	3.5	0	5.8	3.0	3.6	13	-	-	-	4.8	-	-	-
P	XRF	ppm	105	0	453	379	<	1260	<	<	-	301	-	-	-
P	ICP-AES	ppm partial	6	0	411	352	66	1100	-	-	-	279	-	-	-
Pb	XRF	ppm	14	0	34	11	23	55	-	-	-	33	-	-	-
Pb	ICP-AES	ppm partial	8.7	62.5	-	-	<	13	<	<	<	<	11	-	-
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	8.1	4.2	1.0	13.8	-	-	-	7.6	-	-	-
Rb	XRF	ppm	5.5	0	64	17	36	89	-	-	-	69	-	-	-
Rb	ICP-MS	ppm	0.6	0	61	15	33	80	-	-	-	64	-	-	-
S	XRF	ppm	70	87.5	-	-	<	140	<	<	<	<	<	-	-
S	ICP-AES	ppm partial	14.3	37.5	56	85	<	247	<	<	<	19	-	-	-
Sc	ICP-MS	ppm	2.8	50	-	-	<	7.5	<	<	<	<	5.9	-	-
Sc	ICP-AES	ppm partial	0.4	0	2.1	1.2	0.92	4.6	-	-	-	1.8	-	-	-
Se	GFAAS	ppm partial	0.055	100	-	-	<	<	<	<	<	<	<	<	<
Sm	ICP-MS	ppm	0.5	0	4.4	2.5	0.64	9.0	-	-	-	3.8	-	-	-
Sr	XRF	ppm	4	0	436	384	129	1320	-	-	-	327	-	-	-
Sr	ICP-AES	ppm partial	1.2	0	14	9.7	4.8	35	-	-	-	12	-	-	-
Ta	ICP-MS	ppm	0.06	0	0.38	0.15	0.06	0.54	-	-	-	0.41	-	-	-
Tb	ICP-MS	ppm	0.08	12.5	0.50	0.30	<	1.2	<	<	-	0.46	-	-	-
Te	GFAAS	ppb partial	5	87.5	-	-	<	5	<	<	<	<	<	-	-
Th	ICP-MS	ppm	0.13	0	8.5	6.7	1.5	23	-	-	-	6.8	-	-	-
Th	ICP-AES	ppm partial	5.6	12.5	14	7	<	28	<	<	-	13	-	-	-
Ti	XRF	ppm	30	0	1758	1206	576	3894	-	-	-	1200	-	-	-
Ti	ICP-MS	ppm	10	0	1738	1253	528	3960	-	-	-	1155	-	-	-
Ti	ICP-AES	ppm partial	2	0	1275	961	428	2810	-	-	-	836	-	-	-
Tm	ICP-MS	ppm	0.03	0	0.17	0.12	0.03	0.37	-	-	-	0.15	-	-	-
U	ICP-MS	ppm	0.08	0	1.41	1.15	0.51	3.57	-	-	-	1.03	-	-	-
V	XRF	ppm	6	0	30	22	13	74	-	-	-	20	-	-	-
V	ICP-MS	ppm	2	0	19	16	6.8	51	-	-	-	9.7	-	-	-
V	ICP-AES	ppm partial	0.6	0	19	16	5.3	47	-	-	-	9.4	-	-	-
Y	XRF	ppm	2.8	0	12	8	3	28	-	-	-	12	-	-	-
Y	ICP-MS	ppm	0.1	0	13	9.2	1.8	31	-	-	-	13	-	-	-
Y	ICP-AES	ppm partial	0.15	0	6.8	4.4	0.87	15	-	-	-	6.4	-	-	-
Yb	ICP-MS	ppm	0.22	12.5	1.1	0.74	<	2.3	<	<	-	1.2	-	-	-
Zn	XRF	ppm	4	0	52	19	30	79	-	-	-	51	-	-	-
Zn	ICP-AES	ppm partial	2	0	46	20	21	72	-	-	-	46	-	-	-
Zr	XRF	ppm	6	0	191	75	86	319	-	-	-	166	-	-	-
Zr	ICP-MS	ppm	3	0	172	66	85	289	-	-	-	147	-	-	-

Table 40. Chemical concentration summary statistics for map unit 45.

Map unit	**45**	**Quartz monzodiorite, quartz monzonite and granodiorite (1.90 - 1.86 Ga)**
Number of samples	16	
Unit area	1560.4	km^2
Percent of bedrock	0.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

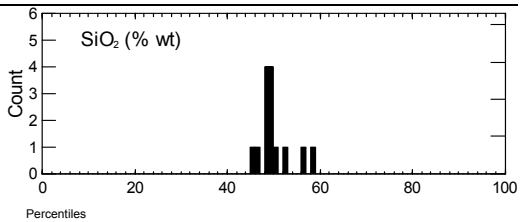


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**61.04**	5.77	53.00	74.10	-	-	55.35	**60.90**	64.40	-	-
TiO_2	XRF	%	**0.005**	0	**0.73**	0.35	0.14	1.64	-	-	0.53	**0.70**	0.87	-	-
Al_2O_3	XRF	%	**0.02**	0	**15.77**	1.13	14.00	18.90	-	-	14.95	**15.75**	16.35	-	-
FeO	XRF	%	**0.01**	0	**5.81**	2.08	1.24	8.84	-	-	4.59	**5.79**	7.42	-	-
MnO	XRF	%	**0.012**	0	**0.099**	0.037	0.023	0.157	-	-	0.080	**0.101**	0.125	-	-
MgO	XRF	%	**0.09**	0	**2.82**	1.73	0.23	7.00	-	-	1.54	**2.36**	4.10	-	-
CaO	XRF	%	**0.004**	0	**4.41**	1.80	1.20	7.10	-	-	3.50	**4.35**	5.97	-	-
Na_2O	XRF	%	**0.05**	0	**4.26**	0.70	2.85	5.53	-	-	3.76	**4.34**	4.64	-	-
K_2O	XRF	%	**0.003**	0	**3.57**	1.12	1.74	6.21	-	-	2.74	**3.58**	4.17	-	-
P_2O_5	XRF	%	**0.024**	0	**0.340**	0.275	0.034	1.260	-	-	0.233	**0.283**	0.357	-	-
C_{tot}	Leco	%	**0.05**	93.8	**-**	-	<	0.08	<	<	<	**<**	<	<	-
$C_{non-carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	25	**0.09**	0.04	<	0.18	<	<	<	**0.08**	0.11	-	-
Al	XRF	ppm	**106**	0	**83418**	5999	74060	99981	-	-	79086	**83318**	86492	-	-
Al	ICP-AES	ppm partial	**1100**	0	**9581**	4761	3400	19300	-	-	6350	**8800**	12400	-	-
As	GFAAS	ppm partial	**3**	87.5	**-**	-	<	6.2	<	<	<	**<**	<	5.0	-
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	87.5	**-**	-	<	6	<	<	<	**<**	<	5	-
Ba	XRF	ppm	**21**	0	**844**	226	512	1437	-	-	765	**839**	961	-	-
Ba	ICP-AES	ppm partial	**10**	0	**127**	153	21	614	-	-	38	**55**	174	-	-
Bi	GFAAS	ppm partial	**0.04**	87.5	**-**	-	<	0.08	<	<	<	**<**	<	0.05	-
Ca	XRF	ppm	**29**	0	**31510**	12870	8580	50765	-	-	25025	**31103**	42650	-	-
Ca	ICP-AES	ppm partial	**50**	0	**6900**	3233	1600	13900	-	-	4500	**6600**	8450	-	-
Ce	ICP-MS	ppm	**0.22**	0	**75**	30	39	172	-	-	58	**73**	81	-	-
Cl	XRF	ppm	**45**	0	**806**	1053	110	4420	-	-	280	**520**	670	-	-
Co	ICP-MS	ppm	**2**	0	**17**	8.5	4.0	29	-	-	9.5	**16**	25	-	-
Co	ICP-AES	ppm partial	**0.9**	0	**10**	5.1	1.6	20	-	-	7.6	**9.2**	13	-	-
Cr	XRF	ppm	**19**	12.5	**86**	111	<	448	<	<	32	**47**	74	-	-
Cr	ICP-AES	ppm partial	**5**	0	**50**	69	5.5	272	-	-	14	**28**	40	-	-
Cu	XRF	ppm	**17**	37.5	**49**	39	<	127	<	<	<	**40**	74	-	-
Cu	ICP-AES	ppm partial	**3**	12.5	**36**	35	<	107	<	<	6.2	**25**	53	-	-
Dy	ICP-MS	ppm	**0.55**	0	**3.7**	1.8	1.0	8.4	-	-	2.6	**3.3**	4.3	-	-
Er	ICP-MS	ppm	**0.3**	0	**1.9**	0.9	0.5	4.4	-	-	1.4	**1.7**	2.1	-	-
Eu	ICP-MS	ppm	**0.09**	0	**1.2**	0.47	0.35	2.4	-	-	0.95	**1.2**	1.3	-	-
Fe	XRF	ppm	**78**	0	**45113**	16131	9635	68687	-	-	35664	**44949**	57653	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**30550**	10269	9500	52000	-	-	24350	**29300**	35450	-	-
Ga	XRF	ppm	**10**	0	**26**	3	20	31	-	-	24	**26**	28	-	-
Gd	ICP-MS	ppm	**0.5**	0	**5.2**	2.0	1.8	9.2	-	-	4.0	**4.8**	6.2	-	-
Hf	ICP-MS	ppm	**0.12**	0	**4.29**	1.59	1.69	7.42	-	-	3.15	**3.95**	5.17	-	-
Ho	ICP-MS	ppm	**0.09**	0	**0.70**	0.34	0.22	1.6	-	-	0.50	**0.63**	0.83	-	-
K	XRF	ppm	**25**	0	**29606**	9279	14442	51543	-	-	22701	**29714**	34611	-	-
K	ICP-AES	ppm partial	**100**	0	**6819**	4833	1800	18600	-	-	3050	**5800**	9100	-	-
La	ICP-MS	ppm	**0.55**	0	**38**	15	26	89	-	-	29	**34**	39	-	-
La	ICP-AES	ppm partial	**1.3**	0	**31**	13	10	70	-	-	26	**29**	34	-	-
Li	ICP-AES	ppm partial	**3.5**	0	**19.3**	9.1	5.2	37.9	-	-	13.4	**17.4**	24.3	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.26**	0.10	0.11	0.49	-	-	0.21	**0.25**	0.28	-	-
Mg	XRF	ppm	**543**	0	**16999**	10426	1387	42210	-	-	9286	**14231**	24723	-	-
Mg	ICP-AES	ppm partial	**50**	0	**8488**	5488	1300	23300	-	-	5950	**7050**	9700	-	-
Mn	XRF	ppm	**93**	0	**767**	287	178	1217	-	-	620	**783**	969	-	-
Mn	ICP-AES	ppm partial	**50**	0	**297**	83	138	481	-	-	263	**299**	351	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	93.8	**-**	-	<	4	<	<	<	**<**	<	<	-
Na	XRF	ppm	**371**	0	**31602**	5201	21147	41033	-	-	27862	**32203**	34429	-	-
Na	ICP-AES	ppm partial	**150**	0	**781**	152	500	1100	-	-	650	**800**	900	-	-
Nb	XRF	ppm	**7**	0	**14**	5	8	23	-	-	10	**13**	17	-	-
Nb	ICP-MS	ppm	**0.16**	0	**11**	4.6	5.4	20	-	-	6.9	**11**	14	-	-
Nd	ICP-MS	ppm	**0.2**	0	**32**	13	13	74	-	-	26	**30**	35	-	-
Ni	XRF	ppm	**14**	25	**40**	52	<	215	<	<	<	**22**	35	-	-
Ni	ICP-AES	ppm partial	**3.5**	0	**24**	34	3.8	132	-	-	7.4	**12**	18	-	-
P	XRF	ppm	**105**	0	**1482**	1199	148	5494	-	-	1016	**1234**	1557	-	-
P	ICP-AES	ppm partial	**6**	0	**1339**	1065	127	4890	-	-	945	**1130**	1365	-	-
Pb	XRF	ppm	**14**	0	**29**	7	14	43	-	-	26	**29**	33	-	-
Pb	ICP-AES	ppm partial	**8.7**	68.8	***8***	2	<	13	<	<	<	**<**	10	-	-
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**8.7**	3.6	3.9	20.3	-	-	7.1	**8.2**	9.1	-	-
Rb	XRF	ppm	**5.5**	0	**135**	58	64	259	-	-	91	**120**	170	-	-
Rb	ICP-MS	ppm	**0.6**	0	**122**	58	48	248	-	-	81	**111**	152	-	-
S	XRF	ppm	**70**	75	***159***	*257*	<	940	<	<	<	**<**	<	524	-
S	ICP-AES	ppm partial	**14.3**	12.5	**184**	329	<	1180	<	<	21	**32**	140	-	-
Sc	ICP-MS	ppm	**2.8**	6.3	**13**	5.6	<	21	<	-	9.7	**14**	17	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**3.1**	0.92	1.1	4.3	-	-	2.6	**3.2**	3.8	-	-
Se	GFAAS	ppm partial	**0.055**	93.8	**-**	-	<	0.06	<	<	<	**<**	<	<	-
Sm	ICP-MS	ppm	**0.5**	0	**5.6**	2.2	2.2	12	-	-	4.5	**5.1**	6.6	-	-
Sr	XRF	ppm	**4**	0	**588**	275	91	1069	-	-	491	**613**	727	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**18**	7.3	7.4	34	-	-	14	**17**	20	-	-
Ta	ICP-MS	ppm	**0.06**	0	**0.94**	0.62	0.31	2.7	-	-	0.54	**0.86**	1.0	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.67**	0.29	0.15	1.3	-	-	0.52	**0.61**	0.79	-	-
Te	GFAAS	ppb partial	**5**	81.3	**-**	-	<	13	<	<	<	**<**	<	8	-
Th	ICP-MS	ppm	**0.13**	0	**12**	8.0	2.0	33	-	-	6.3	**9.4**	18	-	-
Th	ICP-AES	ppm partial	**5.6**	6.3	**16**	9	<	39	<	-	11	**14**	21	-	-
Ti	XRF	ppm	**30**	0	**4356**	2082	846	9840	-	-	3192	**4194**	5190	-	-
Ti	ICP-MS	ppm	**10**	0	**4120**	2038	729	9650	-	-	2955	**4125**	4615	-	-
Ti	ICP-AES	ppm partial	**2**	0	**2367**	1030	354	4370	-	-	1870	**2175**	3105	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.28**	0.13	0.08	0.63	-	-	0.22	**0.26**	0.29	-	-
U	ICP-MS	ppm	**0.08**	0	**3.40**	2.00	1.01	7.40	-	-	1.72	**3.05**	4.78	-	-
V	XRF	ppm	**6**	0	**129**	59	14	235	-	-	95	**124**	172	-	-
V	ICP-MS	ppm	**2**	0	**101**	51	6.7	192	-	-	70	**96**	134	-	-
V	ICP-AES	ppm partial	**0.6**	0	**68**	32	4.5	137	-	-	51	**65**	91	-	-
Y	XRF	ppm	**2.8**	0	**21**	9	7	46	-	-	16	**19**	22	-	-
Y	ICP-MS	ppm	**0.1**	0	**22**	11	6.5	52	-	-	16	**20**	25	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**13**	9.2	3.0	41	-	-	6.8	**11**	14	-	-
Yb	ICP-MS	ppm	**0.22**	0	**1.8**	0.88	0.38	4.3	-	-	1.3	**1.8**	2.0	-	-
Zn	XRF	ppm	**4**	0	**70**	32	8	136	-	-	56	**71**	91	-	-
Zn	ICP-AES	ppm partial	**2**	6.3	**38**	20	<	80	<	-	26	**33**	55	-	-
Zr	XRF	ppm	**6**	0	**205**	76	110	359	-	-	149	**189**	255	-	-
Zr	ICP-MS	ppm	**3**	0	**172**	78	46	317	-	-	116	**154**	218	-	-

Table 41. Chemical concentration summary statistics for map unit 46.

Map unit	46	Gabbro
Number of samples	14	
Unit area	95.6	km^2
Percent of bedrock	0.03	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

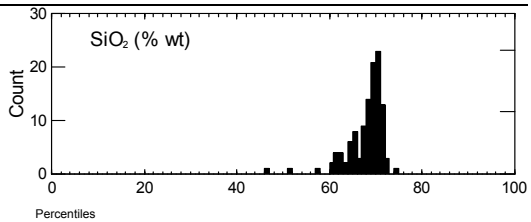


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	50.19	3.60	45.60	58.90	-	-	48.70	49.25	50.40	-	-
TiO_2	XRF	%	0.005	0	1.19	0.60	0.16	2.33	-	-	0.87	1.17	1.35	-	-
Al_2O_3	XRF	%	0.02	0	15.99	5.76	3.84	29.90	-	-	13.20	16.40	18.10	-	-
FeO	XRF	%	0.01	0	9.43	2.93	2.44	13.40	-	-	7.49	9.18	11.70	-	-
MnO	XRF	%	0.012	0	0.149	0.054	0.042	0.224	-	-	0.116	0.140	0.201	-	-
MgO	XRF	%	0.09	0	6.35	5.00	1.99	20.30	-	-	3.84	4.78	6.17	-	-
CaO	XRF	%	0.004	0	8.67	2.69	4.89	15.90	-	-	6.72	8.47	9.96	-	-
Na_2O	XRF	%	0.05	0	2.81	1.33	0.19	4.19	-	-	1.62	3.42	3.74	-	-
K_2O	XRF	%	0.003	0	1.39	1.08	0.07	3.33	-	-	0.30	1.32	2.29	-	-
P_2O_5	XRF	%	0.024	7.1	0.514	0.360	<	1.180	<	-	0.240	0.483	0.781	-	-
C_{tot}	Leco	%	0.05	92.9	-	-	<	0.17	<	<	<	<	<	<	-
$C_{non\text{-}carb}$	Leco	%	0.05	92.9	-	-	<	0.05	<	<	<	<	<	<	-
F	Ion	%	0.055	42.9	0.08	0.03	<	0.14	<	<	<	0.07	0.10	-	-
Al	XRF	ppm	106	0	84592	30465	20314	158171	-	-	69828	86756	95749	-	-
Al	ICP-AES	ppm partial	1100	0	26771	40351	1900	165000	-	-	11300	16350	24200	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	100	-	-	<	<	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	823	858	25	2907	-	-	114	654	999	-	-
Ba	ICP-AES	ppm partial	10	0	558	798	13	2690	-	-	52	228	702	-	-
Bi	GFAAS	ppm partial	0.04	100	-	-	<	<	<	<	<	<	<	<	<
Ca	XRF	ppm	29	0	61976	19255	34964	113685	-	-	48048	60525	71214	-	-
Ca	ICP-AES	ppm partial	50	0	17796	24175	3200	100000	-	-	7900	11500	15500	-	-
Ce	ICP-MS	ppm	0.22	0	70	52	5.2	171	-	-	21	61	106	-	-
Cl	XRF	ppm	45	0	338	208	70	710	-	-	170	290	530	-	-
Co	ICP-MS	ppm	2	0	37	18	10	73	-	-	27	33	46	-	-
Co	ICP-AES	ppm partial	0.9	0	19	8.7	3.7	34	-	-	15	17	23	-	-
Cr	XRF	ppm	19	0	219	340	22	1252	-	-	63	86	227	-	-
Cr	ICP-AES	ppm partial	5	0	72	118	9.6	459	-	-	12	29	62	-	-
Cu	XRF	ppm	17	7.1	56	34	<	136	<	-	33	41	68	-	-
Cu	ICP-AES	ppm partial	3	0	53	38	12	140	-	-	30	35	70	-	-
Dy	ICP-MS	ppm	0.55	7.1	4.4	2.5	<	11	<	-	2.6	4.1	5.3	-	-
Er	ICP-MS	ppm	0.3	7.1	2.3	1.4	<	6.3	<	-	1.4	2.0	2.5	-	-
Eu	ICP-MS	ppm	0.09	0	1.7	0.76	0.44	2.9	-	-	1.0	1.9	2.3	-	-
Fe	XRF	ppm	78	0	73248	22727	18959	104118	-	-	58197	71329	90909	-	-
Fe	ICP-AES	ppm partial	2300	0	35550	15629	8100	62000	-	-	26500	33500	46800	-	-
Ga	XRF	ppm	10	0	23	6	10	32	-	-	22	25	27	-	-
Gd	ICP-MS	ppm	0.5	0	5.9	3.1	0.5	11.2	-	-	3.7	6.0	7.9	-	-
Hf	ICP-MS	ppm	0.12	0	3.16	2.08	0.15	6.40	-	-	1.22	3.63	4.28	-	-
Ho	ICP-MS	ppm	0.09	7.1	0.82	0.52	<	2.3	<	-	0.46	0.77	0.92	-	-
K	XRF	ppm	25	0	11570	8956	589	27639	-	-	2482	10956	19007	-	-
K	ICP-AES	ppm partial	100	0	7286	6367	100	16900	-	-	600	7350	11900	-	-
La	ICP-MS	ppm	0.55	0	34	26	2.9	83	-	-	9.4	29	53	-	-
La	ICP-AES	ppm partial	1.3	14.3	27	27	<	84	<	<	4.1	18	42	-	-
Li	ICP-AES	ppm partial	3.5	35.7	13.2	12.0	<	37.8	<	<	<	8.8	16.8	-	-
Lu	ICP-MS	ppm	0.03	7.1	0.29	0.18	<	0.79	<	-	0.17	0.26	0.37	-	-
Mg	XRF	ppm	543	0	38309	30156	12000	122409	-	-	23155	28823	37205	-	-
Mg	ICP-AES	ppm partial	50	0	12479	6791	3100	29700	-	-	7500	11450	17300	-	-
Mn	XRF	ppm	93	0	1155	419	326	1736	-	-	899	1085	1558	-	-
Mn	ICP-AES	ppm partial	50	0	303	194	98	693	-	-	121	263	491	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	20880	9861	1410	31090	-	-	12020	25339	27751	-	-
Na	ICP-AES	ppm partial	150	0	2056	2596	300	10600	-	-	1000	1250	2000	-	-
Nb	XRF	ppm	7	42.9	15	7	<	29	<	<	<	12	17	-	-
Nb	ICP-MS	ppm	0.16	0	11	8.9	0.35	27	-	-	5.0	8.8	15	-	-
Nd	ICP-MS	ppm	0.2	0	34	21	2.8	71	-	-	15	36	48	-	-
Ni	XRF	ppm	14	7.1	92	132	<	481	<	-	30	46	77	-	-
Ni	ICP-AES	ppm partial	3.5	0	51	71	7.6	250	-	-	14	24	47	-	-
P	XRF	ppm	105	0	2241	1570	<	5145	<	-	1046	2106	3405	-	-
P	ICP-AES	ppm partial	6	0	2077	1475	76	4630	-	-	739	2020	3130	-	-
Pb	XRF	ppm	14	0	21	5	14	29	-	-	17	20	24	-	-
Pb	ICP-AES	ppm partial	8.7	92.9	-	-	<	9	<	<	<	<	<	<	-
Pd	GFAAS	ppb partial	5	85.7	-	-	<	20	<	<	<	<	<	11	-
Pr	ICP-MS	ppm	0.74	7.1	8.8	5.8	<	20.0	<	-	3.4	8.3	13.0	-	-
Rb	XRF	ppm	5.5	28.6	31	22	<	70	<	<	<	28	52	-	-
Rb	ICP-MS	ppm	0.6	14.3	28	23	<	65	<	<	3.4	25	46	-	-
S	XRF	ppm	70	21.4	913	994	<	3560	<	<	160	740	950	-	-
S	ICP-AES	ppm partial	14.3	0	1075	1173	25	3960	-	-	158	997	1250	-	-
Sc	ICP-MS	ppm	2.8	0	28	12	8.4	45	-	-	17	25	38	-	-
Sc	ICP-AES	ppm partial	0.4	0	3.9	2.2	0.60	8.8	-	-	2.7	3.5	4.2	-	-
Se	GFAAS	ppm partial	0.055	50	*0.13*	*0.19*	<	0.67	<	<	<	<	0.12	-	-
Sm	ICP-MS	ppm	0.5	0	6.2	3.3	0.61	12	-	-	2.9	6.8	8.9	-	-
Sr	XRF	ppm	4	0	967	701	54	2190	-	-	527	671	1455	-	-
Sr	ICP-AES	ppm partial	1.2	0	182	477	7.9	1830	-	-	27	37	82	-	-
Ta	ICP-MS	ppm	0.06	7.1	0.54	0.41	<	1.3	<	-	0.20	0.43	0.81	-	-
Tb	ICP-MS	ppm	0.08	0	0.82	0.45	0.08	1.7	-	-	0.51	0.78	1.0	-	-
Te	GFAAS	ppb partial	5	64.3	*5*	*7*	<	20	<	<	<	<	8	-	-
Th	ICP-MS	ppm	0.13	14.3	2.8	2.9	<	10	<	<	0.55	1.8	4.4	-	-
Th	ICP-AES	ppm partial	5.6	57.1	*6*	*5*	<	19	<	<	<	<	8	-	-
Ti	XRF	ppm	30	0	7122	3600	972	13980	-	-	5226	6990	8100	-	-
Ti	ICP-MS	ppm	10	0	6894	3458	910	12800	-	-	5180	6705	8160	-	-
Ti	ICP-AES	ppm partial	2	0	2426	1744	180	6090	-	-	848	2225	3900	-	-
Tm	ICP-MS	ppm	0.03	7.1	0.31	0.19	<	0.83	<	-	0.17	0.27	0.37	-	-
U	ICP-MS	ppm	0.08	14.3	0.88	1.00	<	3.80	<	<	0.22	0.57	1.13	-	-
V	XRF	ppm	6	0	219	86	68	374	-	-	150	204	278	-	-
V	ICP-MS	ppm	2	0	190	85	57	349	-	-	133	172	268	-	-
V	ICP-AES	ppm partial	0.6	0	86	51	17	195	-	-	58	76	122	-	-
Y	XRF	ppm	2.8	7.1	22	13	<	55	<	-	13	20	27	-	-
Y	ICP-MS	ppm	0.1	0	24	15	2.2	63	-	-	13	24	28	-	-
Y	ICP-AES	ppm partial	0.15	7.1	7.2	4.9	<	17	<	-	2.6	6.7	10	-	-
Yb	ICP-MS	ppm	0.22	7.1	2.0	1.3	<	5.5	<	-	1.2	1.8	2.6	-	-
Zn	XRF	ppm	4	0	107	38	21	161	-	-	88	116	129	-	-
Zn	ICP-AES	ppm partial	2	0	44	28	9.3	98	-	-	19	40	63	-	-
Zr	XRF	ppm	6	0	151	106	7	342	-	-	55	168	209	-	-
Zr	ICP-MS	ppm	3	0	137	97	6.2	308	-	-	41	167	206	-	-

Table 42. Chemical concentration summary statistics for map unit 47.

Map unit	47	Mica schists and intercalated black schists
Number of samples	116	
Unit area	7951.5	km^2
Percent of bedrock	2.4	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

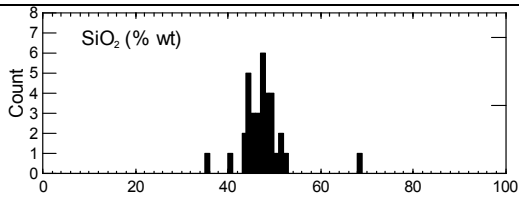


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
									Percentiles						
SiO_2	XRF	%	0.02	0	67.93	4.03	46.70	74.10	61.12	62.90	66.20	69.05	70.55	71.38	71.80
TiO_2	XRF	%	0.005	0	0.71	0.10	0.55	1.13	0.59	0.61	0.65	0.69	0.74	0.82	0.86
Al_2O_3	XRF	%	0.02	0	13.83	1.48	10.80	21.10	12.30	12.50	12.90	13.50	14.30	15.70	16.90
FeO	XRF	%	0.01	0	5.36	1.06	3.96	9.78	4.23	4.49	4.74	5.09	5.58	6.51	7.10
MnO	XRF	%	0.012	0	0.073	0.024	0.041	0.289	0.056	0.059	0.064	0.069	0.076	0.087	0.095
MgO	XRF	%	0.09	0	2.51	0.64	1.31	6.24	1.92	2.01	2.14	2.35	2.66	3.17	3.79
CaO	XRF	%	0.004	0	2.28	0.58	0.28	4.63	1.58	1.73	2.01	2.21	2.53	2.84	3.09
Na_2O	XRF	%	0.05	0	2.93	0.54	0.73	4.21	2.01	2.39	2.71	2.99	3.20	3.45	3.97
K_2O	XRF	%	0.003	0	2.57	0.52	1.06	4.70	1.96	2.03	2.22	2.49	2.83	3.07	3.49
P_2O_5	XRF	%	0.024	0	0.158	0.032	0.058	0.406	0.128	0.137	0.144	0.155	0.164	0.177	0.191
C_{tot}	Leco	%	0.05	40.5	0.29	0.59	<	5.5	<	<	<	0.09	0.30	0.77	1.1
$C_{non\text{-}carb}$	Leco	%	0.05	48.3	0.29	0.57	<	5.4	<	<	<	0.08	0.28	0.75	0.97
F	Ion	%	0.055	42.2	0.07	0.02	<	0.17	<	<	<	0.06	0.07	0.08	0.09
Al	XRF	ppm	106	0	73182	7813	57132	111619	65067	66125	68241	71415	75647	83053	89401
Al	ICP-AES	ppm partial	1100	0	26072	6824	12600	65100	18620	19910	22050	24650	28150	33980	37490
As	GFAAS	ppm partial	3	92.2	-	-	<	65	<	<	<	<	<	<	5.7
Au	GFAAS	ppb partial	2.5	98.3	-	-	<	13.1	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	505	119	239	917	307	360	430	503	575	645	689
Ba	ICP-AES	ppm partial	10	0	378	117	60	624	156	201	305	392	463	522	552
Bi	GFAAS	ppm partial	0.04	19	0.10	0.08	<	0.70	<	<	0.04	0.09	0.13	0.18	0.20
Ca	XRF	ppm	29	0	16331	4176	1973	33105	11290	12348	14336	15766	18054	20285	22101
Ca	ICP-AES	ppm partial	50	0	2383	1897	307	11100	1040	1221	1430	1665	2545	4631	7180
Ce	ICP-MS	ppm	0.22	0	63	16	27	156	41	50	56	61	69	75	83
Cl	XRF	ppm	45	15.5	103	69	<	396	<	<	54	80	122	190	248
Co	ICP-MS	ppm	2	0	16	5.1	5.7	48	11	12	13	15	17	22	24
Co	ICP-AES	ppm partial	0.9	0	16	4.3	6.9	46	12	13	14	16	17	21	23
Cr	XRF	ppm	19	0.9	107	27	<	260	80	86	93	106	119	133	142
Cr	ICP-AES	ppm partial	5	0.9	87	23	<	165	47	69	77	89	99	110	116
Cu	XRF	ppm	17	32.8	30	38	<	410	<	<	<	21	35	46	54
Cu	ICP-AES	ppm partial	3	0.9	31	35	<	380	9.5	12	19	26	36	47	56
Dy	ICP-MS	ppm	0.55	0	3.7	0.8	2.2	8.8	2.8	3.0	3.2	3.6	4.1	4.3	4.5
Er	ICP-MS	ppm	0.3	0	2.1	0.6	0.9	6.7	1.5	1.7	1.9	2.1	2.3	2.5	2.6
Eu	ICP-MS	ppm	0.09	0	1.1	0.14	0.75	1.7	0.86	0.91	0.97	1.1	1.2	1.2	1.3
Fe	XRF	ppm	78	0	41624	8252	30761	75991	32898	34911	36845	39534	43349	50575	55167
Fe	ICP-AES	ppm partial	2300	0	43779	8570	27400	83900	35120	36220	39400	41900	45100	51900	57540
Ga	XRF	ppm	10	0	22	4	17	35	18	18	19	22	24	26	29
Gd	ICP-MS	ppm	0.5	0	4.6	0.7	2.5	7.4	3.4	3.7	4.3	4.6	5.2	5.4	5.5
Hf	ICP-MS	ppm	0.12	0	4.64	1.05	2.68	8.22	3.28	3.53	3.87	4.49	5.18	5.70	6.67
Ho	ICP-MS	ppm	0.09	0	0.74	0.18	0.42	2.2	0.54	0.59	0.65	0.73	0.80	0.88	0.91
K	XRF	ppm	25	0	21356	4283	8798	39010	16235	16866	18385	20667	23489	25481	28975
K	ICP-AES	ppm partial	100	0	18171	3854	2550	34600	13370	14600	16000	17900	20100	22270	23980
La	ICP-MS	ppm	0.55	0	32	8.6	14	85	20	24	28	31	35	38	43
La	ICP-AES	ppm partial	1.3	0	26	8.3	10	81	17	18	22	25	30	33	39
Li	ICP-AES	ppm partial	3.5	0	31.0	19.7	10.2	138	13.8	18.2	20.9	25.3	32.8	56.0	68.5
Lu	ICP-MS	ppm	0.03	0	0.31	0.09	0.10	0.98	0.20	0.25	0.28	0.30	0.35	0.39	0.40
Mg	XRF	ppm	543	0	15135	3847	7899	37627	11553	12126	12904	14171	16010	19121	22872
Mg	ICP-AES	ppm partial	50	0	15744	3573	8300	31300	11900	12400	13600	14800	17050	20300	23550
Mn	XRF	ppm	93	0	566	186	318	2240	434	457	496	535	589	674	736
Mn	ICP-AES	ppm partial	50	0	464	178	69	1730	237	293	380	459	526	581	676
Mo	XRF	ppm	2.6	96.6	-	-	<	20	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	97.4	-	-	<	20	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	21770	3977	5417	31238	14936	17734	20108	22186	23744	25599	29487
Na	ICP-AES	ppm partial	150	0	720	312	300	2400	458	500	574	631	762	1023	1276
Nb	XRF	ppm	7	6	12	16	<	179	<	8	9	10	12	14	15
Nb	ICP-MS	ppm	0.16	0	11	14	5.3	159	7.7	8.0	8.6	9.3	10	11	12
Nd	ICP-MS	ppm	0.2	0	27	5.8	11	56	19	22	25	27	31	33	35
Ni	XRF	ppm	14	3.4	54	56	<	627	30	36	41	47	54	65	76
Ni	ICP-AES	ppm partial	3.5	0	47	54	3.9	605	28	30	36	40	48	56	65
P	XRF	ppm	105	0	689	140	253	1770	558	597	628	676	715	772	833
P	ICP-AES	ppm partial	6	0	597	139	59	1580	450	501	541	591	642	690	736
Pb	XRF	ppm	14	0	28	5	17	56	23	24	25	28	30	32	34
Pb	ICP-AES	ppm partial	8.7	70.7	7	3	<	22	<	<	<	<	9	11	12
Pd	GFAAS	ppb partial	5	99.1	-	-	<	10	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	7.4	1.7	3.2	16.9	5.0	6.0	6.6	7.3	8.2	8.8	9.6
Rb	XRF	ppm	5.5	0	95	23	36	186	68	72	81	91	107	128	137
Rb	ICP-MS	ppm	0.6	0	94	22	36	176	68	72	79	90	104	126	138
S	XRF	ppm	70	6.9	1370	4628	<	49700	<	130	319	645	1320	2185	3511
S	ICP-AES	ppm partial	14.3	0.9	1420	5203	<	56000	53	139	328	631	1295	2025	3697
Sc	ICP-MS	ppm	2.8	0	16	3.7	5.3	35	12	13	14	16	17	21	23
Sc	ICP-AES	ppm partial	0.4	0	13	2.8	4.1	21	7.7	9.9	12	14	15	17	18
Se	GFAAS	ppm partial	0.055	8.6	0.26	1.2	<	12.9	<	0.06	0.09	0.11	0.17	0.26	0.38
Sm	ICP-MS	ppm	0.5	0	5.1	0.94	2.5	9.7	3.7	4.2	4.6	5.1	5.6	6.2	6.6
Sr	XRF	ppm	4	0	239	105	63	917	133	169	196	227	262	294	341
Sr	ICP-AES	ppm partial	1.2	0	8.5	9.5	2.9	63	3.2	3.6	4.2	5.4	7.4	20	30
Ta	ICP-MS	ppm	0.06	0	0.75	0.69	0.20	8.0	0.54	0.58	0.62	0.68	0.76	0.83	0.90
Tb	ICP-MS	ppm	0.08	0	0.68	0.12	0.33	1.2	0.50	0.56	0.61	0.67	0.74	0.79	0.83
Te	GFAAS	ppb partial	5	10.3	15	12	<	108	<	<	8	13	17	27	37
Th	ICP-MS	ppm	0.13	0	8.6	1.7	1.3	14	6.3	6.9	7.7	8.5	9.4	11	11
Th	ICP-AES	ppm partial	5.6	0.9	10	3	<	21	6	7	7	9	11	14	15
Ti	XRF	ppm	30	0	4254	588	3294	6780	3546	3660	3900	4152	4464	4920	5130
Ti	ICP-MS	ppm	10	0	3883	592	2700	6690	3220	3244	3515	3750	4130	4570	4821
Ti	ICP-AES	ppm partial	2	0	3874	879	651	6200	2405	2882	3310	3935	4365	4900	5255
Tm	ICP-MS	ppm	0.03	0	0.31	0.09	0.12	1.08	0.21	0.25	0.28	0.31	0.34	0.38	0.40
U	ICP-MS	ppm	0.08	0	2.01	0.74	0.82	8.35	1.26	1.42	1.66	1.95	2.24	2.54	2.64
V	XRF	ppm	6	0	135	36	52	445	106	113	119	129	143	162	171
V	ICP-MS	ppm	2	0	108	36	12	416	80	87	94	103	113	134	149
V	ICP-AES	ppm partial	0.6	0	112	25	13	232	75	87	103	111	121	138	150
Y	XRF	ppm	2.8	0	24	6	13	72	17	18	21	24	27	29	31
Y	ICP-MS	ppm	0.1	0	23	5.3	12	64	17	18	20	22	24	26	27
Y	ICP-AES	ppm partial	0.15	0	10	3.3	4.5	25	6.2	6.8	8.1	9.9	12	14	16
Yb	ICP-MS	ppm	0.22	0	2.1	0.61	0.63	7.0	1.3	1.7	1.9	2.1	2.3	2.6	2.8
Zn	XRF	ppm	4	0	100	94	48	1081	67	72	79	87	102	119	132
Zn	ICP-AES	ppm partial	2	0	87	108	10	1220	55	59	66	73	87	98	114
Zr	XRF	ppm	6	0	206	48	133	424	149	158	176	197	228	261	293
Zr	ICP-MS	ppm	3	0	181	46	109	403	126	137	151	174	200	223	262

Table 43. Chemical concentration summary statistics for map unit 49.

Map unit	**49**	**Mafic metavolcanic rocks with metasedimentary intercalations**
Number of samples	34	
Unit area	2970.2	km^2
Percent of bedrock	0.9	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

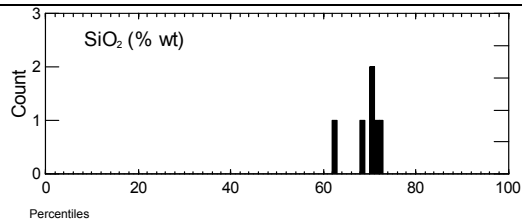


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**47.49**	4.97	35.80	68.90	41.18	43.82	44.90	**47.30**	49.00	51.07	52.18
TiO_2	XRF	%	**0.005**	0	**1.46**	0.75	0.28	3.99	0.47	0.59	0.91	**1.36**	1.89	2.30	2.61
Al_2O_3	XRF	%	**0.02**	0	**13.91**	1.35	11.70	17.20	12.30	12.39	12.90	**13.55**	14.70	16.00	16.16
FeO	XRF	%	**0.01**	0	**12.23**	3.47	2.03	20.90	6.56	8.35	10.50	**11.95**	14.80	15.65	17.38
MnO	XRF	%	**0.012**	0	**0.198**	0.045	0.063	0.263	0.101	0.146	0.179	**0.198**	0.235	0.248	0.261
MgO	XRF	%	**0.09**	0	**7.09**	2.53	0.89	14.60	4.12	4.76	5.53	**6.94**	8.34	10.63	11.86
CaO	XRF	%	**0.004**	0	**9.05**	2.85	0.23	13.00	3.23	4.34	8.22	**9.76**	11.10	11.85	12.54
Na_2O	XRF	%	**0.05**	0	**2.65**	0.99	0.95	4.81	1.10	1.54	2.00	**2.53**	3.12	4.03	4.79
K_2O	XRF	%	**0.003**	0	**0.36**	0.43	0.04	2.05	0.06	0.07	0.09	**0.23**	0.46	0.85	1.33
P_2O_5	XRF	%	**0.024**	0	**0.145**	0.117	0.037	0.691	0.043	0.059	0.070	**0.122**	0.167	0.244	0.286
C_{tot}	Leco	%	**0.05**	52.9	***0.19***	*0.32*	<	1.5	<	<	<	**<**	0.21	0.53	0.84
$C_{non\text{-}carb}$	Leco	%	**0.05**	82.4	**-**	-	<	0.05	<	<	<	**<**	<	0.05	0.05
F	Ion	%	**0.055**	76.5	***0.04***	*0.02*	<	0.11	<	<	<	**<**	<	0.07	0.08
Al	XRF	ppm	**106**	0	**73563**	7115	61893	90988	65067	65543	68241	**71680**	77763	84640	85486
Al	ICP-AES	ppm partial	**1100**	0	**20632**	16042	5500	66300	6360	7140	9020	**13950**	29100	42150	59480
As	GFAAS	ppm partial	**3**	61.8	***3.9***	*6.3*	<	31	<	<	<	**<**	4.4	8.1	18
Au	GFAAS	ppb partial	**2.5**	91.2	**-**	-	<	3.5	<	<	<	**<**	<	<	3.3
B	ICP-AES	ppm partial	**4.5**	82.4	**-**	-	<	8	<	<	<	**<**	<	6	7
Ba	XRF	ppm	**21**	0	**120**	134	32	724	35	38	51	**70**	120	301	305
Ba	ICP-AES	ppm partial	**10**	35.3	**28**	43	<	221	<	<	<	**15**	20	36	132
Bi	GFAAS	ppm partial	**0.04**	94.1	**-**	-	<	0.09	<	<	<	**<**	<	<	0.03
Ca	XRF	ppm	**29**	0	**64679**	20385	1673	92950	23080	31017	58773	**69748**	79365	84728	89661
Ca	ICP-AES	ppm partial	**50**	0	**14655**	12215	1400	60800	3408	4584	7700	**11550**	15100	32110	41720
Ce	ICP-MS	ppm	**0.22**	0	**20**	20	4.0	111	4.8	6.2	8.4	**15**	23	36	60
Cl	XRF	ppm	**45**	11.8	**497**	1311	<	7640	<	<	80	**169**	348	1011	1534
Co	ICP-MS	ppm	**2**	0	**46**	11	5.0	70	32	36	41	**47**	53	59	60
Co	ICP-AES	ppm partial	**0.9**	0	**24**	14	4.8	63	5.6	8.8	14	**20**	33	39	50
Cr	XRF	ppm	**19**	2.9	**201**	244	<	1132	28	38	77	**113**	229	392	890
Cr	ICP-AES	ppm partial	**5**	0	**78**	159	5.6	802	7.0	9.6	17	**28**	53	151	469
Cu	XRF	ppm	**17**	8.8	**100**	52	<	261	<	30	59	**97**	120	169	203
Cu	ICP-AES	ppm partial	**3**	5.9	**88**	55	<	247	<	25	48	**92**	105	149	200
Dy	ICP-MS	ppm	**0.55**	0	**4.4**	1.8	1.9	11	2.0	2.4	3.0	**4.1**	5.8	6.5	7.1
Er	ICP-MS	ppm	**0.3**	0	**2.5**	1.0	1.0	5.6	1.2	1.5	1.7	**2.4**	3.0	3.9	4.4
Eu	ICP-MS	ppm	**0.09**	0	**1.2**	0.61	0.47	3.8	0.49	0.57	0.77	**0.99**	1.4	1.7	1.8
Fe	XRF	ppm	**78**	0	**95035**	26954	15804	162393	50956	64841	81585	**92852**	114996	121601	135043
Fe	ICP-AES	ppm partial	**2300**	0	**42100**	35983	7600	147000	9560	13920	17300	**25800**	57800	87620	136200
Ga	XRF	ppm	**10**	0	**25**	4	18	33	19	19	21	**25**	28	29	31
Gd	ICP-MS	ppm	**0.5**	0	**4.3**	2.3	1.6	14.0	1.8	1.9	2.8	**3.8**	5.6	6.2	6.9
Hf	ICP-MS	ppm	**0.12**	0	**2.24**	1.73	0.72	9.85	0.86	0.92	1.07	**1.63**	3.02	3.81	4.83
Ho	ICP-MS	ppm	**0.09**	0	**0.87**	0.35	0.34	2.0	0.40	0.53	0.59	**0.82**	1.1	1.3	1.5
K	XRF	ppm	**25**	0	**3005**	3528	332	17015	457	606	780	**1917**	3851	7014	11047
K	ICP-AES	ppm partial	**100**	0	**637**	1258	100	6300	100	100	100	**197**	600	1260	3720
La	ICP-MS	ppm	**0.55**	0	**8.7**	9.3	1.6	44	2.1	2.4	3.7	**6.0**	9.8	14	35
La	ICP-AES	ppm partial	**1.3**	26.5	**5.5**	7.8	<	38	<	<	<	**3.0**	5.7	12	25
Li	ICP-AES	ppm partial	**3.5**	20.6	**11.3**	9.2	<	34.5	<	<	4.4	**7.1**	16.1	27.0	31.3
Lu	ICP-MS	ppm	**0.03**	0	**0.33**	0.13	0.16	0.62	0.17	0.21	0.23	**0.30**	0.41	0.52	0.59
Mg	XRF	ppm	**543**	0	**42771**	15250	5361	88038	24819	28709	33346	**41848**	50290	64099	71516
Mg	ICP-AES	ppm partial	**50**	0	**14929**	13069	4000	58400	4200	5050	5400	**10375**	21400	32900	45140
Mn	XRF	ppm	**93**	0	**1535**	349	488	2038	783	1132	1387	**1535**	1821	1922	2023
Mn	ICP-AES	ppm partial	**50**	0	**500**	331	108	1320	157	196	260	**357**	755	978	1184
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**19663**	7309	7049	35690	8192	11412	14840	**18736**	23150	29932	35527
Na	ICP-AES	ppm partial	**150**	2.9	**861**	700	<	2600	175	199	229	**577**	1300	1892	2168
Nb	XRF	ppm	**7**	50	***10***	*9*	<	54	<	<	<	**<**	13	16	19
Nb	ICP-MS	ppm	**0.16**	0	**6.9**	7.5	1.2	44	1.6	1.8	2.3	**4.2**	9.0	13	14
Nd	ICP-MS	ppm	**0.2**	0	**13**	11	3.3	61	3.6	4.1	6.5	**11**	16	23	28
Ni	XRF	ppm	**14**	5.9	**110**	114	<	615	<	50	60	**79**	111	154	394
Ni	ICP-AES	ppm partial	**3.5**	0	**52**	78	3.9	414	8.5	12	22	**32**	41	75	231
P	XRF	ppm	**105**	0	**632**	510	161	3013	187	257	305	**532**	728	1064	1247
P	ICP-AES	ppm partial	**6**	0	**552**	446	117	2670	139	225	284	**471**	629	898	1050
Pb	XRF	ppm	**14**	38.2	**16**	4	<	34	<	<	<	**14**	16	19	28
Pb	ICP-AES	ppm partial	**8.7**	94.1	**-**	-	<	10	<	<	<	**<**	<	<	7
Pd	GFAAS	ppb partial	**5**	79.4	***3***	*5*	<	23	<	<	<	**<**	<	7	19
Pr	ICP-MS	ppm	**0.74**	5.9	**2.8**	2.5	<	13.8	<	0.96	1.4	**2.3**	3.4	5.3	7.1
Rb	XRF	ppm	**5.5**	52.9	***9***	*15*	<	69	<	<	<	**<**	10	15	50
Rb	ICP-MS	ppm	**0.6**	2.9	**8.2**	14	<	68	0.8	0.9	1.8	**3.2**	8.1	17	41
S	XRF	ppm	**70**	38.2	**519**	746	<	4000	<	<	<	**275**	600	1134	1706
S	ICP-AES	ppm partial	**14.3**	5.9	**553**	787	<	4180	<	24	55	**307**	792	1237	1624
Sc	ICP-MS	ppm	**2.8**	0	**41**	9.5	4.4	63	29	32	37	**42**	46	51	53
Sc	ICP-AES	ppm partial	**0.4**	0	**6.8**	7.2	1.3	35	1.4	2.1	3.1	**4.4**	7.3	15	26
Se	GFAAS	ppm partial	**0.055**	17.6	**0.18**	0.17	<	0.86	<	<	0.06	**0.14**	0.24	0.35	0.48
Sm	ICP-MS	ppm	**0.5**	0	**3.5**	2.3	1.0	14	1.2	1.5	1.9	**3.0**	4.4	5.6	6.3
Sr	XRF	ppm	**4**	0	**201**	151	37	718	55	70	126	**161**	245	373	576
Sr	ICP-AES	ppm partial	**1.2**	0	**20**	20	2.0	95	2.5	3.9	6.7	**11**	28	44	65
Ta	ICP-MS	ppm	**0.06**	0	**0.46**	0.53	0.09	3.1	0.09	0.10	0.16	**0.27**	0.62	0.87	0.91
Tb	ICP-MS	ppm	**0.08**	0	**0.69**	0.33	0.27	1.9	0.32	0.38	0.42	**0.63**	0.95	1.0	1.2
Te	GFAAS	ppb partial	**5**	20.6	**10**	7	<	33	<	<	5	**7**	14	19	22
Th	ICP-MS	ppm	**0.13**	2.9	**0.98**	1.5	<	8.0	0.17	0.20	0.30	**0.44**	0.87	1.9	4.0
Th	ICP-AES	ppm partial	**5.6**	79.4	***4***	*4*	<	16	<	<	<	**<**	<	11	15
Ti	XRF	ppm	**30**	0	**8772**	4512	1680	23940	2790	3528	5472	**8130**	11340	13776	15648
Ti	ICP-MS	ppm	**10**	0	**8274**	4343	1580	23900	2696	3365	5650	**7260**	11200	12620	13840
Ti	ICP-AES	ppm partial	**2**	0	**2418**	1899	429	8700	910	1060	1240	**1725**	2690	6031	6670
Tm	ICP-MS	ppm	**0.03**	0	**0.35**	0.14	0.13	0.72	0.16	0.21	0.24	**0.33**	0.39	0.54	0.62
U	ICP-MS	ppm	**0.08**	8.8	**0.40**	0.61	<	3.25	<	0.07	0.11	**0.18**	0.39	1.08	1.37
V	XRF	ppm	**6**	0	**353**	106	39	590	200	228	299	**356**	418	493	518
V	ICP-MS	ppm	**2**	0	**311**	94	29	505	195	212	264	**294**	353	437	484
V	ICP-AES	ppm partial	**0.6**	0	**104**	93	17	482	21	27	44	**73**	119	198	258
Y	XRF	ppm	**2.8**	0	**25**	11	10	67	12	12	17	**24**	31	40	40
Y	ICP-MS	ppm	**0.1**	0	**26**	11	11	61	12	15	19	**24**	32	40	44
Y	ICP-AES	ppm partial	**0.15**	0	**6.0**	3.3	0.85	16	1.3	2.5	3.2	**6.0**	7.5	11	12
Yb	ICP-MS	ppm	**0.22**	0	**2.3**	0.91	0.98	4.5	1.1	1.2	1.6	**2.1**	2.8	3.6	4.2
Zn	XRF	ppm	**4**	0	**116**	37	60	217	64	75	91	**108**	134	174	179
Zn	ICP-AES	ppm partial	**2**	0	**46**	39	8.9	169	11	14	18	**32**	54	106	136
Zr	XRF	ppm	**6**	0	**111**	99	26	573	30	38	52	**88**	133	196	254
Zr	ICP-MS	ppm	**3**	0	**83**	74	24	429	30	31	43	**58**	101	144	191

Table 44. Chemical concentration summary statistics for map unit 50.

Map unit	50	Gneissic alkaline granite
Number of samples	6	
Unit area	184.6	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

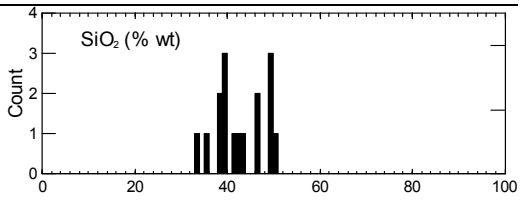


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**69.17**	3.58	62.30	72.20	-	-	-	**70.45**	-	-	-
TiO_2	XRF	%	**0.005**	0	**0.60**	0.28	0.35	1.05	-	-	-	**0.50**	-	-	-
Al_2O_3	XRF	%	**0.02**	0	**13.72**	1.27	12.10	15.50	-	-	-	**13.55**	-	-	-
FeO	XRF	%	**0.01**	0	**4.41**	1.33	2.60	6.67	-	-	-	**4.21**	-	-	-
MnO	XRF	%	**0.012**	0	**0.105**	0.067	0.032	0.205	-	-	-	**0.090**	-	-	-
MgO	XRF	%	**0.09**	0	**0.62**	0.48	0.09	1.34	-	-	-	**0.58**	-	-	-
CaO	XRF	%	**0.004**	0	**1.80**	1.49	0.64	4.62	-	-	-	**1.32**	-	-	-
Na_2O	XRF	%	**0.05**	0	**4.92**	0.58	4.14	5.75	-	-	-	**4.85**	-	-	-
K_2O	XRF	%	**0.003**	0	**3.65**	1.61	1.13	4.99	-	-	-	**4.28**	-	-	-
P_2O_5	XRF	%	**0.024**	0	**0.134**	0.099	0.029	0.290	-	-	-	**0.116**	-	-	-
C_{tot}	Leco	%	**0.05**	83.3	**-**	-	<	0.06	<	<	<	**<**	<	-	-
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	66.7	**-**	-	<	0.32	<	<	<	**<**	0.08	-	-
Al	XRF	ppm	**106**	0	**72563**	6734	64009	81995	-	-	-	**71680**	-	-	-
Al	ICP-AES	ppm partial	**1100**	0	**6150**	4052	1700	10900	-	-	-	**5500**	-	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**740**	834	229	2410	-	-	-	**464**	-	-	-
Ba	ICP-AES	ppm partial	**10**	0	**113**	103	26	312	-	-	-	**86**	-	-	-
Bi	GFAAS	ppm partial	**0.04**	50	***0.05***	*0.04*	<	0.10	<	<	<	**<**	0.09	-	-
Ca	XRF	ppm	**29**	0	**12863**	10654	4547	33033	-	-	-	**9402**	-	-	-
Ca	ICP-AES	ppm partial	**50**	0	**4283**	2531	1500	8100	-	-	-	**3950**	-	-	-
Ce	ICP-MS	ppm	**0.22**	0	**112**	81	42	268	-	-	-	**96**	-	-	-
Cl	XRF	ppm	**45**	16.7	**118**	84	<	270	<	<	-	**100**	-	-	-
Co	ICP-MS	ppm	**2**	33.3	**7.4**	10	<	28	<	<	<	**3.2**	-	-	-
Co	ICP-AES	ppm partial	**0.9**	33.3	**7.1**	9.0	<	24	<	<	<	**3.7**	-	-	-
Cr	XRF	ppm	**19**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Cr	ICP-AES	ppm partial	**5**	83.3	**-**	-	<	6.8	<	<	<	**<**	<	-	-
Cu	XRF	ppm	**17**	66.7	**-**	-	<	161	<	<	<	**<**	36	-	-
Cu	ICP-AES	ppm partial	**3**	16.7	**34**	59	<	149	<	<	-	**5.1**	-	-	-
Dy	ICP-MS	ppm	**0.55**	0	**6.0**	4.5	1.3	15	-	-	-	**4.9**	-	-	-
Er	ICP-MS	ppm	**0.3**	0	**3.2**	2.6	0.6	8.3	-	-	-	**2.6**	-	-	-
Eu	ICP-MS	ppm	**0.09**	0	**2.0**	1.1	0.72	3.6	-	-	-	**1.8**	-	-	-
Fe	XRF	ppm	**78**	0	**34250**	10311	20202	51826	-	-	-	**32673**	-	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**19433**	11891	5400	35800	-	-	-	**18550**	-	-	-
Ga	XRF	ppm	**10**	0	**32**	4	27	37	-	-	-	**32**	-	-	-
Gd	ICP-MS	ppm	**0.5**	0	**8.5**	5.5	2.6	18.9	-	-	-	**7.6**	-	-	-
Hf	ICP-MS	ppm	**0.12**	0	**7.75**	5.20	3.66	17.7	-	-	-	**6.03**	-	-	-
Ho	ICP-MS	ppm	**0.09**	0	**1.2**	0.96	0.25	3.0	-	-	-	**0.94**	-	-	-
K	XRF	ppm	**25**	0	**30254**	13396	9379	41417	-	-	-	**35483**	-	-	-
K	ICP-AES	ppm partial	**100**	0	**4167**	3274	700	8300	-	-	-	**4050**	-	-	-
La	ICP-MS	ppm	**0.55**	0	**54**	41	22	135	-	-	-	**44**	-	-	-
La	ICP-AES	ppm partial	**1.3**	0	**52**	36	17	119	-	-	-	**47**	-	-	-
Li	ICP-AES	ppm partial	**3.5**	50	***7.9***	*8.3*	<	21.2	<	<	<	**<**	14.9	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.44**	0.34	0.09	1.10	-	-	-	**0.37**	-	-	-
Mg	XRF	ppm	**543**	0	**3708**	2894	543	8080	-	-	-	**3497**	-	-	-
Mg	ICP-AES	ppm partial	**50**	0	**3000**	2943	400	7300	-	-	-	**1750**	-	-	-
Mn	XRF	ppm	**93**	0	**814**	519	248	1589	-	-	-	**698**	-	-	-
Mn	ICP-AES	ppm partial	**50**	0	**315**	182	164	650	-	-	-	**234**	-	-	-
Mo	XRF	ppm	**2.6**	83.3	**-**	-	<	10	<	<	<	**<**	<	-	-
Mo	ICP-AES	ppm partial	**2.6**	83.3	**-**	-	<	10	<	<	<	**<**	<	-	-
Na	XRF	ppm	**371**	0	**36521**	4304	30719	42665	-	-	-	**35987**	-	-	-
Na	ICP-AES	ppm partial	**150**	0	**867**	207	600	1200	-	-	-	**900**	-	-	-
Nb	XRF	ppm	**7**	16.7	**68**	47	<	152	<	<	-	**56**	-	-	-
Nb	ICP-MS	ppm	**0.16**	0	**53**	44	4.0	132	-	-	-	**45**	-	-	-
Nd	ICP-MS	ppm	**0.2**	0	**51**	33	18	114	-	-	-	**47**	-	-	-
Ni	XRF	ppm	**14**	50	***14***	*4*	<	21	<	<	<	**<**	16	-	-
Ni	ICP-AES	ppm partial	**3.5**	33.3	**8.0**	5.9	<	17	<	<	<	**6.1**	-	-	-
P	XRF	ppm	**105**	0	**584**	432	126	1264	-	-	-	**506**	-	-	-
P	ICP-AES	ppm partial	**6**	0	**501**	391	95	1160	-	-	-	**420**	-	-	-
Pb	XRF	ppm	**14**	0	**32**	24	16	78	-	-	-	**22**	-	-	-
Pb	ICP-AES	ppm partial	**8.7**	33.3	**16**	11	<	36	<	<	<	**10**	-	-	-
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**13.2**	9.2	4.8	30.8	-	-	-	**11.8**	-	-	-
Rb	XRF	ppm	**5.5**	0	**107**	75	23	236	-	-	-	**101**	-	-	-
Rb	ICP-MS	ppm	**0.6**	0	**99**	71	20	220	-	-	-	**93**	-	-	-
S	XRF	ppm	**70**	33.3	**957**	1953	<	4720	<	<	<	**160**	-	-	-
S	ICP-AES	ppm partial	**14.3**	16.7	**968**	1845	<	4630	<	<	-	**233**	-	-	-
Sc	ICP-MS	ppm	**2.8**	33.3	**6.1**	2.4	<	10	<	<	<	**5.1**	-	-	-
Sc	ICP-AES	ppm partial	**0.4**	33.3	**2.1**	1.6	<	4.0	<	<	<	**1.8**	-	-	-
Se	GFAAS	ppm partial	**0.055**	83.3	**-**	-	<	0.47	<	<	<	**<**	<	-	-
Sm	ICP-MS	ppm	**0.5**	0	**9.1**	5.6	2.9	20	-	-	-	**8.5**	-	-	-
Sr	XRF	ppm	**4**	0	**198**	199	23	568	-	-	-	**160**	-	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**17**	12	4.6	33	-	-	-	**16**	-	-	-
Ta	ICP-MS	ppm	**0.06**	0	**3.0**	2.7	0.25	8.1	-	-	-	**2.4**	-	-	-
Tb	ICP-MS	ppm	**0.08**	0	**1.2**	0.81	0.32	2.7	-	-	-	**1.1**	-	-	-
Te	GFAAS	ppb partial	**5**	83.3	**-**	-	<	20	<	<	<	**<**	<	-	-
Th	ICP-MS	ppm	**0.13**	0	**11**	7.0	4.1	23	-	-	-	**8.6**	-	-	-
Th	ICP-AES	ppm partial	**5.6**	0	**14**	7	7	27	-	-	-	**13**	-	-	-
Ti	XRF	ppm	**30**	0	**3618**	1686	2088	6300	-	-	-	**2976**	-	-	-
Ti	ICP-MS	ppm	**10**	0	**3138**	1636	1810	5960	-	-	-	**2535**	-	-	-
Ti	ICP-AES	ppm partial	**2**	0	**1628**	679	836	2610	-	-	-	**1625**	-	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.46**	0.39	0.07	1.21	-	-	-	**0.35**	-	-	-
U	ICP-MS	ppm	**0.08**	0	**2.75**	2.14	0.67	6.43	-	-	-	**2.46**	-	-	-
V	XRF	ppm	**6**	0	**39**	35	17	110	-	-	-	**26**	-	-	-
V	ICP-MS	ppm	**2**	50	***17***	*23*	<	60	<	<	<	**<**	27	-	-
V	ICP-AES	ppm partial	**0.6**	33.3	**9.9**	11	<	27	<	<	<	**6.2**	-	-	-
Y	XRF	ppm	**2.8**	0	**34**	26	7	84	-	-	-	**30**	-	-	-
Y	ICP-MS	ppm	**0.1**	0	**34**	28	7.0	87	-	-	-	**26**	-	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**19**	15	3.4	48	-	-	-	**15**	-	-	-
Yb	ICP-MS	ppm	**0.22**	0	**3.0**	2.4	0.62	7.7	-	-	-	**2.5**	-	-	-
Zn	XRF	ppm	**4**	0	**83**	49	26	133	-	-	-	**93**	-	-	-
Zn	ICP-AES	ppm partial	**2**	0	**39**	27	20	77	-	-	-	**23**	-	-	-
Zr	XRF	ppm	**6**	0	**383**	249	170	869	-	-	-	**298**	-	-	-
Zr	ICP-MS	ppm	**3**	0	**327**	220	152	755	-	-	-	**256**	-	-	-

Table 45. Chemical concentration summary statistics for map unit 51.

Map unit	51	Serpentinites and other rocks of ophiolitic origin
Number of samples	16	
Unit area	198.4	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

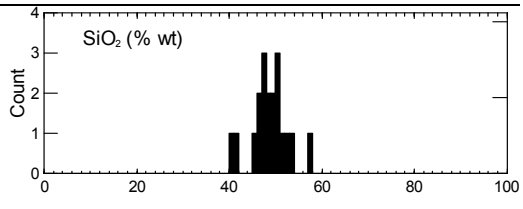


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	42.74	5.30	33.40	50.00	-	-	39.00	42.00	47.95	-	-
TiO_2	XRF	%	0.005	18.8	0.24	0.41	<	1.27	<	<	0.02	0.04	0.23	-	-
Al_2O_3	XRF	%	0.02	0	4.62	6.23	0.14	17.30	-	-	0.99	2.23	4.10	-	-
FeO	XRF	%	0.01	0	7.14	1.61	4.94	10.30	-	-	6.13	6.60	7.75	-	-
MnO	XRF	%	0.012	0	0.112	0.038	0.062	0.198	-	-	0.087	0.111	0.123	-	-
MgO	XRF	%	0.09	0	31.69	12.51	6.81	44.90	-	-	27.10	36.60	39.75	-	-
CaO	XRF	%	0.004	0	3.12	4.83	0.01	13.40	-	-	0.03	0.42	4.08	-	-
Na_2O	XRF	%	0.05	81.3	-	-	<	2.92	<	<	<	<	<	2.51	-
K_2O	XRF	%	0.003	25	0.03	0.04	<	0.13	<	<	<	0.01	0.02	-	-
P_2O_5	XRF	%	0.024	81.3	-	-	<	0.471	<	<	<	<	<	0.096	-
C_{tot}	Leco	%	0.05	56.3	*0.19*	*0.46*	<	1.9	<	<	<	<	0.16	-	-
$C_{non\text{-}carb}$	Leco	%	0.05	75	-	-	<	0.05	<	<	<	<	<	0.05	-
F	Ion	%	0.055	100	-	-	<	<	<	<	<	<	<	<	<
Al	XRF	ppm	106	0	24424	32936	730	91517	-	-	5237	11770	21663	-	-
Al	ICP-AES	ppm partial	1100	18.8	8089	16863	<	69400	<	<	1300	3110	6650	-	-
As	GFAAS	ppm partial	3	75	*59*	*185*	<	729	<	<	<	<	<	179	-
Au	GFAAS	ppb partial	2.5	87.5	-	-	<	69.3	<	<	<	<	<	37.7	-
B	ICP-AES	ppm partial	4.5	50	*10*	*13*	<	41	<	<	<	<	12	-	-
Ba	XRF	ppm	21	37.5	26	8	<	51	<	<	<	23	28	-	-
Ba	ICP-AES	ppm partial	10	62.5	*9.0*	*4.2*	<	20	<	<	<	<	12	-	-
Bi	GFAAS	ppm partial	0.04	81.3	-	-	<	0.45	<	<	<	<	<	0.17	-
Ca	XRF	ppm	29	0	22315	34563	57	95810	-	-	229	2974	29136	-	-
Ca	ICP-AES	ppm partial	50	0	7038	13736	100	45300	-	-	100	550	7750	-	-
Ce	ICP-MS	ppm	0.22	18.8	7.3	17	<	70	<	<	0.30	2.0	4.0	-	-
Cl	XRF	ppm	45	25	461	565	<	1880	<	<	<	150	845	-	-
Co	ICP-MS	ppm	2	0	83	29	37	146	-	-	71	87	95	-	-
Co	ICP-AES	ppm partial	0.9	0	57	35	1.6	106	-	-	20	66	86	-	-
Cr	XRF	ppm	19	0	2260	1287	308	4950	-	-	1411	2353	2945	-	-
Cr	ICP-AES	ppm partial	5	0	604	386	24	1220	-	-	261	681	875	-	-
Cu	XRF	ppm	17	75	*39*	*46*	<	184	<	<	<	<	<	84	-
Cu	ICP-AES	ppm partial	3	25	31	51	<	189	<	<	<	12	42	-	-
Dy	ICP-MS	ppm	0.55	68.8	*0.8*	*1.3*	<	4.3	<	<	<	<	1.0	-	-
Er	ICP-MS	ppm	0.3	56.3	*0.5*	*0.8*	<	2.7	<	<	<	<	0.5	-	-
Eu	ICP-MS	ppm	0.09	56.3	*0.22*	*0.37*	<	1.2	<	<	<	<	0.26	-	-
Fe	XRF	ppm	78	0	55462	12525	38384	80031	-	-	47630	51266	60218	-	-
Fe	ICP-AES	ppm partial	2300	0	29069	17115	2600	66800	-	-	12500	31550	39500	-	-
Ga	XRF	ppm	10	62.5	*8*	*5*	<	20	<	<	<	<	11	-	-
Gd	ICP-MS	ppm	0.5	56.3	*0.9*	*1.4*	<	4.1	<	<	<	<	0.9	-	-
Hf	ICP-MS	ppm	0.12	37.5	0.40	0.53	<	1.75	<	<	<	0.20	0.29	-	-
Ho	ICP-MS	ppm	0.09	43.8	0.22	0.27	<	0.97	<	<	<	0.10	0.17	-	-
K	XRF	ppm	25	25	208	349	<	1062	<	<	<	42	183	-	-
K	ICP-AES	ppm partial	100	6.3	125	45	<	200	<	-	100	100	150	-	-
La	ICP-MS	ppm	0.55	37.5	4.1	11	<	45	<	<	<	0.7	1.7	-	-
La	ICP-AES	ppm partial	1.3	87.5	-	-	<	15	<	<	<	<	<	2.0	-
Li	ICP-AES	ppm partial	3.5	93.8	-	-	<	3.6	<	<	<	<	<	<	-
Lu	ICP-MS	ppm	0.03	31.3	0.09	0.10	<	0.35	<	<	<	0.05	0.07	-	-
Mg	XRF	ppm	543	0	191115	75405	41064	270747	-	-	163413	220698	239693	-	-
Mg	ICP-AES	ppm partial	50	0	124450	105577	2500	304000	-	-	30100	92200	225500	-	-
Mn	XRF	ppm	93	0	868	295	481	1535	-	-	674	860	953	-	-
Mn	ICP-AES	ppm partial	50	0	384	241	56	774	-	-	148	395	611	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	62.5	*2*	*2*	<	7	<	<	<	<	3	-	-
Na	XRF	ppm	371	81.3	-	-	<	21666	<	<	<	<	<	18639	-
Na	ICP-AES	ppm partial	150	25	831	1581	<	5900	<	<	<	200	200	-	-
Nb	XRF	ppm	7	87.5	-	-	<	11	<	<	<	<	<	8	-
Nb	ICP-MS	ppm	0.16	37.5	1.6	2.5	<	8.1	<	<	<	0.61	1.6	-	-
Nd	ICP-MS	ppm	0.2	25	3.7	6.6	<	25	<	<	<	1.4	2.6	-	-
Ni	XRF	ppm	14	0	1630	843	125	2470	-	-	1239	1824	2306	-	-
Ni	ICP-AES	ppm partial	3.5	0	1143	767	8.9	2340	-	-	415	1355	1690	-	-
P	XRF	ppm	105	0	-	-	<	2054	<	<	<	<	<	419	-
P	ICP-AES	ppm partial	6	12.5	179	451	<	1810	<	<	8.5	26	80	-	-
Pb	XRF	ppm	14	50	*14*	*2*	<	17	<	<	<	<	15	-	-
Pb	ICP-AES	ppm partial	8.7	81.3	-	-	<	12	<	<	<	<	<	11	-
Pd	GFAAS	ppb partial	5	75	*3*	*6*	<	24	<	<	<	<	<	9	-
Pr	ICP-MS	ppm	0.74	81.3	-	-	<	7.4	<	<	<	<	<	1.9	-
Rb	XRF	ppm	5.5	100	-	-	<	<	<	<	<	<	<	<	<
Rb	ICP-MS	ppm	0.6	81.3	-	-	<	1.1	<	<	<	<	<	0.7	-
S	XRF	ppm	70	25	781	953	<	3510	<	<	<	375	1480	-	-
S	ICP-AES	ppm partial	14.3	0	867	1190	15	4310	-	-	71	235	1755	-	-
Sc	ICP-MS	ppm	2.8	0	15	14	2.8	45	-	-	5.3	9.4	20	-	-
Sc	ICP-AES	ppm partial	0.4	0	2.5	0.99	1.0	4.1	-	-	1.5	2.6	3.4	-	-
Se	GFAAS	ppm partial	0.055	50	*0.18*	*0.37*	<	1.5	<	<	<	<	0.20	-	-
Sm	ICP-MS	ppm	0.5	62.5	*0.76*	*1.2*	<	3.3	<	<	<	<	0.65	-	-
Sr	XRF	ppm	4	37.5	54	101	<	349	<	<	<	7	53	-	-
Sr	ICP-AES	ppm partial	1.2	50	*18*	*30*	<	86	<	<	<	<	24	-	-
Ta	ICP-MS	ppm	0.06	62.5	*0.09*	*0.15*	<	0.47	<	<	<	<	0.08	-	-
Tb	ICP-MS	ppm	0.08	50	*0.14*	*0.21*	<	0.70	<	<	<	<	0.17	-	-
Te	GFAAS	ppb partial	5	50	*19*	*33*	<	111	<	<	<	<	14	-	-
Th	ICP-MS	ppm	0.13	62.5	*0.31*	*0.67*	<	2.7	<	<	<	<	0.36	-	-
Th	ICP-AES	ppm partial	5.6	93.8	-	-	<	10	<	<	<	<	<	<	-
Ti	XRF	ppm	30	18.8	1416	2442	<	7620	<	<	90	216	1356	-	-
Ti	ICP-MS	ppm	10	12.5	1263	2201	<	6910	<	<	90	238	1260	-	-
Ti	ICP-AES	ppm partial	2	0	323	690	2.8	2150	-	-	23	65	122	-	-
Tm	ICP-MS	ppm	0.03	31.3	0.09	0.11	<	0.40	<	<	<	0.05	0.06	-	-
U	ICP-MS	ppm	0.08	62.5	*0.09*	*0.07*	<	0.29	<	<	<	<	0.13	-	-
V	XRF	ppm	6	0	79	81	16	297	-	-	25	42	103	-	-
V	ICP-MS	ppm	2	0	70	67	16	249	-	-	21	38	98	-	-
V	ICP-AES	ppm partial	0.6	0	16	7.5	5.2	29	-	-	9.5	18	21	-	-
Y	XRF	ppm	2.8	43.8	6	8	<	27	<	<	<	3	4	-	-
Y	ICP-MS	ppm	0.1	6.3	5.6	8.2	<	28	<	-	0.67	2.8	4.6	-	-
Y	ICP-AES	ppm partial	0.15	25	1.6	1.8	<	5.8	<	<	<	1.0	2.0	-	-
Yb	ICP-MS	ppm	0.22	31.3	0.62	0.74	<	2.6	<	<	<	0.31	0.43	-	-
Zn	XRF	ppm	4	0	56	13	31	77	-	-	48	56	64	-	-
Zn	ICP-AES	ppm partial	2	6.3	17	11	<	39	<	-	8.8	14	26	-	-
Zr	XRF	ppm	6	56.3	*17*	*27*	<	85	<	<	<	<	19	-	-
Zr	ICP-MS	ppm	3	37.5	14	19	<	62	<	<	<	5.7	15	-	-

Table 46. Chemical concentration summary statistics for map unit 52.

Map unit	52	Gabbro (2.15 - 2.00 Ga)
Number of samples	19	
Unit area	402.9	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

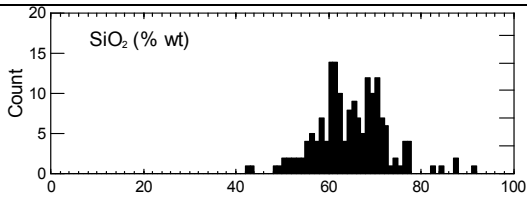


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	48.61	3.96	40.20	57.30	-	-	46.75	48.10	50.70	-	-
TiO_2	XRF	%	0.005	0	1.14	0.91	0.28	3.54	-	-	0.63	0.78	1.45	-	-
Al_2O_3	XRF	%	0.02	0	13.32	5.30	3.74	23.70	-	-	10.78	13.00	17.00	-	-
FeO	XRF	%	0.01	0	10.08	3.89	3.16	22.05	-	-	8.14	10.08	10.69	-	-
MnO	XRF	%	0.012	0	0.166	0.064	0.050	0.359	-	-	0.122	0.169	0.195	-	-
MgO	XRF	%	0.09	0	8.70	6.05	2.08	27.10	-	-	5.26	6.90	10.32	-	-
CaO	XRF	%	0.004	0	10.08	2.72	5.36	17.30	-	-	8.55	10.40	11.28	-	-
Na_2O	XRF	%	0.05	0	2.51	1.41	0.06	5.07	-	-	1.56	2.44	3.55	-	-
K_2O	XRF	%	0.003	0	0.50	0.44	0.02	1.87	-	-	0.24	0.38	0.67	-	-
P_2O_5	XRF	%	0.024	15.8	0.176	0.394	<	1.680	<	<	0.027	0.055	0.095	-	-
C_{tot}	Leco	%	0.05	89.5	-	-	<	0.41	<	<	<	<	<	0.04	-
$C_{non-carb}$	Leco	%	0.05	94.7	-	-	<	0.06	<	<	<	<	<	<	-
F	Ion	%	0.055	89.5	-	-	<	0.09	<	<	<	<	<	0.04	-
Al	XRF	ppm	106	0	70442	28053	19785	125373	-	-	57000	68770	89930	-	-
Al	ICP-AES	ppm partial	1100	0	13875	9424	1400	43100	-	-	7525	12500	17175	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	94.7	-	-	<	4.7	<	<	<	<	<	<	-
B	ICP-AES	ppm partial	4.5	89.5	-	-	<	26	<	<	<	<	<	3	-
Ba	XRF	ppm	21	0	165	205	21	939	-	-	53	117	169	-	-
Ba	ICP-AES	ppm partial	10	10.5	62	99	<	418	<	<	14	25	65	-	-
Bi	GFAAS	ppm partial	0.04	89.5	-	-	<	0.06	<	<	<	<	<	0.02	-
Ca	XRF	ppm	29	0	72101	19455	38324	123695	-	-	61097	74360	80616	-	-
Ca	ICP-AES	ppm partial	50	0	11300	5854	1100	26400	-	-	8525	10800	14600	-	-
Ce	ICP-MS	ppm	0.22	0	19	25	3.7	114	-	-	5.1	10	24	-	-
Cl	XRF	ppm	45	5.3	1794	2624	<	9390	<	-	223	682	2865	-	-
Co	ICP-MS	ppm	2	0	47	20	15	103	-	-	34	46	55	-	-
Co	ICP-AES	ppm partial	0.9	0	18	20	1.6	90	-	-	7.4	11	22	-	-
Cr	XRF	ppm	19	0	493	755	19	3060	-	-	52	237	570	-	-
Cr	ICP-AES	ppm partial	5	10.5	103	191	<	771	<	<	9.7	25	88	-	-
Cu	XRF	ppm	17	5.3	94	59	<	217	<	-	33	88	136	-	-
Cu	ICP-AES	ppm partial	3	0	85	53	13	176	-	-	28	90	121	-	-
Dy	ICP-MS	ppm	0.55	5.3	2.8	2.0	<	8.5	<	-	1.3	2.4	3.2	-	-
Er	ICP-MS	ppm	0.3	5.3	1.5	1.0	<	4.2	<	-	0.7	1.5	1.9	-	-
Eu	ICP-MS	ppm	0.09	0	1.0	0.85	0.16	4.1	-	-	0.58	0.90	1.2	-	-
Fe	XRF	ppm	78	0	78322	30241	24553	171290	-	-	63271	78306	83022	-	-
Fe	ICP-AES	ppm partial	2300	0	25197	22146	3500	81500	-	-	9535	17500	33425	-	-
Ga	XRF	ppm	10	0	21	6	11	32	-	-	16	21	25	-	-
Gd	ICP-MS	ppm	0.5	0	3.1	2.6	0.7	11.9	-	-	1.4	2.5	3.6	-	-
Hf	ICP-MS	ppm	0.12	0	1.59	1.57	0.37	7.41	-	-	0.77	1.10	1.99	-	-
Ho	ICP-MS	ppm	0.09	0	0.55	0.39	0.10	1.6	-	-	0.23	0.49	0.63	-	-
K	XRF	ppm	25	0	4167	3685	174	15521	-	-	1967	3171	5561	-	-
K	ICP-AES	ppm partial	100	0	1494	2340	100	9700	-	-	244	664	1300	-	-
La	ICP-MS	ppm	0.55	0	8.2	11	1.4	50	-	-	2.5	4.6	10	-	-
La	ICP-AES	ppm partial	1.3	26.3	6.1	9.9	<	45	<	<	<	2.3	7.0	-	-
Li	ICP-AES	ppm partial	3.5	52.6	*5.8*	*6.2*	<	21.7	<	<	<	<	6.6	-	-
Lu	ICP-MS	ppm	0.03	0	0.20	0.13	0.03	0.50	-	-	0.11	0.20	0.26	-	-
Mg	XRF	ppm	543	0	52479	36500	12542	163413	-	-	31688	41607	62218	-	-
Mg	ICP-AES	ppm partial	50	0	11842	23637	2000	108000	-	-	4250	5200	8110	-	-
Mn	XRF	ppm	93	0	1287	496	388	2782	-	-	946	1310	1511	-	-
Mn	ICP-AES	ppm partial	50	5.3	257	229	<	990	<	-	118	207	303	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	18602	10425	423	37619	-	-	11560	18105	26304	-	-
Na	ICP-AES	ppm partial	150	0	2125	1452	221	5000	-	-	1013	2200	2830	-	-
Nb	XRF	ppm	7	78.9	*5*	*13*	<	58	<	<	<	<	<	12	-
Nb	ICP-MS	ppm	0.16	0	5.3	11	0.48	49	-	-	0.84	2.3	5.3	-	-
Nd	ICP-MS	ppm	0.2	0	12	14	2.4	63	-	-	4.2	6.3	15	-	-
Ni	XRF	ppm	14	15.8	205	290	<	1310	<	<	58	117	180	-	-
Ni	ICP-AES	ppm partial	3.5	0	97	218	4.7	970	-	-	13	28	64	-	-
P	XRF	ppm	105	0	767	1718	<	7325	<	<	118	240	414	-	-
P	ICP-AES	ppm partial	6	0	707	1600	39	6850	-	-	97	237	403	-	-
Pb	XRF	ppm	14	36.8	18	7	<	40	<	<	<	16	19	-	-
Pb	ICP-AES	ppm partial	8.7	89.5	-	-	<	10	<	<	<	<	<	5	-
Pd	GFAAS	ppb partial	5	68.4	*6*	*8*	<	31	<	<	<	<	7	-	-
Pr	ICP-MS	ppm	0.74	15.8	2.6	3.3	<	15.0	<	<	0.80	1.4	3.4	-	-
Rb	XRF	ppm	5.5	47.4	14	15	<	56	<	<	<	6	15	-	-
Rb	ICP-MS	ppm	0.6	0	12	14	0.6	54	-	-	3.3	6.0	12	-	-
S	XRF	ppm	70	5.3	850	1357	<	4720	<	-	192	446	730	-	-
S	ICP-AES	ppm partial	14.3	0	896	1487	16	5170	-	-	142	317	900	-	-
Sc	ICP-MS	ppm	2.8	0	35	15	13	59	-	-	21	35	46	-	-
Sc	ICP-AES	ppm partial	0.4	0	4.0	2.3	0.80	8.8	-	-	1.8	3.9	5.3	-	-
Se	GFAAS	ppm partial	0.055	26.3	0.23	0.19	<	0.68	<	<	<	0.16	0.33	-	-
Sm	ICP-MS	ppm	0.5	0	2.9	2.9	0.59	13	-	-	1.3	1.9	3.4	-	-
Sr	XRF	ppm	4	0	310	289	5	895	-	-	111	200	465	-	-
Sr	ICP-AES	ppm partial	1.2	5.3	42	54	<	173	<	-	9.0	24	36	-	-
Ta	ICP-MS	ppm	0.06	26.3	0.34	0.64	<	2.9	<	<	<	0.13	0.32	-	-
Tb	ICP-MS	ppm	0.08	0	0.48	0.38	0.10	1.7	-	-	0.20	0.44	0.56	-	-
Te	GFAAS	ppb partial	5	31.6	14	12	<	56	<	<	<	11	15	-	-
Th	ICP-MS	ppm	0.13	10.5	1.2	1.4	<	5.0	<	<	0.24	0.35	1.7	-	-
Th	ICP-AES	ppm partial	5.6	89.5	-	-	<	10	<	<	<	<	<	5	-
Ti	XRF	ppm	30	0	6816	5430	1686	21240	-	-	3780	4680	8670	-	-
Ti	ICP-MS	ppm	10	0	6111	4493	1520	17700	-	-	3605	4270	8533	-	-
Ti	ICP-AES	ppm partial	2	0	1443	1086	332	3740	-	-	560	1110	2055	-	-
Tm	ICP-MS	ppm	0.03	0	0.21	0.14	0.03	0.56	-	-	0.10	0.23	0.27	-	-
U	ICP-MS	ppm	0.08	36.8	0.31	0.35	<	1.40	<	<	<	0.10	0.47	-	-
V	XRF	ppm	6	0	248	148	74	736	-	-	147	256	303	-	-
V	ICP-MS	ppm	2	0	212	121	24	533	-	-	132	198	291	-	-
V	ICP-AES	ppm partial	0.6	0	52	37	6.3	129	-	-	24	40	76	-	-
Y	XRF	ppm	2.8	10.5	14	10	<	39	<	<	7	12	20	-	-
Y	ICP-MS	ppm	0.1	0	15	10	3.0	42	-	-	6.6	15	19	-	-
Y	ICP-AES	ppm partial	0.15	0	3.3	3.0	0.50	12	-	-	1.0	3.0	4.5	-	-
Yb	ICP-MS	ppm	0.22	0	1.4	0.87	0.26	3.5	-	-	0.72	1.5	1.8	-	-
Zn	XRF	ppm	4	0	87	43	22	176	-	-	55	86	116	-	-
Zn	ICP-AES	ppm partial	2	0	21	24	2.3	100	-	-	4.8	11	31	-	-
Zr	XRF	ppm	6	0	69	80	10	366	-	-	27	42	91	-	-
Zr	ICP-MS	ppm	3	0	59	65	12	301	-	-	23	37	76	-	-

Table 47. Chemical concentration summary statistics for map unit 53.

Map unit	53	Mica schist, black schist, conglomerate and arkosite
Number of samples	173	
Unit area	9371.4	km^2
Percent of bedrock	2.8	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

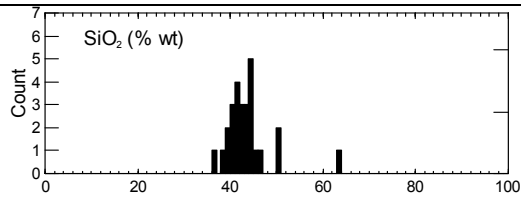


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	64.91	7.70	42.90	91.00	52.02	55.82	60.55	64.80	69.73	72.94	76.97
TiO_2	XRF	%	0.005	0	0.75	0.27	0.19	1.86	0.29	0.41	0.59	0.75	0.89	1.06	1.23
Al_2O_3	XRF	%	0.02	0	14.29	2.76	3.07	20.70	10.03	11.00	12.90	14.10	16.30	17.60	18.19
FeO	XRF	%	0.01	0	6.68	3.33	1.11	29.10	2.21	3.25	4.72	6.23	8.32	9.88	10.59
MnO	XRF	%	0.012	0	0.078	0.067	0.016	0.774	0.025	0.037	0.055	0.070	0.084	0.108	0.135
MgO	XRF	%	0.09	0	3.10	1.38	0.53	7.18	0.91	1.52	2.07	2.92	3.96	5.05	5.51
CaO	XRF	%	0.004	0	1.73	1.20	0.06	6.65	0.26	0.47	0.81	1.56	2.29	3.21	4.41
Na_2O	XRF	%	0.05	0	2.29	1.06	0.10	5.11	0.59	0.86	1.44	2.32	3.04	3.58	4.14
K_2O	XRF	%	0.003	0	3.15	1.12	0.06	6.76	1.48	1.91	2.42	3.03	3.84	4.70	4.96
P_2O_5	XRF	%	0.024	2.3	0.140	0.091	<	0.924	0.046	0.060	0.102	0.138	0.160	0.184	0.219
C_{tot}	Leco	%	0.05	39.3	0.37	1.0	<	8.3	<	<	<	0.09	0.27	0.59	1.1
$C_{non\text{-}carb}$	Leco	%	0.05	43.4	0.30	0.88	<	6.8	<	<	<	0.07	0.21	0.46	0.75
F	Ion	%	0.055	31.8	0.08	0.03	<	0.22	<	<	<	0.07	0.09	0.11	0.13
Al	XRF	ppm	106	0	75589	14622	16240	109503	53059	58190	68241	74589	86227	93104	96199
Al	ICP-AES	ppm partial	1100	0.6	30926	15349	<	88400	8005	11560	21575	28200	38000	53380	61860
As	GFAAS	ppm partial	3	65.9	*6.8*	*25*	<	304	<	<	<	<	4.1	17	30
Au	GFAAS	ppb partial	2.5	97.1	-	-	<	20.9	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	94.2	-	-	<	9	<	<	<	<	<	<	5
Ba	XRF	ppm	21	0.6	500	233	<	2312	182	251	357	495	618	738	823
Ba	ICP-AES	ppm partial	10	1.2	234	165	<	975	32	41	98	202	343	443	515
Bi	GFAAS	ppm partial	0.04	16.2	0.18	0.19	<	1.1	<	<	0.06	0.12	0.22	0.45	0.53
Ca	XRF	ppm	29	0	12398	8580	458	47548	1866	3339	5777	11154	16374	22923	31510
Ca	ICP-AES	ppm partial	50	0	3451	6260	100	49100	300	498	1063	1500	2518	8932	15090
Ce	ICP-MS	ppm	0.22	0	58	26	7.7	244	23	32	42	56	69	83	97
Cl	XRF	ppm	45	28.9	100	116	<	960	<	<	<	60	106	163	297
Co	ICP-MS	ppm	2	2.3	22	12	<	107	5.1	7.7	13	20	28	33	41
Co	ICP-AES	ppm partial	0.9	0.6	21	12	<	118	5.3	8.2	15	20	28	32	39
Cr	XRF	ppm	19	2.9	144	75	<	437	28	46	93	131	192	257	266
Cr	ICP-AES	ppm partial	5	1.2	106	64	<	306	14	26	67	94	132	205	231
Cu	XRF	ppm	17	24.3	64	82	<	896	<	<	17	44	82	114	138
Cu	ICP-AES	ppm partial	3	5.2	58	83	<	865	<	6.2	17	38	77	106	128
Dy	ICP-MS	ppm	0.55	0.6	3.8	1.7	<	19	1.6	2.2	3.1	3.7	4.1	5.1	5.6
Er	ICP-MS	ppm	0.3	0	2.2	1.1	0.3	13	0.9	1.3	1.8	2.1	2.4	2.9	3.2
Eu	ICP-MS	ppm	0.09	0	1.0	0.27	0.17	2.5	0.62	0.71	0.87	1.0	1.1	1.3	1.4
Fe	XRF	ppm	78	0	51873	25890	8625	226107	17164	25221	36690	48407	64639	76783	82245
Fe	ICP-AES	ppm partial	2300	0	52221	22809	5900	160000	19260	25840	39075	49100	66300	78500	85840
Ga	XRF	ppm	10	0.6	24	6	<	62	15	17	21	24	28	31	33
Gd	ICP-MS	ppm	0.5	0	4.6	1.8	0.6	18.2	1.9	3.0	3.7	4.4	5.2	5.9	7.0
Hf	ICP-MS	ppm	0.12	0	4.34	1.57	0.99	14.2	2.65	3.16	3.48	3.91	4.80	6.24	7.08
Ho	ICP-MS	ppm	0.09	0	0.75	0.37	0.09	4.2	0.29	0.45	0.62	0.72	0.82	1.0	1.1
K	XRF	ppm	25	0	26120	9263	481	56108	12267	15836	20103	25149	31889	38977	41127
K	ICP-AES	ppm partial	100	0	17045	7771	100	43200	4001	6576	11825	17100	20800	26900	30420
La	ICP-MS	ppm	0.55	0	29	14	3.5	119	12	15	21	28	35	42	52
La	ICP-AES	ppm partial	1.3	0	24	10	3.7	69	9.9	12	16	22	30	35	41
Li	ICP-AES	ppm partial	3.5	1.7	41.6	29.4	<	288	9.8	13.7	25.2	36.7	52.4	69.2	81.1
Lu	ICP-MS	ppm	0.03	0	0.31	0.17	0.04	2.01	0.13	0.18	0.25	0.30	0.34	0.43	0.46
Mg	XRF	ppm	543	0	18687	8303	3196	43295	5487	9154	12464	17608	23891	30427	33225
Mg	ICP-AES	ppm partial	50	0	18069	7871	1600	46800	5708	7924	13075	17400	22600	28760	33380
Mn	XRF	ppm	93	0	605	519	124	5999	194	287	426	543	651	837	1046
Mn	ICP-AES	ppm partial	50	0	415	230	83	2400	132	181	268	403	519	649	745
Mo	XRF	ppm	2.6	91.9	-	-	<	104	<	<	<	<	<	<	7
Mo	ICP-AES	ppm partial	2.6	82.7	-	-	<	97	<	<	<	<	<	4	9
Na	XRF	ppm	371	0	16999	7880	742	37916	4400	6359	10670	17214	22579	26578	30704
Na	ICP-AES	ppm partial	150	0.6	746	593	<	3500	209	300	400	600	889	1202	2336
Nb	XRF	ppm	7	11.6	13	7	<	59	<	<	9	12	14	17	22
Nb	ICP-MS	ppm	0.16	0	11	6.0	2.1	55	4.1	5.2	8.4	9.6	11	15	17
Nd	ICP-MS	ppm	0.2	0	25	10	3.4	108	13	15	19	25	30	35	42
Ni	XRF	ppm	14	6.9	92	233	<	3066	<	19	39	62	103	146	183
Ni	ICP-AES	ppm partial	3.5	2.9	86	239	<	3150	6.9	20	36	57	93	137	163
P	XRF	ppm	105	0	610	397	<	4029	201	262	445	602	698	802	955
P	ICP-AES	ppm partial	6	0	516	367	21	3560	71	152	359	520	613	690	796
Pb	XRF	ppm	14	1.2	31	11	<	84	18	21	24	29	34	42	54
Pb	ICP-AES	ppm partial	8.7	65.3	*9*	*15*	<	165	<	<	<	<	11	16	25
Pd	GFAAS	ppb partial	5	88.4	-	-	<	25	<	<	<	<	<	5	6
Pr	ICP-MS	ppm	0.74	0	6.8	2.9	0.85	28.6	3.5	3.8	4.9	6.7	8.0	9.5	11.4
Rb	XRF	ppm	5.5	0.6	127	63	<	608	55	74	88	120	149	188	223
Rb	ICP-MS	ppm	0.6	0	120	60	0.7	547	46	70	85	111	144	175	210
S	XRF	ppm	70	23.1	4531	13596	<	132000	<	<	78	670	2455	8632	24550
S	ICP-AES	ppm partial	14.3	6.4	4911	15585	<	155000	<	23	87	689	2583	9530	25850
Sc	ICP-MS	ppm	2.8	0.6	18	8.0	<	46	5.6	8.2	13	17	23	28	32
Sc	ICP-AES	ppm partial	0.4	0.6	11	6.5	<	34	1.5	3.4	5.9	10	15	20	23
Se	GFAAS	ppm partial	0.055	28.3	0.86	3.9	<	39.9	<	<	<	0.15	0.36	0.71	2.4
Sm	ICP-MS	ppm	0.5	0	4.8	1.9	0.68	21	2.2	3.2	3.7	4.6	5.6	6.6	7.8
Sr	XRF	ppm	4	0	159	123	10	738	34	46	70	124	221	291	395
Sr	ICP-AES	ppm partial	1.2	1.2	12	26	<	261	2.2	2.5	3.5	4.9	8.7	27	42
Ta	ICP-MS	ppm	0.06	0	0.79	0.40	0.15	3.1	0.37	0.49	0.61	0.71	0.85	1.1	1.4
Tb	ICP-MS	ppm	0.08	0	0.68	0.29	0.10	3.1	0.30	0.42	0.57	0.66	0.76	0.92	1.0
Te	GFAAS	ppb partial	5	16.2	25	25	<	189	<	<	8	17	34	53	71
Th	ICP-MS	ppm	0.13	0	9.3	5.0	0.96	30	3.7	4.6	6.6	8.2	10	14	20
Th	ICP-AES	ppm partial	5.6	4.6	13	6	<	40	6	7	9	12	15	19	26
Ti	XRF	ppm	30	0	4524	1638	1152	11160	1758	2466	3564	4488	5352	6372	7362
Ti	ICP-MS	ppm	10	0	4124	1586	1090	10600	1536	2202	3070	4040	4855	5952	6799
Ti	ICP-AES	ppm partial	2	0	2823	1330	205	7070	712	1240	1800	2660	3763	4530	5054
Tm	ICP-MS	ppm	0.03	0	0.31	0.16	0.04	1.85	0.13	0.19	0.26	0.30	0.34	0.43	0.49
U	ICP-MS	ppm	0.08	0	2.88	2.41	0.28	20.4	0.89	1.14	1.81	2.43	3.12	4.70	6.22
V	XRF	ppm	6	0	158	95	11	807	38	63	113	146	194	228	294
V	ICP-MS	ppm	2	0.6	132	94	<	751	25	43	84	114	165	201	230
V	ICP-AES	ppm partial	0.6	0.6	110	81	<	669	21	32	64	102	142	177	212
Y	XRF	ppm	2.8	0	24	12	4	138	9	14	20	24	27	31	35
Y	ICP-MS	ppm	0.1	0	23	12	2.6	138	9.2	14	19	22	25	31	35
Y	ICP-AES	ppm partial	0.15	0	8.4	4.5	1.1	33	3.0	4.0	5.5	7.9	10	13	16
Yb	ICP-MS	ppm	0.22	0	2.1	1.2	0.36	14	0.88	1.2	1.7	2.0	2.3	2.8	3.2
Zn	XRF	ppm	4	0.6	159	440	<	5508	28	46	77	107	152	196	253
Zn	ICP-AES	ppm partial	2	0.6	140	501	<	6280	12	24	61	80	121	155	186
Zr	XRF	ppm	6	0	185	63	34	538	114	136	148	173	200	264	316
Zr	ICP-MS	ppm	3	0	164	59	39	492	105	117	129	148	182	234	259

Table 48. Chemical concentration summary statistics for map unit 54.

Map unit	54	Ultramafic metavolcanic rocks
Number of samples	27	
Unit area	946.2	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

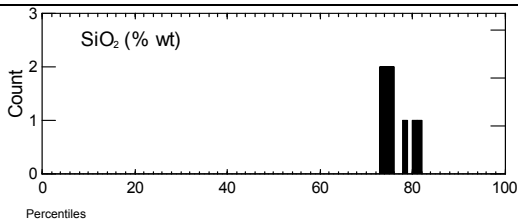


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	43.62	5.00	36.60	63.30	38.39	39.32	40.95	42.60	44.75	49.50	52.25
TiO_2	XRF	%	0.005	0	0.76	0.65	0.02	3.17	0.20	0.38	0.44	0.54	0.70	1.70	2.01
Al_2O_3	XRF	%	0.02	0	7.96	3.81	0.69	20.10	3.37	4.86	5.91	6.93	8.72	13.36	15.17
FeO	XRF	%	0.01	0	10.22	2.13	5.41	14.70	6.35	8.12	8.93	9.90	11.68	12.93	14.06
MnO	XRF	%	0.012	0	0.165	0.032	0.095	0.215	0.106	0.112	0.152	0.166	0.186	0.207	0.209
MgO	XRF	%	0.09	0	20.48	8.72	3.21	37.00	3.53	4.43	18.00	23.60	25.30	26.16	33.26
CaO	XRF	%	0.004	0	7.16	2.32	1.75	11.90	2.57	4.51	6.08	6.81	7.77	10.72	11.14
Na_2O	XRF	%	0.05	44.4	0.95	1.79	<	7.72	<	<	<	0.10	0.61	3.06	4.86
K_2O	XRF	%	0.003	0	0.17	0.34	0.01	1.17	0.01	0.01	0.01	0.02	0.06	0.69	1.15
P_2O_5	XRF	%	0.024	22.2	0.061	0.065	<	0.280	<	<	0.024	0.034	0.061	0.151	0.229
C_{tot}	Leco	%	0.05	66.7	*0.19*	*0.41*	<	1.7	<	<	<	<	0.21	0.39	1.4
$C_{non\text{-}carb}$	Leco	%	0.05	77.8	-	-	<	0.05	<	<	<	<	<	0.05	0.05
F	Ion	%	0.055	88.9	-	-	<	0.15	<	<	<	<	<	0.06	0.09
Al	XRF	ppm	106	0	42124	20139	3650	106329	17817	25688	31274	36660	46145	70674	80249
Al	ICP-AES	ppm partial	1100	3.7	14836	8122	<	32000	1275	4164	9215	13900	19425	25780	28940
As	GFAAS	ppm partial	3	92.6	-	-	<	23	<	<	<	<	<	<	7.5
Au	GFAAS	ppb partial	2.5	88.9	-	-	<	7.9	<	<	<	<	<	2.3	3.7
B	ICP-AES	ppm partial	4.5	85.2	-	-	<	44	<	<	<	<	<	5	13
Ba	XRF	ppm	21	40.7	71	97	<	313	<	<	<	23	45	277	303
Ba	ICP-AES	ppm partial	10	51.9	*28*	*57*	<	233	<	<	<	<	18	114	178
Bi	GFAAS	ppm partial	0.04	77.8	*0.04*	*0.16*	<	0.84	<	<	<	<	<	0.06	0.20
Ca	XRF	ppm	29	0	51194	16588	12513	85085	18347	32247	43451	48692	55541	76619	79615
Ca	ICP-AES	ppm partial	50	0	6927	9650	451	41700	504	632	1128	2440	8298	17780	31330
Ce	ICP-MS	ppm	0.22	0	10	15	0.68	47	0.77	0.98	1.8	2.2	11	43	47
Cl	XRF	ppm	45	25.9	345	734	<	3730	<	<	<	130	243	690	1622
Co	ICP-MS	ppm	2	0	80	23	22	124	28	42	71	86	93	100	104
Co	ICP-AES	ppm partial	0.9	0	39	22	2.4	98	9.5	14	22	39	51	59	85
Cr	XRF	ppm	19	0	1936	1105	26	3856	36	73	1450	2312	2490	3334	3817
Cr	ICP-AES	ppm partial	5	0	912	616	7.5	1780	8.4	17	252	978	1488	1684	1780
Cu	XRF	ppm	17	40.7	60	59	<	226	<	<	<	30	90	128	203
Cu	ICP-AES	ppm partial	3	18.5	54	58	<	215	<	<	9.0	31	81	125	190
Dy	ICP-MS	ppm	0.55	3.7	2.1	1.4	<	7.8	0.7	1.1	1.4	1.6	2.3	3.5	4.2
Er	ICP-MS	ppm	0.3	3.7	1.2	0.9	<	4.9	0.4	0.7	0.7	0.9	1.3	2.0	2.8
Eu	ICP-MS	ppm	0.09	3.7	0.56	0.47	<	1.9	0.10	0.15	0.24	0.46	0.76	1.3	1.7
Fe	XRF	ppm	78	0	79402	16527	42036	114219	49371	63077	69355	76907	90715	100435	109246
Fe	ICP-AES	ppm partial	2300	0	44293	22007	5700	103000	11395	18120	26950	44500	59400	66780	73760
Ga	XRF	ppm	10	11.1	16	5	<	27	<	<	13	16	19	25	26
Gd	ICP-MS	ppm	0.5	3.7	2.2	1.5	<	7.6	0.8	1.0	1.3	1.6	3.0	4.4	5.1
Hf	ICP-MS	ppm	0.12	3.7	1.37	1.25	<	5.17	0.23	0.43	0.54	0.67	1.81	2.88	4.50
Ho	ICP-MS	ppm	0.09	3.7	0.42	0.29	<	1.7	0.14	0.23	0.29	0.33	0.47	0.67	0.91
K	XRF	ppm	25	0	1386	2805	42	9711	50	50	83	183	490	5744	9504
K	ICP-AES	ppm partial	100	0	389	833	100	3980	100	100	100	100	128	1340	2127
La	ICP-MS	ppm	0.55	25.9	6.0	9.4	<	38	<	<	<	1.8	5.6	22	25
La	ICP-AES	ppm partial	1.3	63	*3.3*	*5.8*	<	19	<	<	<	<	2.7	16	18
Li	ICP-AES	ppm partial	3.5	70.4	*3.0*	*2.2*	<	9.5	<	<	<	<	4.0	5.9	8.3
Lu	ICP-MS	ppm	0.03	7.4	0.16	0.14	<	0.75	<	0.07	0.09	0.12	0.15	0.28	0.41
Mg	XRF	ppm	543	0	123494	52551	19356	223110	21256	26737	108540	142308	152559	157745	200558
Mg	ICP-AES	ppm partial	50	0	47125	43340	1800	208000	5625	6740	23500	43100	53675	78020	151900
Mn	XRF	ppm	93	0	1279	248	736	1666	822	868	1178	1287	1442	1604	1620
Mn	ICP-AES	ppm partial	50	0	369	252	101	1160	102	133	184	300	471	718	903
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	44.4	7071	13304	<	57282	<	<	<	742	4541	22690	36091
Na	ICP-AES	ppm partial	150	37	486	615	<	2310	<	<	<	200	288	1600	1843
Nb	XRF	ppm	7	85.2	-	-	<	21	<	<	<	<	<	15	18
Nb	ICP-MS	ppm	0.16	11.1	2.6	4.6	<	17	<	<	0.27	0.43	2.4	11	15
Nd	ICP-MS	ppm	0.2	0	6.4	7.7	0.44	26	1.1	1.3	2.3	2.9	7.2	23	24
Ni	XRF	ppm	14	0	1058	563	43	2059	47	58	852	1251	1420	1522	1779
Ni	ICP-AES	ppm partial	3.5	0	487	400	11	1890	17	19	274	459	641	834	1236
P	XRF	ppm	105	0	266	283	<	1221	<	<	105	148	266	658	998
P	ICP-AES	ppm partial	6	7.4	241	284	<	1220	<	35	91	139	224	651	937
Pb	XRF	ppm	14	40.7	16	4	<	29	<	<	<	14	17	18	28
Pb	ICP-AES	ppm partial	8.7	92.6	-	-	<	10	<	<	<	<	<	<	9
Pd	GFAAS	ppb partial	5	33.3	9	3	<	19	<	<	<	8	11	12	16
Pr	ICP-MS	ppm	0.74	59.3	*1.3*	*1.9*	<	5.8	<	<	<	<	1.6	5.5	5.7
Rb	XRF	ppm	5.5	85.2	-	-	<	48	<	<	<	<	<	20	32
Rb	ICP-MS	ppm	0.6	51.9	*3.6*	*8.3*	<	37	<	<	<	<	1.1	14	23
S	XRF	ppm	70	51.9	*361*	*959*	<	4930	<	<	<	<	254	638	1896
S	ICP-AES	ppm partial	14.3	44.4	439	1303	<	6620	<	<	<	29	263	741	2345
Sc	ICP-MS	ppm	2.8	0	28	10	5.5	57	13	16	22	26	33	41	47
Sc	ICP-AES	ppm partial	0.4	0	3.1	2.7	0.64	12	0.82	0.87	1.1	2.4	3.5	6.7	10
Se	GFAAS	ppm partial	0.055	48.1	0.18	0.29	<	1.4	<	<	<	0.06	0.17	0.36	0.82
Sm	ICP-MS	ppm	0.5	3.7	1.8	1.5	<	6.3	0.67	0.81	0.97	1.1	2.2	4.3	5.1
Sr	XRF	ppm	4	0	86	115	5	407	5	7	13	41	92	258	382
Sr	ICP-AES	ppm partial	1.2	14.8	21	44	<	215	<	<	1.6	4.7	15	57	104
Ta	ICP-MS	ppm	0.06	55.6	*0.22*	*0.54*	<	2.7	<	<	<	<	0.16	0.66	1.2
Tb	ICP-MS	ppm	0.08	3.7	0.35	0.24	<	1.3	0.13	0.18	0.23	0.26	0.42	0.62	0.79
Te	GFAAS	ppb partial	5	55.6	*12*	*23*	<	121	<	<	<	<	14	20	43
Th	ICP-MS	ppm	0.13	40.7	0.66	1.0	<	4.2	<	<	<	0.26	0.62	1.7	3.6
Th	ICP-AES	ppm partial	5.6	77.8	*4*	*3*	<	13	<	<	<	<	<	8	10
Ti	XRF	ppm	30	0	4536	3888	126	19020	1176	2250	2658	3216	4194	10188	12084
Ti	ICP-MS	ppm	10	0	4226	3353	115	15700	1165	2136	2405	3140	3868	9794	11110
Ti	ICP-AES	ppm partial	2	0	672	949	42	4280	84	104	209	270	700	1288	3252
Tm	ICP-MS	ppm	0.03	3.7	0.16	0.13	<	0.72	0.05	0.07	0.11	0.12	0.17	0.32	0.41
U	ICP-MS	ppm	0.08	40.7	0.30	0.42	<	2.04	<	<	<	0.13	0.33	0.69	1.17
V	XRF	ppm	6	0	224	145	34	851	74	124	162	191	239	345	433
V	ICP-MS	ppm	2	0	211	125	29	742	82	106	156	187	221	318	395
V	ICP-AES	ppm partial	0.6	0	100	53	11	179	17	20	48	113	143	168	171
Y	XRF	ppm	2.8	3.7	10	8	<	45	3	4	6	7	11	19	25
Y	ICP-MS	ppm	0.1	0	12	9.0	0.67	49	4.4	6.5	8.0	9.0	14	22	27
Y	ICP-AES	ppm partial	0.15	0	2.7	3.2	0.20	16	0.29	0.49	0.79	1.9	3.2	5.0	9.3
Yb	ICP-MS	ppm	0.22	3.7	1.0	0.86	<	4.8	0.40	0.50	0.67	0.78	1.2	1.8	2.7
Zn	XRF	ppm	4	0	88	34	32	159	42	52	59	83	116	133	143
Zn	ICP-AES	ppm partial	2	0	28	17	7.1	59	8.7	10	12	24	39	56	57
Zr	XRF	ppm	6	3.7	51	56	<	231	15	19	20	27	55	129	202
Zr	ICP-MS	ppm	3	0	53	53	3.9	212	11	14	16	26	73	108	191

Table 49. Chemical concentration summary statistics for map unit 55.

Map unit	55	Arkosite, mica schist and conglomerate
Number of samples	9	
Unit area	612.6	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

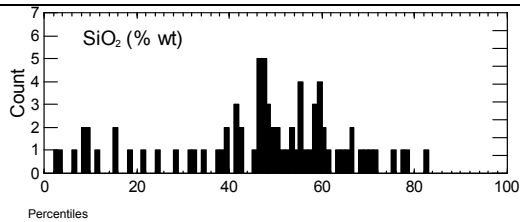


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	76.37	3.04	73.20	81.40	-	-	-	75.50	-	-	-
TiO_2	XRF	%	0.005	0	0.28	0.11	0.06	0.44	-	-	-	0.28	-	-	-
Al_2O_3	XRF	%	0.02	0	11.49	2.51	5.57	14.00	-	-	-	12.30	-	-	-
FeO	XRF	%	0.01	0	2.22	0.97	0.67	3.52	-	-	-	2.24	-	-	-
MnO	XRF	%	0.012	11.1	0.040	0.016	<	0.069	<	<	-	0.035	-	-	-
MgO	XRF	%	0.09	0	1.09	0.63	0.09	1.79	-	-	-	1.14	-	-	-
CaO	XRF	%	0.004	0	1.23	0.92	0.03	2.82	-	-	-	0.96	-	-	-
Na_2O	XRF	%	0.05	0	2.81	1.55	0.31	4.50	-	-	-	3.33	-	-	-
K_2O	XRF	%	0.003	0	3.34	1.27	1.68	5.26	-	-	-	3.22	-	-	-
P_2O_5	XRF	%	0.024	0	0.050	0.015	0.024	0.076	-	-	-	0.048	-	-	-
C_{tot}	Leco	%	0.05	55.6	-	-	<	0.65	<	<	<	<	0.23	-	-
$C_{non\text{-}carb}$	Leco	%	0.05	66.7	-	-	<	0.20	<	<	<	<	0.10	-	-
F	Ion	%	0.055	100	-	-	<	<	<	<	<	<	<	<	<
Al	XRF	ppm	106	0	60761	13267	29465	74060	-	-	-	65067	-	-	-
Al	ICP-AES	ppm partial	1100	0	11011	5087	2500	17200	-	-	-	11900	-	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	100	-	-	<	<	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	503	137	353	772	-	-	-	497	-	-	-
Ba	ICP-AES	ppm partial	10	0	63	56	22	193	-	-	-	41	-	-	-
Bi	GFAAS	ppm partial	0.04	77.8	-	-	<	0.08	<	<	<	<	<	-	-
Ca	XRF	ppm	29	0	8823	6592	222	20163	-	-	-	6893	-	-	-
Ca	ICP-AES	ppm partial	50	0	3391	5768	200	18000	-	-	-	600	-	-	-
Ce	ICP-MS	ppm	0.22	0	28	10	16	47	-	-	-	26	-	-	-
Cl	XRF	ppm	45	11.1	81	17	<	105	<	<	-	80	-	-	-
Co	ICP-MS	ppm	2	11.1	6.1	2.3	<	10	<	<	-	6.2	-	-	-
Co	ICP-AES	ppm partial	0.9	0	6.4	2.8	0.9	10	-	-	-	6.9	-	-	-
Cr	XRF	ppm	19	0	38	11	25	63	-	-	-	38	-	-	-
Cr	ICP-AES	ppm partial	5	11.1	28	12	<	53	<	<	-	29	-	-	-
Cu	XRF	ppm	17	77.8	-	-	<	29	<	<	<	<	<	-	-
Cu	ICP-AES	ppm partial	3	0	12	11	3.3	36	-	-	-	7.3	-	-	-
Dy	ICP-MS	ppm	0.55	0	1.4	0.3	1.0	2.1	-	-	-	1.5	-	-	-
Er	ICP-MS	ppm	0.3	0	0.7	0.2	0.5	0.9	-	-	-	0.8	-	-	-
Eu	ICP-MS	ppm	0.09	0	0.43	0.10	0.30	0.57	-	-	-	0.44	-	-	-
Fe	XRF	ppm	78	0	17242	7529	5206	27335	-	-	-	17413	-	-	-
Fe	ICP-AES	ppm partial	2300	0	19278	8724	3300	31100	-	-	-	19400	-	-	-
Ga	XRF	ppm	10	11.1	18	3	<	23	<	<	-	17	-	-	-
Gd	ICP-MS	ppm	0.5	0	1.9	0.5	1.3	2.9	-	-	-	1.8	-	-	-
Hf	ICP-MS	ppm	0.12	0	2.43	0.68	1.75	3.49	-	-	-	2.02	-	-	-
Ho	ICP-MS	ppm	0.09	0	0.27	0.06	0.18	0.34	-	-	-	0.28	-	-	-
K	XRF	ppm	25	0	27747	10574	13944	43658	-	-	-	26726	-	-	-
K	ICP-AES	ppm partial	100	0	7499	4020	1700	13100	-	-	-	7400	-	-	-
La	ICP-MS	ppm	0.55	0	14	5.4	8.4	25	-	-	-	13	-	-	-
La	ICP-AES	ppm partial	1.3	0	13	5.9	6.4	26	-	-	-	13	-	-	-
Li	ICP-AES	ppm partial	3.5	11.1	20.1	13.0	<	40.5	<	<	-	16.3	-	-	-
Lu	ICP-MS	ppm	0.03	0	0.10	0.02	0.07	0.13	-	-	-	0.11	-	-	-
Mg	XRF	ppm	543	0	6567	3793	543	10794	-	-	-	6874	-	-	-
Mg	ICP-AES	ppm partial	50	0	6836	3819	200	10900	-	-	-	7700	-	-	-
Mn	XRF	ppm	93	11.1	310	124	<	535	<	<	-	271	-	-	-
Mn	ICP-AES	ppm partial	50	11.1	297	122	<	525	<	<	-	283	-	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	20821	11501	2300	33390	-	-	-	24709	-	-	-
Na	ICP-AES	ppm partial	150	0	542	142	300	814	-	-	-	542	-	-	-
Nb	XRF	ppm	7	100	-	-	<	<	<	<	<	<	<	<	<
Nb	ICP-MS	ppm	0.16	0	2.4	0.89	0.75	3.5	-	-	-	2.6	-	-	-
Nd	ICP-MS	ppm	0.2	0	11	3.5	7.7	18	-	-	-	11	-	-	-
Ni	XRF	ppm	14	22.2	18	5	<	29	<	<	-	16	-	-	-
Ni	ICP-AES	ppm partial	3.5	0	16	6.9	5.3	29	-	-	-	15	-	-	-
P	XRF	ppm	105	0	218	65	105	331	-	-	-	209	-	-	-
P	ICP-AES	ppm partial	6	0	159	79	31	287	-	-	-	162	-	-	-
Pb	XRF	ppm	14	0	27	5	21	35	-	-	-	26	-	-	-
Pb	ICP-AES	ppm partial	8.7	100	-	-	<	<	<	<	<	<	<	<	<
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	3.1	1.1	1.9	5.1	-	-	-	2.9	-	-	-
Rb	XRF	ppm	5.5	0	98	51	48	180	-	-	-	70	-	-	-
Rb	ICP-MS	ppm	0.6	0	93	43	50	158	-	-	-	70	-	-	-
S	XRF	ppm	70	33.3	922	2094	<	6300	<	<	<	160	-	-	-
S	ICP-AES	ppm partial	14.3	22.2	816	2132	<	6390	<	<	-	136	-	-	-
Sc	ICP-MS	ppm	2.8	11.1	5.2	2.3	<	9.6	<	<	-	4.9	-	-	-
Sc	ICP-AES	ppm partial	0.4	11.1	4.1	2.2	<	8.3	<	<	-	3.8	-	-	-
Se	GFAAS	ppm partial	0.055	77.8	-	-	<	0.29	<	<	<	<	<	-	-
Sm	ICP-MS	ppm	0.5	0	2.2	0.64	1.5	3.2	-	-	-	2.1	-	-	-
Sr	XRF	ppm	4	0	121	54	48	208	-	-	-	126	-	-	-
Sr	ICP-AES	ppm partial	1.2	0	4.8	4.6	1.8	17	-	-	-	3.2	-	-	-
Ta	ICP-MS	ppm	0.06	0	0.22	0.08	0.06	0.37	-	-	-	0.21	-	-	-
Tb	ICP-MS	ppm	0.08	0	0.27	0.07	0.16	0.40	-	-	-	0.25	-	-	-
Te	GFAAS	ppb partial	5	88.9	-	-	<	18	<	<	<	<	<	-	-
Th	ICP-MS	ppm	0.13	0	8.0	4.8	3.8	16	-	-	-	6.2	-	-	-
Th	ICP-AES	ppm partial	5.6	11.1	9	4	<	16	<	<	-	7	-	-	-
Ti	XRF	ppm	30	0	1650	642	378	2622	-	-	-	1650	-	-	-
Ti	ICP-MS	ppm	10	0	1533	608	393	2460	-	-	-	1560	-	-	-
Ti	ICP-AES	ppm partial	2	0	1256	734	47	2320	-	-	-	1280	-	-	-
Tm	ICP-MS	ppm	0.03	0	0.12	0.03	0.08	0.15	-	-	-	0.12	-	-	-
U	ICP-MS	ppm	0.08	0	0.93	0.35	0.49	1.56	-	-	-	0.81	-	-	-
V	XRF	ppm	6	0	52	24	9	90	-	-	-	53	-	-	-
V	ICP-MS	ppm	2	0	42	22	6.2	76	-	-	-	41	-	-	-
V	ICP-AES	ppm partial	0.6	11.1	45	22	<	82	<	<	-	42	-	-	-
Y	XRF	ppm	2.8	0	10	1	8	12	-	-	-	10	-	-	-
Y	ICP-MS	ppm	0.1	0	8.4	1.7	5.2	10	-	-	-	8.7	-	-	-
Y	ICP-AES	ppm partial	0.15	0	3.4	1.2	1.6	4.8	-	-	-	3.8	-	-	-
Yb	ICP-MS	ppm	0.22	0	0.73	0.16	0.51	0.92	-	-	-	0.77	-	-	-
Zn	XRF	ppm	4	0	39	20	5	71	-	-	-	36	-	-	-
Zn	ICP-AES	ppm partial	2	0	34	17	3.3	57	-	-	-	38	-	-	-
Zr	XRF	ppm	6	0	99	25	71	135	-	-	-	89	-	-	-
Zr	ICP-MS	ppm	3	0	87	25	58	133	-	-	-	77	-	-	-

Table 50. Chemical concentration summary statistics for map unit 56.

Map unit	**56**	**Carbonate- and calc-silicate rocks, black schists and metavolcanic rocks, BIF**
Number of samples	78	
Unit area	3504.9	km^2
Percent of bedrock	1.0	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

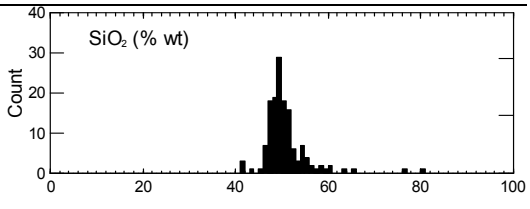


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**46.47**	19.07	2.93	82.90	8.36	12.91	39.30	**48.55**	59.40	68.27	73.98
TiO_2	XRF	%	**0.005**	1.3	**0.78**	0.60	<	2.32	0.03	0.07	0.27	**0.72**	1.14	1.67	1.94
Al_2O_3	XRF	%	**0.02**	0	**10.42**	5.99	0.11	23.10	0.57	0.95	5.38	**12.10**	14.70	17.25	18.78
FeO	XRF	%	**0.01**	0	**7.60**	4.98	0.12	16.70	0.63	0.85	3.00	**8.19**	11.80	13.90	14.80
MnO	XRF	%	**0.012**	2.6	**0.127**	0.092	<	0.359	0.017	0.026	0.049	**0.115**	0.187	0.241	0.329
MgO	XRF	%	**0.09**	0	**8.54**	7.09	0.35	32.90	0.95	1.71	3.40	**6.42**	11.60	19.70	20.80
CaO	XRF	%	**0.004**	0	**10.50**	11.36	0.09	43.50	0.21	0.39	1.32	**6.46**	14.60	29.67	34.02
Na_2O	XRF	%	**0.05**	16.7	**1.84**	1.72	<	6.90	<	<	0.30	**1.61**	3.01	4.26	4.88
K_2O	XRF	%	**0.003**	1.3	**1.41**	1.54	<	5.71	0.02	0.04	0.16	**0.70**	2.60	3.80	4.39
P_2O_5	XRF	%	**0.024**	5.1	**0.101**	0.059	<	0.277	<	0.031	0.059	**0.094**	0.128	0.183	0.227
C_{tot}	Leco	%	**0.05**	43.6	**2.5**	4.1	<	12	<	<	<	**0.12**	3.2	10	11
$C_{non-carb}$	Leco	%	**0.05**	78.2	***0.13***	*0.65*	<	5.5	<	<	<	**<**	<	0.14	0.61
F	Ion	%	**0.055**	75.6	***0.05***	*0.02*	<	0.14	<	<	<	**<**	<	0.08	0.09
Al	XRF	ppm	**106**	0	**55106**	31708	582	122199	3005	5004	28460	**64009**	77763	91253	99346
Al	ICP-AES	ppm partial	**1100**	12.8	**18309**	16367	<	59600	<	<	4300	**15900**	27200	47310	52460
As	GFAAS	ppm partial	**3**	82.1	**-**	-	<	108	<	<	<	**<**	<	4.5	9.8
Au	GFAAS	ppb partial	**2.5**	85.9	**-**	-	<	11.6	<	<	<	**<**	<	2.9	5.0
B	ICP-AES	ppm partial	**4.5**	92.3	**-**	-	<	8	<	<	<	**<**	<	<	5
Ba	XRF	ppm	**21**	6.4	**310**	377	<	1790	<	27	43	**153**	427	823	1076
Ba	ICP-AES	ppm partial	**10**	17.9	**107**	192	<	1380	<	<	13	**36**	131	237	374
Bi	GFAAS	ppm partial	**0.04**	75.6	***0.04***	*0.06*	<	0.33	<	<	<	**<**	<	0.10	0.17
Ca	XRF	ppm	**29**	0	**75096**	81188	608	311025	1516	2803	9438	**46189**	104390	212141	243243
Ca	ICP-AES	ppm partial	**50**	0	**56750**	87728	263	305000	627	1030	1800	**9195**	65800	214700	249200
Ce	ICP-MS	ppm	**0.22**	0	**30**	40	0.58	285	1.0	1.3	6.8	**17**	42	75	80
Cl	XRF	ppm	**45**	11.5	**408**	889	<	7010	<	<	70	**130**	350	907	1806
Co	ICP-MS	ppm	**2**	9	**31**	26	<	122	<	2.2	6.5	**26**	48	59	81
Co	ICP-AES	ppm partial	**0.9**	5.1	**18**	17	<	114	<	1.5	5.3	**14**	28	39	40
Cr	XRF	ppm	**19**	10.3	**338**	673	<	3730	<	<	31	**133**	213	1028	2127
Cr	ICP-AES	ppm partial	**5**	15.4	**140**	282	<	1350	<	<	9.5	**46**	137	221	952
Cu	XRF	ppm	**17**	44.9	**56**	59	<	253	<	<	<	**22**	75	148	200
Cu	ICP-AES	ppm partial	**3**	30.8	**45**	59	<	229	<	<	<	**21**	59	144	193
Dy	ICP-MS	ppm	**0.55**	10.3	**2.9**	2.3	<	17	<	<	1.2	**2.8**	3.9	4.7	5.8
Er	ICP-MS	ppm	**0.3**	10.3	**1.6**	1.2	<	9.2	<	<	0.7	**1.4**	2.1	2.8	3.1
Eu	ICP-MS	ppm	**0.09**	7.7	**0.81**	0.60	<	3.1	<	0.09	0.34	**0.80**	1.1	1.4	1.8
Fe	XRF	ppm	**78**	0	**59029**	38710	932	129759	4926	6628	23279	**63597**	91686	108003	114996
Fe	ICP-AES	ppm partial	**2300**	3.8	**37710**	31390	<	108000	2600	5200	12400	**26550**	56200	92260	100160
Ga	XRF	ppm	**10**	23.1	**20**	8	<	38	<	<	11	**21**	27	30	33
Gd	ICP-MS	ppm	**0.5**	11.5	**3.2**	2.8	<	21.3	<	<	1.3	**2.8**	4.5	5.2	6.8
Hf	ICP-MS	ppm	**0.12**	3.8	**2.41**	2.52	<	18.8	0.12	0.16	0.75	**1.95**	3.52	4.82	5.08
Ho	ICP-MS	ppm	**0.09**	10.3	**0.57**	0.45	<	3.4	<	<	0.25	**0.54**	0.74	0.96	1.1
K	XRF	ppm	**25**	1.3	**11695**	12765	<	47393	174	332	1303	**5802**	21580	31557	36470
K	ICP-AES	ppm partial	**100**	0	**5108**	6796	100	25600	100	100	400	**1100**	8560	16500	19780
La	ICP-MS	ppm	**0.55**	5.1	**15**	20	<	137	<	1.3	3.2	**7.1**	21	36	41
La	ICP-AES	ppm partial	**1.3**	19.2	**12**	19	<	145	<	<	1.7	**4.8**	16	27	37
Li	ICP-AES	ppm partial	**3.5**	33.3	**14.9**	15.3	<	70.9	<	<	<	**8.7**	20.5	41.4	46.8
Lu	ICP-MS	ppm	**0.03**	9	**0.22**	0.16	<	1.02	<	0.03	0.08	**0.21**	0.29	0.37	0.47
Mg	XRF	ppm	**543**	0	**51472**	42759	2129	198387	5710	10323	20502	**38713**	69948	118791	125424
Mg	ICP-AES	ppm partial	**50**	0	**35873**	40866	1000	171000	1964	4010	7800	**20850**	38600	105000	132800
Mn	XRF	ppm	**93**	2.6	**984**	713	<	2782	132	202	380	**891**	1449	1868	2550
Mn	ICP-AES	ppm partial	**50**	2.6	**490**	483	<	2400	93	126	198	**308**	518	1192	1572
Mo	XRF	ppm	**2.6**	97.4	**-**	-	<	3	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	98.7	**-**	-	<	4	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	16.7	**13682**	12725	<	51198	<	<	2226	**11946**	22334	31617	36224
Na	ICP-AES	ppm partial	**150**	20.5	**612**	655	<	3900	<	<	200	**364**	800	1398	2020
Nb	XRF	ppm	**7**	52.6	***8***	*4*	<	25	<	<	<	**<**	10	14	17
Nb	ICP-MS	ppm	**0.16**	5.1	**5.2**	4.5	<	26	<	0.26	1.9	**4.2**	7.4	11	12
Nd	ICP-MS	ppm	**0.2**	0	**14**	17	0.35	125	0.84	1.3	4.0	**9.7**	20	30	38
Ni	XRF	ppm	**14**	23.1	**176**	358	<	1920	<	<	18	**65**	111	354	1163
Ni	ICP-AES	ppm partial	**3.5**	7.7	**93**	206	<	1520	<	4.7	9.4	**36**	83	131	527
P	XRF	ppm	**105**	0	**440**	257	<	1208	<	135	257	**410**	558	798	990
P	ICP-AES	ppm partial	**6**	0	**383**	228	26	994	65	109	225	**358**	504	714	806
Pb	XRF	ppm	**14**	20.5	**18**	6	<	35	<	<	14	**16**	21	29	32
Pb	ICP-AES	ppm partial	**8.7**	89.7	**-**	-	<	12	<	<	<	**<**	<	6	9
Pd	GFAAS	ppb partial	**5**	69.2	***5***	*6*	<	25	<	<	<	**<**	6	13	18
Pr	ICP-MS	ppm	**0.74**	20.5	**3.7**	4.5	<	32.8	<	<	0.90	**2.1**	5.2	8.3	9.4
Rb	XRF	ppm	**5.5**	32.1	**48**	55	<	267	<	<	<	**16**	85	128	148
Rb	ICP-MS	ppm	**0.6**	5.1	**42**	51	<	239	<	1.0	2.6	**13**	78	126	132
S	XRF	ppm	**70**	42.3	**535**	1252	<	8670	<	<	<	**105**	489	1274	1998
S	ICP-AES	ppm partial	**14.3**	17.9	**578**	1360	<	9240	<	<	20	**115**	508	1470	2158
Sc	ICP-MS	ppm	**2.8**	20.5	**23**	16	<	54	<	<	6.0	**25**	37	44	49
Sc	ICP-AES	ppm partial	**0.4**	9	**6.2**	6.3	<	28	<	0.53	1.4	**5.1**	7.8	15	22
Se	GFAAS	ppm partial	**0.055**	52.6	***0.12***	*0.17*	<	0.97	<	<	<	**<**	0.15	0.32	0.54
Sm	ICP-MS	ppm	**0.5**	14.1	**3.1**	2.9	<	22	<	<	1.1	**2.5**	4.1	5.6	7.0
Sr	XRF	ppm	**4**	1.3	**110**	111	<	636	9	23	39	**73**	156	226	312
Sr	ICP-AES	ppm partial	**1.2**	5.1	**39**	82	<	604	<	1.7	4.0	**12**	36	94	152
Ta	ICP-MS	ppm	**0.06**	19.2	**0.36**	0.28	<	1.2	<	<	0.09	**0.29**	0.53	0.79	0.90
Tb	ICP-MS	ppm	**0.08**	10.3	**0.49**	0.40	<	3.1	<	<	0.19	**0.47**	0.67	0.82	0.96
Te	GFAAS	ppb partial	**5**	33.3	**19**	26	<	127	<	<	<	**9**	20	52	80
Th	ICP-MS	ppm	**0.13**	14.1	**3.4**	4.4	<	19	<	<	0.33	**1.3**	4.9	9.8	14
Th	ICP-AES	ppm partial	**5.6**	55.1	***8***	*6*	<	31	<	<	<	**<**	11	16	20
Ti	XRF	ppm	**30**	1.3	**4686**	3612	<	13920	204	408	1614	**4320**	6840	10002	11628
Ti	ICP-MS	ppm	**10**	0	**4329**	3323	68	12600	178	324	1490	**4010**	6630	9034	10120
Ti	ICP-AES	ppm partial	**2**	0	**1240**	1288	4.9	6170	8.7	29	92	**1080**	1750	2952	3924
Tm	ICP-MS	ppm	**0.03**	5.1	**0.23**	0.17	<	1.18	<	0.03	0.09	**0.23**	0.29	0.38	0.44
U	ICP-MS	ppm	**0.08**	11.5	**0.94**	1.09	<	5.54	<	<	0.19	**0.47**	1.39	2.46	2.99
V	XRF	ppm	**6**	2.6	**176**	135	<	501	9	13	45	**182**	275	346	420
V	ICP-MS	ppm	**2**	0	**153**	121	5.2	425	7.9	12	25	**159**	246	326	373
V	ICP-AES	ppm partial	**0.6**	0	**71**	69	1.3	270	2.7	3.8	9.5	**54**	110	184	220
Y	XRF	ppm	**2.8**	7.7	**17**	13	<	93	<	3	8	**16**	23	29	34
Y	ICP-MS	ppm	**0.1**	0	**17**	13	0.99	91	1.7	3.9	6.8	**17**	22	29	32
Y	ICP-AES	ppm partial	**0.15**	0	**5.7**	6.4	0.37	54	1.2	1.3	2.7	**4.3**	7.2	11	12
Yb	ICP-MS	ppm	**0.22**	10.3	**1.5**	1.1	<	7.2	<	<	0.59	**1.4**	2.0	2.5	3.0
Zn	XRF	ppm	**4**	3.8	**74**	57	<	331	7	12	25	**71**	108	142	167
Zn	ICP-AES	ppm partial	**2**	6.4	**35**	30	<	116	<	3.8	11	**23**	52	78	98
Zr	XRF	ppm	**6**	10.3	**110**	110	<	800	<	<	33	**90**	147	208	244
Zr	ICP-MS	ppm	**3**	2.6	**91**	100	<	765	5.5	8.0	29	**71**	124	180	206

Table 51. Chemical concentration summary statistics for map unit 57.

Map unit	57	Mafic and felsic metavolcanic rocks
Number of samples	144	
Unit area	3353.3	km^2
Percent of bedrock	1.0	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

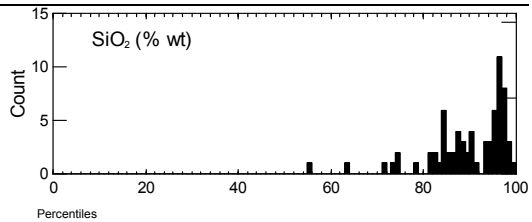


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**50.74**	4.93	41.20	80.60	46.37	47.10	48.50	**49.70**	51.60	55.71	58.87
TiO_2	XRF	%	**0.005**	0	**1.23**	0.52	0.14	3.54	0.56	0.62	0.92	**1.17**	1.48	1.83	2.04
Al_2O_3	XRF	%	**0.02**	0	**13.46**	2.34	3.52	21.00	8.68	11.40	13.15	**13.70**	14.40	15.20	15.79
FeO	XRF	%	**0.01**	0	**11.50**	2.92	0.71	18.00	5.10	7.61	10.55	**12.10**	13.20	14.62	15.43
MnO	XRF	%	**0.012**	0.7	**0.184**	0.112	<	1.260	0.047	0.065	0.134	**0.196**	0.217	0.250	0.271
MgO	XRF	%	**0.09**	0	**7.27**	3.07	0.38	21.50	3.22	4.05	5.74	**7.17**	8.19	9.82	12.90
CaO	XRF	%	**0.004**	0	**8.02**	2.92	0.02	18.80	2.99	4.18	6.35	**8.14**	10.05	11.21	12.10
Na_2O	XRF	%	**0.05**	0.7	**3.38**	1.49	<	9.03	0.90	1.68	2.39	**3.23**	4.40	5.25	5.96
K_2O	XRF	%	**0.003**	0	**0.64**	0.96	0.01	5.14	0.07	0.08	0.14	**0.29**	0.55	1.73	2.76
P_2O_5	XRF	%	**0.024**	2.1	**0.129**	0.105	<	0.845	0.037	0.049	0.080	**0.101**	0.141	0.216	0.304
C_{tot}	Leco	%	**0.05**	63.9	***0.12***	*0.22*	<	1.2	<	<	<	**<**	0.12	0.38	0.65
$C_{non\text{-}carb}$	Leco	%	**0.05**	95.8	**-**	-	<	0.52	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	88.2	**-**	-	<	0.24	<	<	<	**<**	<	0.06	0.08
Al	XRF	ppm	**106**	0	**71219**	12363	18621	111090	45907	60306	69564	**72473**	76176	80408	83529
Al	ICP-AES	ppm partial	**1100**	1.4	**14583**	11356	<	69200	2940	4230	6750	**11300**	19800	29070	34900
As	GFAAS	ppm partial	**3**	91.7	**-**	-	<	120	<	<	<	**<**	<	<	4.3
Au	GFAAS	ppb partial	**2.5**	54.2	***3.6***	*3.8*	<	29.5	<	<	<	**<**	4.6	7.8	9.2
B	ICP-AES	ppm partial	**4.5**	90.3	**-**	-	<	13	<	<	<	**<**	<	<	5
Ba	XRF	ppm	**21**	5.6	**127**	242	<	2109	<	23	34	**55**	106	244	472
Ba	ICP-AES	ppm partial	**10**	30.6	**64**	153	<	1260	<	<	<	**16**	54	139	250
Bi	GFAAS	ppm partial	**0.04**	86.1	**-**	-	<	0.23	<	<	<	**<**	<	0.05	0.10
Ca	XRF	ppm	**29**	0	**57314**	20878	172	134420	21371	29851	45367	**58165**	71858	80152	86515
Ca	ICP-AES	ppm partial	**50**	0	**10608**	7361	200	45200	2540	3580	5800	**8900**	12550	20700	25260
Ce	ICP-MS	ppm	**0.22**	0	**23**	26	0.55	164	3.8	6.3	7.5	**15**	30	44	73
Cl	XRF	ppm	**45**	26.4	**503**	1414	<	14600	<	<	<	**115**	385	1162	1796
Co	ICP-MS	ppm	**2**	0.7	**44**	14	<	94	15	26	41	**47**	51	56	61
Co	ICP-AES	ppm partial	**0.9**	1.4	**17**	11	<	61	3.4	5.6	9.7	**14**	24	33	35
Cr	XRF	ppm	**19**	5.6	**214**	291	<	2669	<	26	107	**169**	233	333	469
Cr	ICP-AES	ppm partial	**5**	5.6	**67**	130	<	1450	<	9.1	18	**39**	78	125	191
Cu	XRF	ppm	**17**	13.2	**145**	124	<	630	<	<	39	**120**	203	282	379
Cu	ICP-AES	ppm partial	**3**	10.4	**136**	126	<	738	<	<	29	**117**	196	265	387
Dy	ICP-MS	ppm	**0.55**	0	**4.3**	2.5	1.0	21	2.1	2.6	3.1	**3.8**	4.6	5.7	7.6
Er	ICP-MS	ppm	**0.3**	0	**2.5**	1.5	0.7	13	1.1	1.5	1.9	**2.3**	2.7	3.2	4.2
Eu	ICP-MS	ppm	**0.09**	0	**1.1**	0.52	0.12	3.3	0.43	0.64	0.77	**0.93**	1.2	1.7	2.1
Fe	XRF	ppm	**78**	0	**89378**	22657	5517	139829	39611	59130	81974	**94017**	102564	113597	119891
Fe	ICP-AES	ppm partial	**2300**	1.4	**33109**	23391	<	97400	7150	10690	15500	**25150**	44900	67580	87470
Ga	XRF	ppm	**10**	0.7	**23**	5	<	38	14	16	20	**23**	26	29	30
Gd	ICP-MS	ppm	**0.5**	0	**4.2**	2.6	0.8	19.5	1.8	2.3	3.0	**3.7**	4.7	6.6	7.9
Hf	ICP-MS	ppm	**0.12**	0	**2.35**	2.16	0.26	18.4	0.93	1.09	1.26	**1.73**	2.61	4.42	5.02
Ho	ICP-MS	ppm	**0.09**	0	**0.88**	0.53	0.26	4.2	0.41	0.51	0.67	**0.80**	0.95	1.1	1.6
K	XRF	ppm	**25**	0	**5312**	7927	58	42662	540	672	1187	**2432**	4598	14334	22925
K	ICP-AES	ppm partial	**100**	0	**2879**	5375	100	26500	100	100	200	**500**	2700	8320	16630
La	ICP-MS	ppm	**0.55**	1.4	**11**	13	<	80	1.8	2.4	3.3	**6.7**	14	25	38
La	ICP-AES	ppm partial	**1.3**	18.1	**7.7**	11	<	65	<	<	1.5	**3.6**	7.7	18	32
Li	ICP-AES	ppm partial	**3.5**	27.8	**10.9**	11.2	<	70.6	<	<	<	**6.8**	13.9	21.0	31.0
Lu	ICP-MS	ppm	**0.03**	0	**0.34**	0.19	0.09	1.53	0.14	0.21	0.26	**0.31**	0.37	0.44	0.55
Mg	XRF	ppm	**543**	0	**43850**	18482	2291	129645	19441	24397	34612	**43235**	49356	59233	77787
Mg	ICP-AES	ppm partial	**50**	0	**12272**	9813	500	43200	2700	3099	4900	**8300**	18750	25820	30420
Mn	XRF	ppm	**93**	0.7	**1426**	868	<	9765	364	504	1039	**1519**	1682	1938	2100
Mn	ICP-AES	ppm partial	**50**	1.4	**314**	222	<	1240	79	118	180	**248**	385	588	768
Mo	XRF	ppm	**2.6**	99.3	**-**	-	<	6	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	98.6	**-**	-	<	5	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0.7	**25050**	11026	<	67003	6685	12480	17734	**23967**	32611	38933	44208
Na	ICP-AES	ppm partial	**150**	0	**1148**	1034	200	6200	270	300	500	**900**	1350	2200	3478
Nb	XRF	ppm	**7**	63.2	***7***	*10*	<	90	<	<	<	**<**	8	11	17
Nb	ICP-MS	ppm	**0.16**	0.7	**5.9**	9.1	<	78	0.62	1.8	2.6	**3.7**	6.1	10	14
Nd	ICP-MS	ppm	**0.2**	0	**14**	13	0.56	85	3.2	5.2	6.2	**10**	17	24	32
Ni	XRF	ppm	**14**	5.6	**119**	153	<	1570	<	45	71	**99**	122	161	220
Ni	ICP-AES	ppm partial	**3.5**	2.8	**43**	60	<	587	4.5	10	19	**31**	48	69	76
P	XRF	ppm	**105**	0	**562**	458	<	3684	161	214	349	**440**	615	942	1325
P	ICP-AES	ppm partial	**6**	0	**512**	436	66	3650	148	195	302	**395**	566	846	1180
Pb	XRF	ppm	**14**	34	**17**	5	<	59	<	<	<	**15**	19	23	26
Pb	ICP-AES	ppm partial	**8.7**	95.8	**-**	-	<	20	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	38.2	**12**	8	<	35	<	<	<	**11**	18	23	26
Pr	ICP-MS	ppm	**0.74**	6.3	**3.1**	3.2	<	22.5	<	0.99	1.2	**2.2**	4.1	5.8	8.5
Rb	XRF	ppm	**5.5**	46.5	**19**	28	<	152	<	<	<	**6**	14	57	86
Rb	ICP-MS	ppm	**0.6**	10.4	**16**	28	<	155	<	<	1.5	**4.6**	12	51	82
S	XRF	ppm	**70**	22.2	**526**	728	<	5160	<	<	90	**275**	585	1242	1924
S	ICP-AES	ppm partial	**14.3**	11.8	**573**	771	<	5120	<	<	93	**294**	680	1437	2096
Sc	ICP-MS	ppm	**2.8**	0.7	**39**	11	<	61	16	21	35	**42**	46	49	52
Sc	ICP-AES	ppm partial	**0.4**	0.7	**5.0**	4.4	<	37	0.94	2.1	3.0	**4.2**	5.5	7.5	10
Se	GFAAS	ppm partial	**0.055**	25.7	**0.23**	0.26	<	2.4	<	<	<	**0.17**	0.28	0.45	0.66
Sm	ICP-MS	ppm	**0.5**	0.7	**3.4**	2.5	<	16	1.2	1.7	2.1	**2.7**	3.8	5.5	7.5
Sr	XRF	ppm	**4**	0	**135**	111	5	680	26	35	65	**96**	188	275	320
Sr	ICP-AES	ppm partial	**1.2**	4.9	**13**	19	<	140	1.0	2.1	3.7	**6.4**	15	32	45
Ta	ICP-MS	ppm	**0.06**	6.3	**0.38**	0.54	<	4.8	<	0.12	0.16	**0.23**	0.43	0.62	0.92
Tb	ICP-MS	ppm	**0.08**	0	**0.69**	0.42	0.14	3.1	0.34	0.41	0.51	**0.60**	0.73	0.95	1.3
Te	GFAAS	ppb partial	**5**	37.5	**26**	55	<	487	<	<	<	**8**	19	76	128
Th	ICP-MS	ppm	**0.13**	4.9	**1.9**	2.8	<	14	0.10	0.19	0.29	**0.82**	2.1	4.6	7.3
Th	ICP-AES	ppm partial	**5.6**	72.9	***5***	*4*	<	21	<	<	<	**<**	6	10	13
Ti	XRF	ppm	**30**	0	**7362**	3126	852	21240	3372	3714	5544	**6990**	8880	11004	12258
Ti	ICP-MS	ppm	**10**	0	**6886**	3141	899	22300	2988	3459	5035	**6470**	8240	11110	12230
Ti	ICP-AES	ppm partial	**2**	0	**1555**	996	80	4710	304	508	822	**1255**	2265	3134	3431
Tm	ICP-MS	ppm	**0.03**	0	**0.36**	0.22	0.10	1.80	0.15	0.21	0.27	**0.33**	0.39	0.45	0.62
U	ICP-MS	ppm	**0.08**	16	**0.53**	0.81	<	5.64	<	<	0.09	**0.25**	0.56	1.29	2.14
V	XRF	ppm	**6**	0	**304**	93	10	588	106	161	275	**317**	355	399	438
V	ICP-MS	ppm	**2**	0.7	**270**	88	<	457	70	136	242	**284**	320	368	393
V	ICP-AES	ppm partial	**0.6**	0.7	**83**	64	<	388	19	23	42	**62**	106	171	218
Y	XRF	ppm	**2.8**	0	**24**	15	5	115	13	15	18	**22**	25	32	42
Y	ICP-MS	ppm	**0.1**	0	**26**	16	7.3	135	12	16	19	**24**	27	33	44
Y	ICP-AES	ppm partial	**0.15**	0	**5.9**	6.2	0.60	60	1.7	2.3	3.2	**4.6**	6.3	9.2	14
Yb	ICP-MS	ppm	**0.22**	0	**2.3**	1.4	0.68	11	0.98	1.4	1.8	**2.2**	2.5	2.9	4.0
Zn	XRF	ppm	**4**	0	**96**	53	5	290	16	24	54	**100**	125	159	180
Zn	ICP-AES	ppm partial	**2**	6.9	**27**	25	<	120	<	3.2	9.0	**20**	37	65	79
Zr	XRF	ppm	**6**	0	**106**	94	10	933	32	44	61	**83**	122	189	232
Zr	ICP-MS	ppm	**3**	0	**88**	81	8.1	753	30	37	46	**65**	103	171	192

Table 52. Chemical concentration summary statistics for map unit 58.

Map unit	**58**	**Quartzite**
Number of samples	71	
Unit area	2653.2	km^2
Percent of bedrock	0.8	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

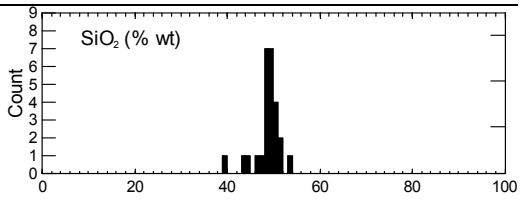


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**89.70**	8.64	55.20	99.20	73.43	80.38	84.93	**91.30**	96.30	97.58	98.28
TiO_2	XRF	%	**0.005**	0	**0.10**	0.15	0.01	1.03	0.02	0.02	0.03	**0.07**	0.10	0.20	0.34
Al_2O_3	XRF	%	**0.02**	0	**4.73**	4.09	0.20	16.40	0.61	0.78	1.49	**3.19**	7.09	11.20	13.83
FeO	XRF	%	**0.01**	0	**0.86**	1.32	0.02	10.20	0.06	0.12	0.23	**0.59**	0.95	1.59	2.06
MnO	XRF	%	**0.012**	49.3	**0.022**	0.028	<	0.210	<	<	<	**0.012**	0.019	0.034	0.050
MgO	XRF	%	**0.09**	36.6	**0.75**	1.22	<	5.57	<	<	<	**0.27**	0.60	2.48	3.81
CaO	XRF	%	**0.004**	0	**0.55**	1.22	0.01	7.00	0.01	0.01	0.02	**0.07**	0.46	1.70	3.25
Na_2O	XRF	%	**0.05**	46.5	**0.64**	1.17	<	5.69	<	<	<	**0.07**	0.71	1.86	3.55
K_2O	XRF	%	**0.003**	0	**1.47**	1.51	0.02	6.72	0.04	0.09	0.26	**0.92**	2.44	3.44	4.16
P_2O_5	XRF	%	**0.024**	49.3	**0.042**	0.032	<	0.186	<	<	<	**0.024**	0.050	0.075	0.124
C_{tot}	Leco	%	**0.05**	84.5	**-**	-	<	0.72	<	<	<	**<**	<	0.17	0.31
$C_{non\text{-}carb}$	Leco	%	**0.05**	88.7	**-**	-	<	0.68	<	<	<	**<**	<	0.05	0.28
F	Ion	%	**0.055**	98.6	**-**	-	<	0.08	<	<	<	**<**	<	<	<
Al	XRF	ppm	**106**	0	**25043**	21615	1058	86756	3237	4137	7893	**16875**	37506	59248	73134
Al	ICP-AES	ppm partial	**1100**	36.6	**3803**	4766	<	23900	<	<	<	**1800**	4125	9400	14655
As	GFAAS	ppm partial	**3**	97.2	**-**	-	<	15	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	98.6	**-**	-	<	2.8	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	98.6	**-**	-	<	5	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	9.9	**282**	324	<	1612	<	13	47	**169**	365	693	973
Ba	ICP-AES	ppm partial	**10**	15.5	**56**	172	<	1420	<	<	12	**20**	37	79	208
Bi	GFAAS	ppm partial	**0.04**	93	**-**	-	<	0.26	<	<	<	**<**	<	<	0.05
Ca	XRF	ppm	**29**	0	**3940**	8702	36	50050	64	86	122	**515**	3268	12126	23259
Ca	ICP-AES	ppm partial	**50**	0	**1583**	2656	69	10500	100	100	100	**300**	1375	6660	7595
Ce	ICP-MS	ppm	**0.22**	0	**16**	14	1.3	77	2.6	3.4	7.4	**13**	20	31	48
Cl	XRF	ppm	**45**	46.5	**116**	180	<	1130	<	<	<	**50**	80	256	518
Co	ICP-MS	ppm	**2**	56.3	***3.2***	*5.6*	<	44	<	<	<	**<**	3.9	6.0	11
Co	ICP-AES	ppm partial	**0.9**	42.3	**1.9**	2.1	<	16	<	<	<	**1.0**	2.1	3.6	4.0
Cr	XRF	ppm	**19**	43.7	**29**	20	<	113	<	<	<	**20**	28	51	72
Cr	ICP-AES	ppm partial	**5**	43.7	**8.9**	8.3	<	52	<	<	<	**5.5**	9.5	14	28
Cu	XRF	ppm	**17**	98.6	**-**	-	<	135	<	<	<	**<**	<	<	<
Cu	ICP-AES	ppm partial	**3**	21.1	**6.5**	15	<	131	<	<	3.1	**4.2**	5.3	7.7	9.6
Dy	ICP-MS	ppm	**0.55**	36.6	**1.0**	1.2	<	9.2	<	<	<	**0.7**	1.1	1.5	2.7
Er	ICP-MS	ppm	**0.3**	26.8	**0.6**	0.8	<	6.2	<	<	<	**0.4**	0.6	0.8	1.8
Eu	ICP-MS	ppm	**0.09**	9.9	**0.28**	0.23	<	1.2	<	0.05	0.12	**0.22**	0.36	0.45	0.88
Fe	XRF	ppm	**78**	0	**6643**	10256	155	79254	474	932	1787	**4584**	7382	12354	15998
Fe	ICP-AES	ppm partial	**2300**	12.7	**5559**	4502	<	31700	<	<	2700	**4200**	6560	10180	12850
Ga	XRF	ppm	**10**	42.3	**12**	4	<	25	<	<	<	**10**	13	19	22
Gd	ICP-MS	ppm	**0.5**	18.3	**1.3**	1.2	<	9.1	<	<	0.7	**1.1**	1.5	1.8	3.8
Hf	ICP-MS	ppm	**0.12**	0	**1.98**	1.26	0.79	8.59	0.94	0.97	1.17	**1.62**	2.26	3.30	4.58
Ho	ICP-MS	ppm	**0.09**	22.5	**0.21**	0.26	<	2.1	<	<	0.09	**0.14**	0.21	0.29	0.68
K	XRF	ppm	**25**	0	**12184**	12492	183	55776	299	739	2183	**7628**	20211	28535	34495
K	ICP-AES	ppm partial	**100**	0	**1692**	2320	100	10400	100	100	200	**800**	1900	4420	8070
La	ICP-MS	ppm	**0.55**	1.4	**8.5**	7.8	<	46	1.5	1.9	3.7	**6.6**	11	15	27
La	ICP-AES	ppm partial	**1.3**	8.5	**7.3**	6.8	<	47	<	1.6	3.4	**6.2**	9.1	12	19
Li	ICP-AES	ppm partial	**3.5**	69	***3.8***	*3.3*	<	14.9	<	<	<	**<**	4.9	8.7	12.1
Lu	ICP-MS	ppm	**0.03**	5.6	**0.09**	0.10	<	0.83	<	0.03	0.05	**0.06**	0.09	0.13	0.25
Mg	XRF	ppm	**543**	36.6	**4492**	7369	<	33587	<	<	<	**1628**	3642	14979	22980
Mg	ICP-AES	ppm partial	**50**	1.4	**2461**	4331	<	21200	100	100	100	**900**	2500	7880	11940
Mn	XRF	ppm	**93**	49.3	**171**	217	<	1628	<	<	<	**93**	147	264	388
Mn	ICP-AES	ppm partial	**50**	31	**109**	84	<	425	<	<	<	**68**	139	195	275
Mo	XRF	ppm	**2.6**	98.6	**-**	-	<	3	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	98.6	**-**	-	<	3	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	46.5	**4764**	8689	<	42220	<	<	<	**519**	5290	13786	26334
Na	ICP-AES	ppm partial	**150**	16.9	**319**	211	<	1300	<	<	200	**200**	319	600	790
Nb	XRF	ppm	**7**	94.4	**-**	-	<	13	<	<	<	**<**	<	<	7
Nb	ICP-MS	ppm	**0.16**	2.8	**1.5**	1.9	<	9.9	0.22	0.30	0.47	**1.0**	1.6	2.7	6.1
Nd	ICP-MS	ppm	**0.2**	0	**7.2**	6.3	0.81	37	1.3	1.7	3.4	**5.9**	9.2	14	22
Ni	XRF	ppm	**14**	87.3	**-**	-	<	49	<	<	<	**<**	<	18	26
Ni	ICP-AES	ppm partial	**3.5**	19.7	**6.4**	4.7	<	33	<	<	3.7	**4.8**	7.4	11	13
P	XRF	ppm	**105**	0	**183**	140	<	811	<	<	<	**105**	218	327	541
P	ICP-AES	ppm partial	**6**	1.4	**138**	151	<	746	16	17	34	**88**	188	299	509
Pb	XRF	ppm	**14**	63.4	***12***	*9*	<	58	<	<	<	**<**	15	18	28
Pb	ICP-AES	ppm partial	**8.7**	91.5	**-**	-	<	29	<	<	<	**<**	<	<	11
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	21.1	**2.0**	1.6	<	8.9	<	<	0.91	**1.6**	2.3	3.7	5.5
Rb	XRF	ppm	**5.5**	16.9	**38**	37	<	173	<	<	8	**21**	60	87	117
Rb	ICP-MS	ppm	**0.6**	2.8	**35**	35	<	164	1.1	2.5	7.9	**23**	55	80	98
S	XRF	ppm	**70**	91.5	**-**	-	<	1940	<	<	<	**<**	<	<	386
S	ICP-AES	ppm partial	**14.3**	71.8	***69***	*327*	<	2630	<	<	<	**<**	16	78	302
Sc	ICP-MS	ppm	**2.8**	84.5	**-**	-	<	42	<	<	<	**<**	<	4.5	6.9
Sc	ICP-AES	ppm partial	**0.4**	64.8	***0.48***	*1.0*	<	5.4	<	<	<	**<**	0.42	0.96	2.9
Se	GFAAS	ppm partial	**0.055**	93	**-**	-	<	2.0	<	<	<	**<**	<	<	0.06
Sm	ICP-MS	ppm	**0.5**	19.7	**1.4**	1.2	<	8.1	<	<	0.61	**1.1**	1.5	2.2	3.9
Sr	XRF	ppm	**4**	18.3	**36**	86	<	708	<	<	5	**18**	36	67	108
Sr	ICP-AES	ppm partial	**1.2**	31	**3.9**	4.0	<	18	<	<	<	**2.5**	4.8	9.5	14
Ta	ICP-MS	ppm	**0.06**	28.2	**0.16**	0.14	<	0.82	<	<	<	**0.10**	0.20	0.31	0.43
Tb	ICP-MS	ppm	**0.08**	19.7	**0.19**	0.20	<	1.5	<	<	0.09	**0.14**	0.20	0.26	0.47
Te	GFAAS	ppb partial	**5**	84.5	**-**	-	<	13	<	<	<	**<**	<	6	8
Th	ICP-MS	ppm	**0.13**	0	**3.7**	4.6	0.48	39	1.1	1.4	1.9	**2.9**	4.0	5.1	7.4
Th	ICP-AES	ppm partial	**5.6**	83.1	**-**	-	<	43	<	<	<	**<**	<	6	8
Ti	XRF	ppm	**30**	0	**612**	876	60	6180	102	114	162	**396**	624	1200	2010
Ti	ICP-MS	ppm	**10**	0	**600**	965	67	7290	100	129	171	**364**	653	1088	1932
Ti	ICP-AES	ppm partial	**2**	0	**196**	430	4.0	2820	6.9	9.4	14	**43**	216	418	744
Tm	ICP-MS	ppm	**0.03**	9.9	**0.09**	0.11	<	0.90	<	0.02	0.04	**0.06**	0.09	0.12	0.26
U	ICP-MS	ppm	**0.08**	2.8	**0.61**	0.78	<	6.51	0.21	0.23	0.36	**0.47**	0.58	0.99	1.62
V	XRF	ppm	**6**	21.1	**22**	35	<	274	<	<	6	**11**	23	38	68
V	ICP-MS	ppm	**2**	9.9	**17**	37	<	298	<	1.2	4.0	**7.7**	16	30	52
V	ICP-AES	ppm partial	**0.6**	12.7	**5.6**	11	<	73	<	<	0.8	**2.4**	5.6	14	17
Y	XRF	ppm	**2.8**	21.1	**7**	8	<	62	<	<	3	**5**	7	10	18
Y	ICP-MS	ppm	**0.1**	0	**6.3**	8.2	0.79	64	1.6	1.7	2.9	**4.6**	6.6	8.8	20
Y	ICP-AES	ppm partial	**0.15**	0	**2.0**	1.9	0.20	12	0.40	0.50	0.80	**1.3**	2.6	4.7	5.2
Yb	ICP-MS	ppm	**0.22**	16.9	**0.59**	0.75	<	6.0	<	<	0.28	**0.44**	0.60	0.93	1.8
Zn	XRF	ppm	**4**	47.9	**9**	15	<	120	<	<	<	**4**	9	19	26
Zn	ICP-AES	ppm partial	**2**	57.7	***4.6***	*7.5*	<	43	<	<	<	**<**	4.8	13	22
Zr	XRF	ppm	**6**	0	**87**	56	31	395	36	40	50	**75**	107	139	185
Zr	ICP-MS	ppm	**3**	0	**77**	52	31	345	33	36	43	**62**	93	128	191

Table 53. Chemical concentration summary statistics for map unit 59.

Map unit	**59**	**Gabbro (2.2 Ga)**
Number of samples	26	
Unit area	703.6	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

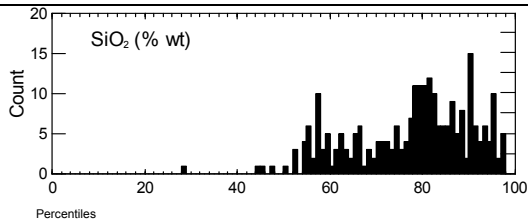


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**48.64**	2.84	39.40	53.40	42.28	44.27	48.40	**49.20**	50.00	51.15	52.04
TiO_2	XRF	%	**0.005**	0	**1.27**	0.60	0.02	2.44	0.48	0.65	0.82	**1.18**	1.63	2.34	2.39
Al_2O_3	XRF	%	**0.02**	0	**11.42**	4.16	0.27	15.80	2.61	4.74	9.22	**12.90**	13.80	15.59	15.64
FeO	XRF	%	**0.01**	0	**11.75**	2.59	8.06	17.10	8.17	8.41	9.92	**11.15**	13.59	15.36	16.30
MnO	XRF	%	**0.012**	0	**0.204**	0.044	0.128	0.280	0.130	0.145	0.177	**0.201**	0.238	0.268	0.279
MgO	XRF	%	**0.09**	0	**9.81**	7.26	3.86	36.80	3.91	4.58	6.00	**7.33**	10.70	16.08	28.64
CaO	XRF	%	**0.004**	0	**9.64**	2.51	4.47	16.40	6.35	6.87	7.54	**9.58**	11.10	12.04	14.48
Na_2O	XRF	%	**0.05**	3.8	**2.38**	1.25	<	5.63	0.04	0.90	1.86	**2.32**	2.69	4.33	5.08
K_2O	XRF	%	**0.003**	0	**0.62**	0.59	0.01	2.69	0.03	0.12	0.25	**0.45**	0.83	1.31	1.70
P_2O_5	XRF	%	**0.024**	7.7	**0.111**	0.066	<	0.323	<	0.042	0.061	**0.098**	0.156	0.192	0.225
C_{tot}	Leco	%	**0.05**	65.4	***0.14***	*0.45*	<	2.3	<	<	<	**<**	0.06	0.26	0.80
$C_{non\text{-}carb}$	Leco	%	**0.05**	92.3	**-**	-	<	0.05	<	<	<	**<**	<	<	0.05
F	Ion	%	**0.055**	88.5	**-**	-	<	0.16	<	<	<	**<**	<	0.05	0.08
Al	XRF	ppm	**106**	0	**60433**	21991	1428	83582	13786	25085	48774	**68241**	73002	82471	82736
Al	ICP-AES	ppm partial	**1100**	3.8	**14023**	9875	<	43900	1600	2920	4200	**13750**	18300	25710	35980
As	GFAAS	ppm partial	**3**	96.2	**-**	-	<	4.2	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	57.7	**2.7**	*2.7*	<	10.5	<	<	<	**<**	3.4	6.9	8.7
B	ICP-AES	ppm partial	**4.5**	88.5	**-**	-	<	6	<	<	<	**<**	<	5	6
Ba	XRF	ppm	**21**	3.8	**136**	122	<	529	17	30	61	**90**	158	317	374
Ba	ICP-AES	ppm partial	**10**	11.5	**83**	113	<	433	<	<	16	**25**	145	272	319
Bi	GFAAS	ppm partial	**0.04**	69.2	***0.06***	*0.16*	<	0.81	<	<	<	**<**	0.04	0.08	0.39
Ca	XRF	ppm	**29**	0	**68926**	17968	31961	117260	45403	49099	53911	**68497**	79365	86086	103532
Ca	ICP-AES	ppm partial	**50**	0	**12931**	6190	3800	32200	6280	7210	9100	**11750**	14000	20600	27960
Ce	ICP-MS	ppm	**0.22**	0	**19**	12	2.1	49	6.3	8.0	8.6	**17**	28	33	47
Cl	XRF	ppm	**45**	0	**615**	650	70	2230	78	81	190	**340**	860	1875	2030
Co	ICP-MS	ppm	**2**	0	**55**	20	27	120	33	42	46	**50**	56	67	113
Co	ICP-AES	ppm partial	**0.9**	0	**21**	21	4.9	106	5.9	7.2	8.6	**16**	22	38	72
Cr	XRF	ppm	**19**	11.5	**406**	647	<	2655	<	<	75	**212**	378	1002	2333
Cr	ICP-AES	ppm partial	**5**	11.5	**141**	350	<	1630	<	<	15	**36**	52	381	992
Cu	XRF	ppm	**17**	7.7	**169**	171	<	810	<	35	72	**117**	200	272	614
Cu	ICP-AES	ppm partial	**3**	0	**153**	155	5.9	752	9.5	25	77	**113**	186	249	523
Dy	ICP-MS	ppm	**0.55**	3.8	**3.8**	1.5	<	8.6	1.3	2.3	2.8	**3.5**	4.5	5.3	6.5
Er	ICP-MS	ppm	**0.3**	3.8	**2.1**	0.9	<	5.3	0.7	1.3	1.5	**2.0**	2.4	2.9	3.6
Eu	ICP-MS	ppm	**0.09**	3.8	**1.0**	0.41	<	2.1	0.35	0.59	0.70	**1.1**	1.3	1.6	1.8
Fe	XRF	ppm	**78**	0	**91305**	20132	62626	132867	63496	65377	77078	**86636**	105571	119347	126651
Fe	ICP-AES	ppm partial	**2300**	0	**31812**	24696	8100	100000	8820	10040	13100	**24400**	44900	71630	78560
Ga	XRF	ppm	**10**	7.7	**22**	6	<	36	<	13	18	**23**	25	32	34
Gd	ICP-MS	ppm	**0.5**	3.8	**4.0**	1.7	<	9.1	1.5	2.0	2.7	**4.0**	5.0	5.8	7.1
Hf	ICP-MS	ppm	**0.12**	0	**2.13**	1.07	0.18	5.20	0.74	1.02	1.21	**2.29**	2.81	3.22	3.71
Ho	ICP-MS	ppm	**0.09**	3.8	**0.76**	0.30	<	1.8	0.25	0.46	0.56	**0.71**	0.90	1.0	1.3
K	XRF	ppm	**25**	0	**5113**	4872	58	22327	224	1013	2100	**3735**	6897	10848	14093
K	ICP-AES	ppm partial	**100**	0	**3018**	4659	100	20500	100	120	400	**876**	5000	8660	12340
La	ICP-MS	ppm	**0.55**	0	**8.1**	5.6	1.1	22	2.5	3.3	3.5	**6.6**	12	15	21
La	ICP-AES	ppm partial	**1.3**	15.4	**5.0**	4.9	<	21	<	<	1.6	**2.7**	7.9	11	14
Li	ICP-AES	ppm partial	**3.5**	38.5	**10.1**	16.7	<	88.1	<	<	<	**4.2**	12.2	13.9	32.7
Lu	ICP-MS	ppm	**0.03**	3.8	**0.27**	0.12	<	0.69	0.07	0.13	0.20	**0.25**	0.30	0.40	0.49
Mg	XRF	ppm	**543**	0	**59172**	43760	23276	221904	23565	27611	36180	**44170**	64521	96962	172699
Mg	ICP-AES	ppm partial	**50**	0	**13900**	22457	1900	108000	2060	2250	4800	**7250**	12200	29960	68800
Mn	XRF	ppm	**93**	0	**1581**	341	992	2170	1008	1124	1372	**1558**	1845	2077	2162
Mn	ICP-AES	ppm partial	**50**	0	**316**	178	69	788	73	104	147	**307**	416	529	622
Mo	XRF	ppm	**2.6**	96.2	**-**	-	<	18	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	92.3	**-**	-	<	7	<	<	<	**<**	<	<	4
Na	XRF	ppm	**371**	3.8	**17667**	9290	<	41775	297	6700	13801	**17214**	19960	32092	37679
Na	ICP-AES	ppm partial	**150**	0	**1629**	1357	200	5720	200	400	800	**1250**	1900	3290	5032
Nb	XRF	ppm	**7**	53.8	**7**	*3*	<	15	<	<	<	**<**	8	11	13
Nb	ICP-MS	ppm	**0.16**	0	**4.7**	2.5	1.3	11	1.6	1.7	2.3	**5.0**	6.1	8.1	8.8
Nd	ICP-MS	ppm	**0.2**	0	**12**	6.5	1.3	28	4.3	5.4	6.5	**13**	15	21	25
Ni	XRF	ppm	**14**	0	**312**	685	21	3507	35	63	89	**127**	204	477	1593
Ni	ICP-AES	ppm partial	**3.5**	0	**150**	447	14	2260	14	15	24	**31**	50	163	950
P	XRF	ppm	**105**	0	**484**	288	<	1408	<	183	266	**427**	680	837	981
P	ICP-AES	ppm partial	**6**	3.8	**435**	283	<	1340	34	172	237	**395**	638	760	927
Pb	XRF	ppm	**14**	19.2	**19**	6	<	39	<	<	15	**17**	21	26	33
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	46.2	**10**	6	<	25	<	<	<	**6**	12	21	23
Pr	ICP-MS	ppm	**0.74**	3.8	**2.7**	1.5	<	6.5	0.90	1.1	1.3	**2.6**	3.7	4.7	6.0
Rb	XRF	ppm	**5.5**	23.1	**20**	18	<	81	<	<	7	**11**	25	41	55
Rb	ICP-MS	ppm	**0.6**	3.8	**16**	18	<	78	0.5	1.0	4.0	**10**	26	39	48
S	XRF	ppm	**70**	3.8	**538**	526	<	2330	56	70	90	**367**	770	1104	1650
S	ICP-AES	ppm partial	**14.3**	3.8	**619**	640	<	2870	30	57	94	**381**	900	1299	1806
Sc	ICP-MS	ppm	**2.8**	0	**37**	12	3.4	64	13	22	31	**41**	43	46	50
Sc	ICP-AES	ppm partial	**0.4**	0	**3.9**	2.2	0.90	9.9	1.1	1.2	2.3	**3.4**	5.4	6.6	8.0
Se	GFAAS	ppm partial	**0.055**	11.5	**0.21**	0.18	<	0.70	<	<	0.09	**0.14**	0.24	0.53	0.63
Sm	ICP-MS	ppm	**0.5**	3.8	**3.3**	1.5	<	7.4	1.1	1.5	2.0	**3.6**	4.1	5.2	6.0
Sr	XRF	ppm	**4**	0	**152**	74	13	303	20	33	121	**149**	195	230	297
Sr	ICP-AES	ppm partial	**1.2**	0	**18**	14	2.4	51	2.7	3.9	7.6	**17**	28	42	44
Ta	ICP-MS	ppm	**0.06**	3.8	**0.28**	0.15	<	0.55	0.08	0.10	0.14	**0.27**	0.39	0.50	0.53
Tb	ICP-MS	ppm	**0.08**	3.8	**0.63**	0.26	<	1.5	0.22	0.34	0.41	**0.62**	0.78	0.85	1.1
Te	GFAAS	ppb partial	**5**	30.8	**17**	28	<	129	<	<	<	**8**	16	32	89
Th	ICP-MS	ppm	**0.13**	0	**1.5**	1.1	0.19	3.2	0.26	0.29	0.49	**1.1**	2.8	3.1	3.2
Th	ICP-AES	ppm partial	**5.6**	80.8	**-**	-	<	13	<	<	<	**<**	<	8	10
Ti	XRF	ppm	**30**	0	**7596**	3624	90	14640	2886	3912	4908	**7050**	9780	14010	14352
Ti	ICP-MS	ppm	**10**	0	**7020**	2920	82	12900	2728	3966	4870	**7410**	8990	10400	11620
Ti	ICP-AES	ppm partial	**2**	0	**2049**	1467	13	5390	298	467	734	**1910**	2680	4814	5286
Tm	ICP-MS	ppm	**0.03**	3.8	**0.30**	0.13	<	0.76	0.10	0.16	0.22	**0.28**	0.34	0.43	0.51
U	ICP-MS	ppm	**0.08**	3.8	**0.35**	0.23	<	0.92	0.07	0.09	0.15	**0.31**	0.50	0.68	0.74
V	XRF	ppm	**6**	0	**301**	115	13	582	94	203	234	**297**	373	435	481
V	ICP-MS	ppm	**2**	0	**271**	100	14	529	84	166	231	**272**	342	376	411
V	ICP-AES	ppm partial	**0.6**	0	**84**	63	9.8	289	21	31	44	**67**	90	184	210
Y	XRF	ppm	**2.8**	3.8	**20**	10	<	53	3	9	14	**20**	24	30	36
Y	ICP-MS	ppm	**0.1**	0	**22**	9.8	1.5	53	7.1	12	16	**20**	28	32	37
Y	ICP-AES	ppm partial	**0.15**	0	**5.3**	3.6	0.90	16	1.7	2.0	2.6	**4.3**	7.2	10	12
Yb	ICP-MS	ppm	**0.22**	3.8	**1.9**	0.84	<	4.8	0.51	0.94	1.4	**1.7**	2.3	2.7	3.2
Zn	XRF	ppm	**4**	0	**109**	49	31	207	38	45	77	**101**	138	188	203
Zn	ICP-AES	ppm partial	**2**	0	**28**	23	3.2	88	3.7	4.2	11	**23**	37	65	87
Zr	XRF	ppm	**6**	3.8	**94**	47	<	230	34	43	48	**93**	127	145	171
Zr	ICP-MS	ppm	**3**	0	**78**	41	6.0	195	27	34	42	**84**	106	119	141

Table 54. Chemical concentration summary statistics for map unit 60.

Map unit	60	Quartzite, arkosite and mica schist
Number of samples	253	
Unit area	14280.3	km^2
Percent of bedrock	4.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

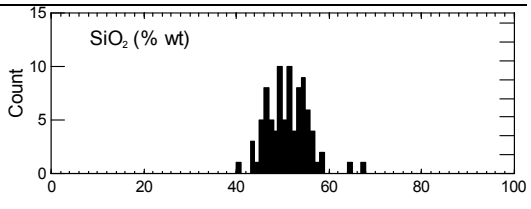


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**77.43**	13.13	28.70	97.90	55.05	57.38	66.93	**80.10**	87.63	93.14	95.39
TiO_2	XRF	%	**0.005**	0	**0.34**	0.37	0.02	2.33	0.03	0.04	0.08	**0.18**	0.51	0.89	1.01
Al_2O_3	XRF	%	**0.02**	0	**10.46**	5.82	0.33	25.90	1.87	3.14	5.97	**9.95**	14.40	19.02	20.97
FeO	XRF	%	**0.01**	0	**2.59**	3.00	0.09	19.00	0.22	0.34	0.64	**1.28**	3.53	7.41	8.84
MnO	XRF	%	**0.012**	26.5	**0.046**	0.164	<	2.580	<	<	<	**0.020**	0.046	0.080	0.102
MgO	XRF	%	**0.09**	7.1	**1.60**	1.73	<	15.50	<	0.11	0.41	**1.27**	2.17	3.44	4.25
CaO	XRF	%	**0.004**	0	**1.29**	2.24	0.01	22.70	0.02	0.04	0.18	**0.55**	1.49	3.03	4.78
Na_2O	XRF	%	**0.05**	15	**1.87**	1.87	<	9.65	<	<	0.23	**1.43**	2.82	4.56	5.28
K_2O	XRF	%	**0.003**	0	**2.46**	1.46	0.02	7.62	0.25	0.42	1.40	**2.40**	3.47	4.32	4.87
P_2O_5	XRF	%	**0.024**	30.8	**0.084**	0.077	<	0.545	<	<	<	**0.055**	0.120	0.181	0.258
C_{tot}	Leco	%	**0.05**	78.7	***0.15***	*0.74*	<	9.5	<	<	<	**<**	<	0.23	0.64
$C_{non\text{-}carb}$	Leco	%	**0.05**	92.9	**-**	-	<	0.30	<	<	<	**<**	<	<	0.05
F	Ion	%	**0.055**	87	**-**	-	<	0.18	<	<	<	**<**	<	0.06	0.07
Al	XRF	ppm	**106**	0	**55344**	30772	1746	137011	9913	16589	31571	**52636**	76176	100616	110931
Al	ICP-AES	ppm partial	**1100**	13	**8407**	9327	<	80200	<	<	2000	**5100**	12125	20220	25010
As	GFAAS	ppm partial	**3**	97.2	**-**	-	<	45	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	95.3	**-**	-	<	96.0	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	94.9	**-**	-	<	6	<	<	<	**<**	<	<	4
Ba	XRF	ppm	**21**	3.6	**492**	610	<	6681	29	59	186	**392**	619	880	1279
Ba	ICP-AES	ppm partial	**10**	6.3	**81**	207	<	2640	<	11	18	**30**	55	169	347
Bi	GFAAS	ppm partial	**0.04**	79.4	***0.03***	*0.05*	<	0.35	<	<	<	**<**	<	0.07	0.10
Ca	XRF	ppm	**29**	0	**9188**	15980	36	162305	129	265	1251	**3925**	10654	21636	34206
Ca	ICP-AES	ppm partial	**50**	0	**4352**	13389	100	169000	100	100	400	**1270**	3240	8140	19955
Ce	ICP-MS	ppm	**0.22**	0.4	**35**	32	<	190	4.5	6.8	13	**24**	47	87	106
Cl	XRF	ppm	**45**	23.3	**143**	167	<	1070	<	<	50	**78**	144	370	527
Co	ICP-MS	ppm	**2**	28.9	**8.9**	11	<	88	<	<	<	**3.8**	10	26	34
Co	ICP-AES	ppm partial	**0.9**	18.2	**7.1**	9.0	<	42	<	<	1.1	**2.5**	9.4	21	27
Cr	XRF	ppm	**19**	9.1	**102**	165	<	2191	<	19	27	**54**	136	216	267
Cr	ICP-AES	ppm partial	**5**	16.6	**47**	76	<	887	<	<	7.3	**19**	65	116	156
Cu	XRF	ppm	**17**	80.6	**-**	-	<	525	<	<	<	**<**	<	39	71
Cu	ICP-AES	ppm partial	**3**	43.1	**14**	37	<	416	<	<	<	**3.2**	9.4	37	62
Dy	ICP-MS	ppm	**0.55**	16.2	**1.9**	1.6	<	9.8	<	<	0.7	**1.2**	2.5	4.1	4.9
Er	ICP-MS	ppm	**0.3**	14.6	**1.1**	0.9	<	6.1	<	<	0.4	**0.7**	1.4	2.2	2.6
Eu	ICP-MS	ppm	**0.09**	5.5	**0.58**	0.47	<	2.4	<	0.14	0.23	**0.44**	0.80	1.3	1.5
Fe	XRF	ppm	**78**	0	**20124**	23302	699	147630	1671	2634	4973	**9946**	27405	57599	68663
Fe	ICP-AES	ppm partial	**2300**	10.7	**17267**	21330	<	111000	<	<	3370	**7480**	19875	52940	62920
Ga	XRF	ppm	**10**	11.1	**20**	9	<	50	<	<	13	**18**	24	32	38
Gd	ICP-MS	ppm	**0.5**	5.5	**2.4**	2.1	<	12.4	<	0.6	1.0	**1.7**	3.3	5.6	6.7
Hf	ICP-MS	ppm	**0.12**	0.4	**3.10**	1.98	<	18.3	1.05	1.20	1.71	**2.84**	3.94	5.34	5.98
Ho	ICP-MS	ppm	**0.09**	11.5	**0.36**	0.32	<	2.0	<	<	0.14	**0.23**	0.49	0.78	0.96
K	XRF	ppm	**25**	0	**20385**	12143	183	63246	2092	3511	11620	**19920**	28801	35823	40421
K	ICP-AES	ppm partial	**100**	0	**4294**	5185	100	38500	209	400	792	**1990**	6220	11280	15265
La	ICP-MS	ppm	**0.55**	0.8	**18**	16	<	94	2.5	3.5	6.8	**12**	22	43	54
La	ICP-AES	ppm partial	**1.3**	2.4	**15**	14	<	73	1.8	2.7	5.4	**11**	20	32	48
Li	ICP-AES	ppm partial	**3.5**	41.5	**9.8**	11.0	<	79.0	<	<	<	**5.2**	11.6	20.7	32.0
Lu	ICP-MS	ppm	**0.03**	4.7	**0.15**	0.13	<	1.02	0.03	0.04	0.06	**0.10**	0.20	0.30	0.35
Mg	XRF	ppm	**543**	7.1	**9666**	10450	<	93465	<	687	2442	**7658**	13097	20767	25609
Mg	ICP-AES	ppm partial	**50**	0	**7113**	8955	100	96800	100	234	1238	**4900**	9965	16700	19835
Mn	XRF	ppm	**93**	26.5	**357**	1271	<	19995	<	<	<	**155**	357	620	791
Mn	ICP-AES	ppm partial	**50**	15.8	**220**	832	<	13200	<	<	69	**116**	214	377	518
Mo	XRF	ppm	**2.6**	96.8	**-**	-	<	79	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	99.2	**-**	-	<	85	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	15	**13875**	13890	<	71603	<	<	1692	**10611**	20924	33806	39155
Na	ICP-AES	ppm partial	**150**	13.4	**362**	195	<	1100	<	<	200	**300**	500	657	743
Nb	XRF	ppm	**7**	69.2	***7***	*4*	<	29	<	<	<	**<**	8	12	15
Nb	ICP-MS	ppm	**0.16**	0.8	**4.1**	3.7	<	27	0.45	0.59	1.3	**2.6**	6.5	9.2	10
Nd	ICP-MS	ppm	**0.2**	0.4	**15**	13	<	82	1.9	3.2	5.4	**10**	19	34	44
Ni	XRF	ppm	**14**	51.4	***38***	*146*	<	2276	<	<	<	**<**	39	84	104
Ni	ICP-AES	ppm partial	**3.5**	13	**22**	27	<	143	<	<	5.1	**9.5**	26	66	83
P	XRF	ppm	**105**	0	**366**	336	<	2376	<	<	<	**240**	523	789	1125
P	ICP-AES	ppm partial	**6**	0.8	**303**	307	<	1990	15	23	62	**220**	439	692	1007
Pb	XRF	ppm	**14**	38.7	**19**	13	<	191	<	<	<	**15**	20	27	34
Pb	ICP-AES	ppm partial	**8.7**	96.8	**-**	-	<	56	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	95.3	**-**	-	<	9	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	7.9	**4.1**	3.7	<	22.8	<	0.81	1.5	**2.8**	5.2	9.6	11.9
Rb	XRF	ppm	**5.5**	4	**79**	49	<	261	7	13	40	**78**	107	141	159
Rb	ICP-MS	ppm	**0.6**	1.2	**72**	46	<	255	5.9	11	36	**73**	99	132	147
S	XRF	ppm	**70**	89.3	**-**	-	<	1410	<	<	<	**<**	<	93	249
S	ICP-AES	ppm partial	**14.3**	70	**54**	167	<	1480	<	<	<	**<**	21	134	280
Sc	ICP-MS	ppm	**2.8**	47.4	**8.1**	8.9	<	46	<	<	<	**3.2**	9.2	23	28
Sc	ICP-AES	ppm partial	**0.4**	34.4	**2.5**	3.9	<	29	<	<	<	**0.90**	2.7	6.7	9.8
Se	GFAAS	ppm partial	**0.055**	85.8	**-**	-	<	1.1	<	<	<	**<**	<	0.10	0.22
Sm	ICP-MS	ppm	**0.5**	6.7	**2.6**	2.3	<	13	<	0.63	1.0	**1.9**	3.5	6.0	7.5
Sr	XRF	ppm	**4**	6.7	**89**	150	<	985	<	5	13	**38**	88	251	334
Sr	ICP-AES	ppm partial	**1.2**	15	**6.2**	8.3	<	54	<	<	1.5	**3.1**	6.8	15	22
Ta	ICP-MS	ppm	**0.06**	7.5	**0.36**	0.34	<	2.5	<	0.06	0.12	**0.23**	0.53	0.77	0.86
Tb	ICP-MS	ppm	**0.08**	8.3	**0.35**	0.29	<	1.8	<	0.09	0.13	**0.23**	0.48	0.79	0.94
Te	GFAAS	ppb partial	**5**	67.6	***10***	*31*	<	298	<	<	<	**<**	6	24	48
Th	ICP-MS	ppm	**0.13**	0.4	**6.1**	5.4	<	53	1.1	1.7	2.5	**4.2**	8.1	13	15
Th	ICP-AES	ppm partial	**5.6**	52.2	***8***	*7*	<	45	<	<	<	**<**	11	19	23
Ti	XRF	ppm	**30**	0	**2016**	2202	96	13980	168	234	468	**1074**	3054	5340	6048
Ti	ICP-MS	ppm	**10**	0	**1840**	2082	22	13000	156	217	437	**952**	2620	4888	5915
Ti	ICP-AES	ppm partial	**2**	0	**673**	975	4.2	7720	10	15	64	**263**	858	2142	2731
Tm	ICP-MS	ppm	**0.03**	6.7	**0.15**	0.14	<	0.93	<	0.03	0.06	**0.09**	0.21	0.32	0.38
U	ICP-MS	ppm	**0.08**	0.8	**1.31**	1.34	<	9.25	0.21	0.27	0.43	**0.74**	1.73	3.29	3.91
V	XRF	ppm	**6**	7.9	**63**	78	<	662	<	7	14	**29**	84	172	200
V	ICP-MS	ppm	**2**	1.6	**52**	71	<	643	3.3	5.0	8.8	**21**	67	151	188
V	ICP-AES	ppm partial	**0.6**	4.7	**29**	44	<	256	0.6	1.0	2.4	**9.4**	37	85	121
Y	XRF	ppm	**2.8**	11.1	**11**	9	<	56	<	<	4	**8**	17	24	29
Y	ICP-MS	ppm	**0.1**	0	**11**	9.6	0.28	53	1.7	2.7	4.7	**7.4**	15	25	28
Y	ICP-AES	ppm partial	**0.15**	0	**4.4**	4.1	0.20	20	0.65	0.90	1.5	**2.9**	5.9	9.8	13
Yb	ICP-MS	ppm	**0.22**	6.3	**1.00**	0.87	<	6.4	<	0.25	0.40	**0.64**	1.4	2.1	2.4
Zn	XRF	ppm	**4**	32.4	**23**	38	<	317	<	<	<	**7**	21	65	113
Zn	ICP-AES	ppm partial	**2**	36	**11**	22	<	219	<	<	<	**3.1**	9.4	34	53
Zr	XRF	ppm	**6**	0	**137**	88	8	721	45	52	76	**121**	173	238	262
Zr	ICP-MS	ppm	**3**	0.4	**121**	81	<	747	39	47	66	**111**	149	206	239

Table 55. Chemical concentration summary statistics for map unit 62.

Map unit	62	Mafic and ultramafic metavolcanic rocks
Number of samples	88	
Unit area	1864.4	km^2
Percent of bedrock	0.6	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

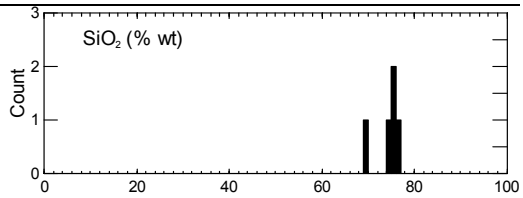


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**51.13**	4.49	40.30	67.10	44.79	45.80	47.70	**51.15**	54.30	55.94	57.22
TiO_2	XRF	%	**0.005**	0	**0.94**	0.59	0.13	2.93	0.41	0.47	0.57	**0.71**	1.18	1.98	2.28
Al_2O_3	XRF	%	**0.02**	0	**12.95**	2.30	5.14	18.50	8.61	9.48	11.90	**13.30**	14.40	15.37	15.90
FeO	XRF	%	**0.01**	0	**10.32**	2.49	4.76	19.90	7.30	7.68	8.78	**9.82**	11.40	14.03	15.62
MnO	XRF	%	**0.012**	0	**0.170**	0.045	0.053	0.279	0.084	0.117	0.146	**0.168**	0.191	0.233	0.246
MgO	XRF	%	**0.09**	0	**8.60**	4.82	0.60	29.90	3.62	4.63	5.67	**6.98**	10.05	16.14	18.66
CaO	XRF	%	**0.004**	0	**7.41**	2.53	0.33	13.00	1.67	3.63	6.39	**7.72**	8.93	10.25	10.74
Na_2O	XRF	%	**0.05**	3.4	**2.72**	1.30	<	5.68	0.22	0.90	1.94	**2.81**	3.65	4.53	4.76
K_2O	XRF	%	**0.003**	0	**0.80**	0.62	0.00	3.20	0.06	0.12	0.35	**0.73**	1.09	1.64	2.15
P_2O_5	XRF	%	**0.024**	1.1	**0.125**	0.091	<	0.647	0.041	0.055	0.075	**0.098**	0.136	0.259	0.301
C_{tot}	Leco	%	**0.05**	75	***0.08***	*0.21*	<	1.6	<	<	<	**<**	<	0.14	0.36
$C_{non\text{-}carb}$	Leco	%	**0.05**	97.7	**-**	-	<	0.05	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	86.4	**-**	-	<	0.26	<	<	<	**<**	<	0.06	0.09
Al	XRF	ppm	**106**	0	**68511**	12172	27191	97865	45531	50160	62951	**70357**	76176	81307	84111
Al	ICP-AES	ppm partial	**1100**	0	**21138**	14222	2600	65000	4390	7374	11250	**17500**	25450	42840	51740
As	GFAAS	ppm partial	**3**	90.9	**-**	-	<	16	<	<	<	**<**	<	<	5.3
Au	GFAAS	ppb partial	**2.5**	84.1	**-**	-	<	11.0	<	<	<	**<**	<	3.4	4.2
B	ICP-AES	ppm partial	**4.5**	90.9	**-**	-	<	6	<	<	<	**<**	<	<	5
Ba	XRF	ppm	**21**	3.4	**241**	215	<	1043	30	38	77	**180**	322	593	719
Ba	ICP-AES	ppm partial	**10**	8	**119**	152	<	780	<	11	21	**45**	158	331	451
Bi	GFAAS	ppm partial	**0.04**	87.5	**-**	-	<	0.65	<	<	<	**<**	<	0.04	0.09
Ca	XRF	ppm	**29**	0	**52967**	18075	2388	92950	11941	25947	45689	**55198**	63814	73309	76791
Ca	ICP-AES	ppm partial	**50**	0	**8825**	7790	1000	54500	1500	2260	3750	**7300**	11050	14690	19000
Ce	ICP-MS	ppm	**0.22**	0	**29**	22	1.9	144	4.5	7.9	15	**25**	35	49	66
Cl	XRF	ppm	**45**	4.5	**331**	451	<	2770	45	60	80	**170**	339	760	1426
Co	ICP-MS	ppm	**2**	0	**48**	15	2.7	98	30	33	39	**45**	55	67	76
Co	ICP-AES	ppm partial	**0.9**	0	**22**	13	2.5	67	6.1	7.6	13	**19**	28	36	45
Cr	XRF	ppm	**19**	5.7	**579**	814	<	5280	<	60	132	**263**	639	1919	2053
Cr	ICP-AES	ppm partial	**5**	4.5	**228**	344	<	1750	5.4	15	29	**81**	276	793	1017
Cu	XRF	ppm	**17**	19.3	**95**	80	<	457	<	<	36	**73**	130	167	262
Cu	ICP-AES	ppm partial	**3**	10.2	**84**	78	<	425	<	<	27	**65**	116	172	247
Dy	ICP-MS	ppm	**0.55**	1.1	**3.2**	1.6	<	7.7	1.3	1.6	2.1	**2.7**	3.8	5.9	6.6
Er	ICP-MS	ppm	**0.3**	0	**1.9**	1.0	0.3	5.0	0.9	1.0	1.3	**1.6**	2.0	3.7	4.1
Eu	ICP-MS	ppm	**0.09**	1.1	**0.91**	0.48	<	2.8	0.36	0.42	0.54	**0.81**	1.1	1.6	1.8
Fe	XRF	ppm	**78**	0	**80155**	19340	36985	154623	56705	59643	68182	**76301**	88578	109029	121367
Fe	ICP-AES	ppm partial	**2300**	0	**35217**	21283	3200	95700	7073	10120	22300	**30450**	44200	65160	84440
Ga	XRF	ppm	**10**	1.1	**22**	5	<	33	14	15	18	**21**	25	27	29
Gd	ICP-MS	ppm	**0.5**	1.1	**3.5**	1.9	<	10.6	1.4	1.7	2.1	**3.1**	4.1	6.5	7.3
Hf	ICP-MS	ppm	**0.12**	0	**2.05**	1.09	0.34	6.14	0.71	1.04	1.33	**1.77**	2.34	3.61	4.40
Ho	ICP-MS	ppm	**0.09**	1.1	**0.65**	0.33	<	1.7	0.30	0.35	0.45	**0.55**	0.72	1.3	1.4
K	XRF	ppm	**25**	0	**6648**	5138	25	26560	465	971	2938	**6051**	9006	13587	17853
K	ICP-AES	ppm partial	**100**	0	**3881**	4783	100	27700	189	230	600	**1950**	5500	9422	12910
La	ICP-MS	ppm	**0.55**	1.1	**15**	12	<	79	2.3	3.4	7.7	**12**	19	27	38
La	ICP-AES	ppm partial	**1.3**	8	**9.7**	8.0	<	46	<	2.1	3.7	**7.7**	13	20	25
Li	ICP-AES	ppm partial	**3.5**	13.6	**12.7**	11.1	<	72.5	<	<	4.5	**8.8**	16.8	25.5	35.3
Lu	ICP-MS	ppm	**0.03**	0	**0.25**	0.14	0.05	0.75	0.13	0.15	0.17	**0.21**	0.26	0.50	0.54
Mg	XRF	ppm	**543**	0	**51882**	29071	3618	180297	21829	27901	34160	**42059**	60571	97324	112520
Mg	ICP-AES	ppm partial	**50**	0	**18861**	16749	1400	88100	3280	4260	7050	**12050**	25450	38680	53520
Mn	XRF	ppm	**93**	0	**1318**	349	411	2162	651	907	1132	**1302**	1480	1806	1907
Mn	ICP-AES	ppm partial	**50**	0	**386**	267	57	1730	110	153	238	**313**	481	708	992
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	3.4	**20182**	9631	<	42146	1662	6693	14358	**20813**	27083	33620	35282
Na	ICP-AES	ppm partial	**150**	4.5	**762**	636	<	3400	141	200	300	**564**	1100	1514	1810
Nb	XRF	ppm	**7**	65.9	***6***	*4*	<	20	<	<	<	**<**	7	11	14
Nb	ICP-MS	ppm	**0.16**	0	**4.5**	3.3	0.36	19	1.0	1.8	2.4	**3.7**	5.3	9.7	12
Nd	ICP-MS	ppm	**0.2**	0	**14**	9.9	1.8	67	2.9	5.5	8.5	**12**	17	26	30
Ni	XRF	ppm	**14**	1.1	**192**	249	<	1460	32	45	65	**85**	185	579	689
Ni	ICP-AES	ppm partial	**3.5**	1.1	**79**	126	<	943	9.8	14	18	**37**	82	211	296
P	XRF	ppm	**105**	0	**545**	397	<	2821	179	240	327	**427**	593	1129	1312
P	ICP-AES	ppm partial	**6**	0	**498**	369	48	2510	165	220	300	**385**	537	1040	1172
Pb	XRF	ppm	**14**	13.6	**20**	12	<	104	<	<	15	**17**	21	24	30
Pb	ICP-AES	ppm partial	**8.7**	93.2	**-**	-	<	47	<	<	<	**<**	<	<	9
Pd	GFAAS	ppb partial	**5**	46.6	**7**	4	<	28	<	<	<	**5**	7	11	15
Pr	ICP-MS	ppm	**0.74**	5.7	**3.6**	2.5	<	16.7	<	1.2	2.1	**3.1**	4.4	6.6	7.5
Rb	XRF	ppm	**5.5**	14.8	**28**	29	<	224	<	<	12	**22**	35	48	76
Rb	ICP-MS	ppm	**0.6**	3.4	**27**	30	<	205	1.4	2.0	9.8	**21**	36	56	75
S	XRF	ppm	**70**	53.4	***247***	*669*	<	5540	<	<	<	**<**	215	550	1048
S	ICP-AES	ppm partial	**14.3**	20.5	**296**	799	<	6670	<	<	25	**77**	260	674	1199
Sc	ICP-MS	ppm	**2.8**	1.1	**33**	9.6	<	69	20	23	28	**31**	37	46	50
Sc	ICP-AES	ppm partial	**0.4**	0	**5.2**	4.9	0.60	22	0.77	0.90	2.0	**3.5**	7.1	10	18
Se	GFAAS	ppm partial	**0.055**	55.7	***0.10***	*0.12*	<	0.54	<	<	<	**<**	0.11	0.25	0.40
Sm	ICP-MS	ppm	**0.5**	1.1	**3.1**	1.8	<	11	1.0	1.4	1.8	**2.8**	3.8	5.6	6.8
Sr	XRF	ppm	**4**	0	**193**	148	8	1119	15	37	100	**178**	265	323	409
Sr	ICP-AES	ppm partial	**1.2**	1.1	**17**	19	<	147	1.9	2.3	6.3	**11**	22	32	42
Ta	ICP-MS	ppm	**0.06**	1.1	**0.29**	0.20	<	0.92	0.07	0.09	0.15	**0.25**	0.36	0.65	0.71
Tb	ICP-MS	ppm	**0.08**	1.1	**0.54**	0.28	<	1.3	0.22	0.28	0.35	**0.46**	0.62	1.0	1.2
Te	GFAAS	ppb partial	**5**	52.3	***11***	*18*	<	89	<	<	<	**<**	12	28	53
Th	ICP-MS	ppm	**0.13**	2.3	**3.1**	2.3	<	11	0.22	0.45	1.4	**2.8**	4.4	6.0	7.6
Th	ICP-AES	ppm partial	**5.6**	54.5	***6***	*3*	<	18	<	<	<	**<**	7	10	14
Ti	XRF	ppm	**30**	0	**5658**	3510	762	17580	2442	2808	3414	**4266**	7080	11874	13704
Ti	ICP-MS	ppm	**10**	0	**5294**	3178	741	15000	2202	2608	3330	**4080**	6430	11270	12640
Ti	ICP-AES	ppm partial	**2**	0	**1601**	915	98	3900	259	442	874	**1455**	2240	2777	3405
Tm	ICP-MS	ppm	**0.03**	1.1	**0.26**	0.14	<	0.70	0.12	0.13	0.18	**0.22**	0.28	0.54	0.58
U	ICP-MS	ppm	**0.08**	8	**0.75**	0.62	<	3.49	<	0.12	0.26	**0.67**	0.96	1.32	2.19
V	XRF	ppm	**6**	0	**247**	97	70	650	151	157	192	**213**	312	382	407
V	ICP-MS	ppm	**2**	0	**221**	87	22	546	132	149	172	**194**	267	333	374
V	ICP-AES	ppm partial	**0.6**	0	**76**	54	5.9	272	17	28	42	**58**	94	141	193
Y	XRF	ppm	**2.8**	1.1	**18**	9	<	42	7	9	12	**16**	22	33	38
Y	ICP-MS	ppm	**0.1**	0	**19**	9.8	2.4	46	8.4	10	13	**17**	21	38	42
Y	ICP-AES	ppm partial	**0.15**	0	**4.9**	3.5	0.30	18	0.84	1.1	2.3	**4.2**	6.5	10	12
Yb	ICP-MS	ppm	**0.22**	1.1	**1.7**	0.92	<	4.5	0.80	0.94	1.2	**1.5**	1.9	3.5	3.9
Zn	XRF	ppm	**4**	1.1	**97**	54	<	345	34	45	66	**92**	111	141	229
Zn	ICP-AES	ppm partial	**2**	1.1	**38**	41	<	242	5.2	9.4	17	**26**	43	79	126
Zr	XRF	ppm	**6**	0	**98**	51	10	281	28	46	67	**90**	111	186	206
Zr	ICP-MS	ppm	**3**	0	**80**	43	8.8	241	27	40	50	**70**	93	140	166

Table 56. Chemical concentration summary statistics for map unit 63.

Map unit	**63**	**Granite (2.45 - 2.3 Ga)**
Number of samples	5	
Unit area	73.9	km^2
Percent of bedrock	0.02	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

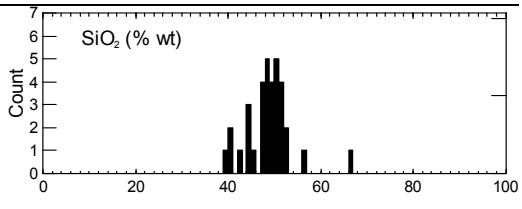


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**74.24**	2.69	69.50	76.10	-	-	-	**75.20**	-	-	-
TiO_2	XRF	%	**0.005**	0	**0.19**	0.17	0.09	0.49	-	-	-	**0.11**	-	-	-
Al_2O_3	XRF	%	**0.02**	0	**13.58**	0.68	12.70	14.60	-	-	-	**13.50**	-	-	-
FeO	XRF	%	**0.01**	0	**1.67**	0.94	0.72	3.24	-	-	-	**1.43**	-	-	-
MnO	XRF	%	**0.012**	0	**0.030**	0.015	0.016	0.055	-	-	-	**0.028**	-	-	-
MgO	XRF	%	**0.09**	20	**0.26**	0.27	<	0.72	<	<	-	**0.15**	-	-	-
CaO	XRF	%	**0.004**	0	**0.74**	0.40	0.32	1.30	-	-	-	**0.60**	-	-	-
Na_2O	XRF	%	**0.05**	0	**3.68**	0.29	3.38	3.98	-	-	-	**3.70**	-	-	-
K_2O	XRF	%	**0.003**	0	**5.08**	0.49	4.48	5.85	-	-	-	**5.02**	-	-	-
P_2O_5	XRF	%	**0.024**	60	**-**	-	<	0.153	<	<	<	**<**	0.058	-	-
C_{tot}	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	40	**0.12**	0.06	<	0.21	<	<	<	**0.09**	-	-	-
Al	XRF	ppm	**106**	0	**71838**	3613	67183	77234	-	-	-	**71415**	-	-	-
Al	ICP-AES	ppm partial	**1100**	0	**5580**	2941	2800	10500	-	-	-	**5200**	-	-	-
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**503**	650	141	1654	-	-	-	**182**	-	-	-
Ba	ICP-AES	ppm partial	**10**	0	**43**	34	24	104	-	-	-	**27**	-	-	-
Bi	GFAAS	ppm partial	**0.04**	40	**0.07**	0.02	<	0.09	<	<	<	**0.06**	-	-	-
Ca	XRF	ppm	**29**	0	**5270**	2839	2302	9295	-	-	-	**4269**	-	-	-
Ca	ICP-AES	ppm partial	**50**	0	**1780**	1130	800	3500	-	-	-	**1400**	-	-	-
Ce	ICP-MS	ppm	**0.22**	0	**125**	116	21	321	-	-	-	**104**	-	-	-
Cl	XRF	ppm	**45**	0	**110**	60	50	200	-	-	-	**80**	-	-	-
Co	ICP-MS	ppm	**2**	60	**-**	-	<	9.9	<	<	<	**<**	7.6	-	-
Co	ICP-AES	ppm partial	**0.9**	20	**2.1**	2.5	<	6.4	<	<	-	**1.2**	-	-	-
Cr	XRF	ppm	**19**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Cr	ICP-AES	ppm partial	**5**	80	**-**	-	<	7.9	<	<	<	**<**	<	-	-
Cu	XRF	ppm	**17**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Cu	ICP-AES	ppm partial	**3**	60	**-**	-	<	8.6	<	<	<	**<**	4.6	-	-
Dy	ICP-MS	ppm	**0.55**	0	**5.6**	3.0	0.9	8.7	-	-	-	**5.7**	-	-	-
Er	ICP-MS	ppm	**0.3**	0	**3.7**	2.0	0.4	5.3	-	-	-	**4.1**	-	-	-
Eu	ICP-MS	ppm	**0.09**	0	**0.65**	0.74	0.22	2.0	-	-	-	**0.35**	-	-	-
Fe	XRF	ppm	**78**	0	**13007**	7265	5594	25175	-	-	-	**11111**	-	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**13680**	8923	5300	28800	-	-	-	**11300**	-	-	-
Ga	XRF	ppm	**10**	0	**27**	2	24	30	-	-	-	**26**	-	-	-
Gd	ICP-MS	ppm	**0.5**	0	**6.9**	4.5	1.4	13.9	-	-	-	**6.0**	-	-	-
Hf	ICP-MS	ppm	**0.12**	0	**6.72**	3.79	2.01	12.5	-	-	-	**6.02**	-	-	-
Ho	ICP-MS	ppm	**0.09**	0	**1.2**	0.63	0.15	1.7	-	-	-	**1.3**	-	-	-
K	XRF	ppm	**25**	0	**42181**	4100	37184	48555	-	-	-	**41666**	-	-	-
K	ICP-AES	ppm partial	**100**	0	**3440**	2278	1500	7000	-	-	-	**3100**	-	-	-
La	ICP-MS	ppm	**0.55**	0	**62**	65	10	174	-	-	-	**47**	-	-	-
La	ICP-AES	ppm partial	**1.3**	0	**62**	63	8.2	170	-	-	-	**54**	-	-	-
Li	ICP-AES	ppm partial	**3.5**	0	**12.8**	6.3	8.2	23.8	-	-	-	**11.1**	-	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.63**	0.34	0.05	0.87	-	-	-	**0.71**	-	-	-
Mg	XRF	ppm	**543**	20	**1556**	1616	<	4342	<	<	-	**905**	-	-	-
Mg	ICP-AES	ppm partial	**50**	0	**1620**	1851	400	4900	-	-	-	**900**	-	-	-
Mn	XRF	ppm	**93**	0	**233**	116	124	426	-	-	-	**217**	-	-	-
Mn	ICP-AES	ppm partial	**50**	0	**198**	130	89	422	-	-	-	**154**	-	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**27306**	2152	25080	29532	-	-	-	**27454**	-	-	-
Na	ICP-AES	ppm partial	**150**	0	**500**	100	400	600	-	-	-	**500**	-	-	-
Nb	XRF	ppm	**7**	20	**23**	15	<	49	<	<	-	**15**	-	-	-
Nb	ICP-MS	ppm	**0.16**	0	**18**	14	4.6	41	-	-	-	**14**	-	-	-
Nd	ICP-MS	ppm	**0.2**	0	**48**	42	9.5	119	-	-	-	**40**	-	-	-
Ni	XRF	ppm	**14**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ni	ICP-AES	ppm partial	**3.5**	60	**-**	-	<	5.6	<	<	<	**<**	4.3	-	-
P	XRF	ppm	**105**	0	**-**	-	<	667	<	<	<	**<**	253	-	-
P	ICP-AES	ppm partial	**6**	0	**173**	237	25	595	-	-	-	**75**	-	-	-
Pb	XRF	ppm	**14**	0	**51**	22	28	88	-	-	-	**47**	-	-	-
Pb	ICP-AES	ppm partial	**8.7**	0	**22**	19	9	55	-	-	-	**11**	-	-	-
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**13.9**	12.4	2.6	34.9	-	-	-	**11.8**	-	-	-
Rb	XRF	ppm	**5.5**	0	**263**	134	107	427	-	-	-	**235**	-	-	-
Rb	ICP-MS	ppm	**0.6**	0	**233**	112	96	370	-	-	-	**208**	-	-	-
S	XRF	ppm	**70**	80	**-**	-	<	100	<	<	<	**<**	<	-	-
S	ICP-AES	ppm partial	**14.3**	60	**-**	-	<	110	<	<	<	**<**	40	-	-
Sc	ICP-MS	ppm	**2.8**	80	**-**	-	<	9.4	<	<	<	**<**	<	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**1.6**	2.4	0.40	5.8	-	-	-	**0.50**	-	-	-
Se	GFAAS	ppm partial	**0.055**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Sm	ICP-MS	ppm	**0.5**	0	**8.0**	5.4	2.0	17	-	-	-	**7.2**	-	-	-
Sr	XRF	ppm	**4**	0	**92**	70	39	169	-	-	-	**46**	-	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**6.4**	5.2	2.3	15	-	-	-	**3.6**	-	-	-
Ta	ICP-MS	ppm	**0.06**	0	**1.4**	0.63	0.81	2.4	-	-	-	**1.3**	-	-	-
Tb	ICP-MS	ppm	**0.08**	0	**1.0**	0.60	0.17	1.8	-	-	-	**0.95**	-	-	-
Te	GFAAS	ppb partial	**5**	60	**-**	-	<	17	<	<	<	**<**	8	-	-
Th	ICP-MS	ppm	**0.13**	0	**36**	21	7.0	60	-	-	-	**36**	-	-	-
Th	ICP-AES	ppm partial	**5.6**	0	**42**	23	7	62	-	-	-	**42**	-	-	-
Ti	XRF	ppm	**30**	0	**1116**	1020	528	2922	-	-	-	**678**	-	-	-
Ti	ICP-MS	ppm	**10**	0	**1075**	1099	459	3030	-	-	-	**616**	-	-	-
Ti	ICP-AES	ppm partial	**2**	0	**721**	856	149	2230	-	-	-	**379**	-	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.58**	0.31	0.05	0.83	-	-	-	**0.68**	-	-	-
U	ICP-MS	ppm	**0.08**	0	**5.39**	3.78	1.53	10.7	-	-	-	**5.89**	-	-	-
V	XRF	ppm	**6**	20	**17**	18	<	48	<	<	-	**12**	-	-	-
V	ICP-MS	ppm	**2**	20	**8.3**	11	<	28	<	<	-	**4.7**	-	-	-
V	ICP-AES	ppm partial	**0.6**	40	**6.9**	12	<	27	<	<	<	**1.9**	-	-	-
Y	XRF	ppm	**2.8**	0	**43**	22	7	62	-	-	-	**52**	-	-	-
Y	ICP-MS	ppm	**0.1**	0	**39**	19	4.9	52	-	-	-	**47**	-	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**27**	15	2.3	38	-	-	-	**31**	-	-	-
Yb	ICP-MS	ppm	**0.22**	0	**4.1**	2.2	0.33	5.8	-	-	-	**4.6**	-	-	-
Zn	XRF	ppm	**4**	0	**34**	14	25	59	-	-	-	**27**	-	-	-
Zn	ICP-AES	ppm partial	**2**	0	**28**	13	14	49	-	-	-	**23**	-	-	-
Zr	XRF	ppm	**6**	0	**227**	167	77	513	-	-	-	**179**	-	-	-
Zr	ICP-MS	ppm	**3**	0	**202**	162	62	479	-	-	-	**152**	-	-	-

Table 57. Chemical concentration summary statistics for map unit 64.

Map unit	64	Gabbro and peridotite (2.44 Ga)
Number of samples	34	
Unit area	954.6	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

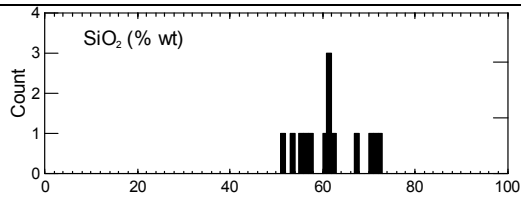


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	48.84	4.94	39.00	66.90	40.60	42.31	47.20	49.20	50.70	52.61	55.58
TiO_2	XRF	%	0.005	0	0.64	0.64	0.08	2.36	0.11	0.13	0.20	0.34	0.87	1.85	2.02
Al_2O_3	XRF	%	0.02	0	13.58	5.19	1.26	22.60	2.71	4.14	11.00	14.20	17.10	20.01	20.10
FeO	XRF	%	0.01	0	8.91	3.90	4.79	18.70	4.81	4.93	6.00	7.72	10.50	16.15	17.88
MnO	XRF	%	0.012	0	0.161	0.069	0.091	0.485	0.097	0.106	0.124	0.140	0.187	0.217	0.239
MgO	XRF	%	0.09	0	11.34	7.20	0.73	33.70	3.35	4.11	7.67	9.49	14.50	18.66	30.88
CaO	XRF	%	0.004	0	9.29	2.97	2.04	13.60	2.69	3.53	8.56	9.60	11.50	12.85	13.38
Na_2O	XRF	%	0.05	5.9	1.98	1.10	<	5.00	<	0.55	1.27	1.86	2.56	3.13	4.09
K_2O	XRF	%	0.003	2.9	0.46	0.48	<	2.17	0.01	0.06	0.18	0.28	0.75	0.88	1.67
P_2O_5	XRF	%	0.024	41.2	0.068	0.070	<	0.282	<	<	<	0.033	0.075	0.211	0.246
C_{tot}	Leco	%	0.05	82.4	-	-	<	1.1	<	<	<	<	<	0.24	0.95
$C_{non\text{-}carb}$	Leco	%	0.05	94.1	-	-	<	0.05	<	<	<	<	<	<	0.04
F	Ion	%	0.055	91.2	-	-	<	0.14	<	<	<	<	<	<	0.08
Al	XRF	ppm	106	0	71812	27471	6665	119554	14315	21901	58190	75118	90459	105853	106329
Al	ICP-AES	ppm partial	1100	2.9	27157	19010	<	70600	3908	7270	11900	23050	42100	56510	67680
As	GFAAS	ppm partial	3	94.1	-	-	<	35	<	<	<	<	<	<	3.2
Au	GFAAS	ppb partial	2.5	88.2	-	-	<	5.6	<	<	<	<	<	3.2	5.4
B	ICP-AES	ppm partial	4.5	94.1	-	-	<	5	<	<	<	<	<	<	4
Ba	XRF	ppm	21	2.9	164	122	<	535	24	43	72	138	192	348	448
Ba	ICP-AES	ppm partial	10	11.8	85	114	<	525	<	<	19	52	80	177	403
Bi	GFAAS	ppm partial	0.04	88.2	-	-	<	0.46	<	<	<	<	<	0.05	0.09
Ca	XRF	ppm	29	0	66445	21207	14586	97240	19262	25211	61204	68604	82225	91878	95667
Ca	ICP-AES	ppm partial	50	0	13480	10471	1300	34400	1600	2670	6100	9300	20800	32170	34180
Ce	ICP-MS	ppm	0.22	0	16	18	0.90	83	1.8	3.6	5.5	10	18	38	62
Cl	XRF	ppm	45	8.8	614	780	<	3220	<	45	100	360	650	1797	2486
Co	ICP-MS	ppm	2	0	58	28	15	140	28	32	37	49	75	94	115
Co	ICP-AES	ppm partial	0.9	0	25	31	1.6	155	2.0	4.3	9.1	18	26	44	97
Cr	XRF	ppm	19	5.9	685	711	<	3071	<	21	145	491	939	1620	1939
Cr	ICP-AES	ppm partial	5	8.8	93	121	<	516	<	4.7	20	52	93	253	382
Cu	XRF	ppm	17	20.6	110	124	<	460	<	<	24	73	109	317	436
Cu	ICP-AES	ppm partial	3	2.9	96	110	<	413	4.0	5.2	26	64	100	293	372
Dy	ICP-MS	ppm	0.55	8.8	1.8	1.5	<	6.4	<	0.5	0.8	1.2	2.2	4.2	5.7
Er	ICP-MS	ppm	0.3	2.9	1.0	0.8	<	3.8	0.3	0.3	0.6	0.7	1.4	2.0	3.4
Eu	ICP-MS	ppm	0.09	0	0.61	0.53	0.09	2.6	0.09	0.20	0.34	0.46	0.69	1.5	1.7
Fe	XRF	ppm	78	0	69192	30326	37195	145299	37374	38283	46620	59984	81585	125486	138928
Fe	ICP-AES	ppm partial	2300	0	30892	29010	2400	119000	2920	5235	11500	20350	38300	78160	94560
Ga	XRF	ppm	10	8.8	19	6	<	32	<	9	14	19	24	25	30
Gd	ICP-MS	ppm	0.5	8.8	2.1	2.1	<	8.2	<	0.5	0.9	1.2	2.5	5.8	7.8
Hf	ICP-MS	ppm	0.12	2.9	1.12	1.19	<	5.21	0.15	0.24	0.38	0.70	1.28	2.64	3.90
Ho	ICP-MS	ppm	0.09	2.9	0.37	0.31	<	1.3	0.10	0.12	0.18	0.26	0.48	0.71	1.2
K	XRF	ppm	25	2.9	3826	3976	<	18011	58	465	1477	2316	6200	7271	13828
K	ICP-AES	ppm partial	100	0	2520	3974	100	17700	100	100	200	886	3300	5940	13260
La	ICP-MS	ppm	0.55	2.9	8.2	9.0	<	50	1.2	1.7	3.2	5.6	10	17	23
La	ICP-AES	ppm partial	1.3	47.1	4.7	6.8	<	33	<	<	<	1.4	5.0	11	20
Li	ICP-AES	ppm partial	3.5	35.3	8.0	5.2	<	24.3	<	<	<	6.2	9.9	15.9	20.1
Lu	ICP-MS	ppm	0.03	5.9	0.15	0.11	<	0.51	<	0.05	0.08	0.11	0.19	0.23	0.47
Mg	XRF	ppm	543	0	68374	43434	4402	203211	20201	24801	46250	57225	87435	112520	186206
Mg	ICP-AES	ppm partial	50	0	21987	35923	2200	166000	2420	2599	3900	12500	23500	35560	126620
Mn	XRF	ppm	93	0	1248	535	705	3759	752	822	961	1085	1449	1682	1852
Mn	ICP-AES	ppm partial	50	0	295	231	57	1030	61	64	141	246	369	630	848
Mo	XRF	ppm	2.6	97.1	-	-	<	4	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	97.1	-	-	<	4	<	<	<	<	<	<	<
Na	XRF	ppm	371	5.9	14714	8177	<	37100	<	4051	9423	13764	18995	23195	30377
Na	ICP-AES	ppm partial	150	2.9	2234	2106	<	7570	200	200	700	1400	3870	5841	6596
Nb	XRF	ppm	7	85.3	-	-	<	13	<	<	<	<	<	9	12
Nb	ICP-MS	ppm	0.16	2.9	2.1	2.8	<	10	0.21	0.28	0.41	1.0	2.3	6.3	9.8
Nd	ICP-MS	ppm	0.2	0	8.6	10	0.75	46	1.2	2.1	3.3	5.2	9.7	22	36
Ni	XRF	ppm	14	2.9	302	383	<	2090	15	34	89	210	337	630	914
Ni	ICP-AES	ppm partial	3.5	0	140	272	3.9	1440	8.2	11	19	54	111	336	665
P	XRF	ppm	105	0	296	305	<	1230	<	<	<	144	327	920	1073
P	ICP-AES	ppm partial	6	2.9	241	295	<	1110	25	35	49	124	274	822	1005
Pb	XRF	ppm	14	20.6	18	5	<	42	<	<	15	16	19	23	26
Pb	ICP-AES	ppm partial	8.7	88.2	-	-	<	29	<	<	<	<	<	9	12
Pd	GFAAS	ppb partial	5	73.5	*4*	*8*	<	35	<	<	<	<	5	11	27
Pr	ICP-MS	ppm	0.74	26.5	2.1	2.3	<	10.3	<	<	<	1.3	2.2	5.0	8.8
Rb	XRF	ppm	5.5	35.3	16	17	<	68	<	<	<	8	25	39	62
Rb	ICP-MS	ppm	0.6	8.8	14	16	<	68	<	1.2	3.3	7.1	21	32	54
S	XRF	ppm	70	50	244	484	<	2680	<	<	<	<	250	595	880
S	ICP-AES	ppm partial	14.3	14.7	275	593	<	3330	<	<	24	69	295	667	914
Sc	ICP-MS	ppm	2.8	0	30	14	12	68	12	13	22	28	35	52	61
Sc	ICP-AES	ppm partial	0.4	2.9	2.1	2.1	<	10	0.52	0.69	0.80	1.2	2.8	4.6	5.8
Se	GFAAS	ppm partial	0.055	52.9	*0.10*	*0.13*	<	0.53	<	<	<	<	0.13	0.32	0.38
Sm	ICP-MS	ppm	0.5	8.8	2.0	2.1	<	9.9	<	0.53	0.83	1.1	2.1	5.4	7.0
Sr	XRF	ppm	4	0	247	166	5	957	19	83	151	229	345	367	422
Sr	ICP-AES	ppm partial	1.2	2.9	59	55	<	185	1.6	6.4	19	37	107	144	174
Ta	ICP-MS	ppm	0.06	47.1	0.15	0.17	<	0.65	<	<	<	0.06	0.15	0.43	0.59
Tb	ICP-MS	ppm	0.08	5.9	0.32	0.29	<	1.1	<	0.11	0.13	0.21	0.39	0.92	1.1
Te	GFAAS	ppb partial	5	55.9	*7*	*11*	<	60	<	<	<	<	11	15	27
Th	ICP-MS	ppm	0.13	8.8	1.2	1.8	<	8.5	<	0.13	0.34	0.59	1.1	3.0	6.2
Th	ICP-AES	ppm partial	5.6	76.5	*5*	*3*	<	14	<	<	<	<	<	10	13
Ti	XRF	ppm	30	0	3846	3864	480	14160	642	750	1194	2058	5238	11100	12120
Ti	ICP-MS	ppm	10	0	3588	3540	505	13900	597	701	1130	2025	5150	9783	10960
Ti	ICP-AES	ppm partial	2	0	1041	1174	18	4560	48	54	192	543	1320	2850	3646
Tm	ICP-MS	ppm	0.03	2.9	0.15	0.12	<	0.55	0.03	0.05	0.08	0.11	0.18	0.26	0.49
U	ICP-MS	ppm	0.08	32.4	0.29	0.45	<	2.08	<	<	<	0.12	0.24	0.56	1.40
V	XRF	ppm	6	0	258	358	50	1476	54	63	111	132	233	450	1331
V	ICP-MS	ppm	2	0	255	381	30	1580	47	58	106	126	219	406	1382
V	ICP-AES	ppm partial	0.6	0	116	280	3.0	1250	5.0	5.9	12	25	49	298	949
Y	XRF	ppm	2.8	8.8	10	9	<	39	<	3	4	7	13	19	34
Y	ICP-MS	ppm	0.1	0	11	9.2	2.2	41	3.1	3.3	5.2	7.6	14	21	35
Y	ICP-AES	ppm partial	0.15	5.9	2.7	4.3	<	18	<	0.20	0.40	1.1	2.7	7.4	14
Yb	ICP-MS	ppm	0.22	2.9	0.97	0.81	<	3.7	0.23	0.31	0.53	0.72	1.2	1.6	3.3
Zn	XRF	ppm	4	0	83	56	37	353	43	45	53	73	93	119	171
Zn	ICP-AES	ppm partial	2	2.9	23	14	<	50	3.2	6.0	12	21	33	47	49
Zr	XRF	ppm	6	2.9	49	60	<	277	7	9	14	26	61	129	185
Zr	ICP-MS	ppm	3	0	42	49	5.0	226	5.6	8.4	14	27	54	99	150

Table 58. Chemical concentration summary statistics for map unit 65.

Map unit	65	Intermediate and felsic metavolcanic rocks
Number of samples	14	
Unit area	1173.7	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

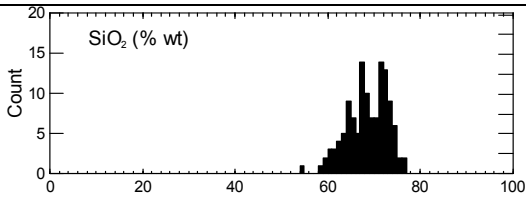


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	61.67	6.76	51.10	72.70	-	-	56.30	61.65	67.30	-	-
TiO_2	XRF	%	0.005	0	0.79	0.23	0.26	1.11	-	-	0.66	0.85	0.98	-	-
Al_2O_3	XRF	%	0.02	0	13.06	1.38	11.40	16.30	-	-	12.10	12.65	13.70	-	-
FeO	XRF	%	0.01	0	7.53	1.60	5.00	10.00	-	-	6.02	8.01	8.57	-	-
MnO	XRF	%	0.012	0	0.093	0.048	0.021	0.157	-	-	0.064	0.085	0.136	-	-
MgO	XRF	%	0.09	0	3.67	2.37	0.64	8.77	-	-	1.91	2.88	4.94	-	-
CaO	XRF	%	0.004	0	4.09	2.89	0.16	8.93	-	-	1.42	4.16	6.74	-	-
Na_2O	XRF	%	0.05	0	3.32	0.90	1.57	5.22	-	-	2.97	3.25	3.96	-	-
K_2O	XRF	%	0.003	0	2.45	1.36	0.20	4.78	-	-	1.57	2.67	3.34	-	-
P_2O_5	XRF	%	0.024	0	0.168	0.078	0.042	0.297	-	-	0.131	0.173	0.226	-	-
C_{tot}	Leco	%	0.05	71.4	*0.08*	*0.17*	<	0.63	<	<	<	<	0.05	-	-
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	71.4	*0.05*	*0.01*	<	0.08	<	<	<	<	0.06	-	-
Al	XRF	ppm	106	0	69109	7321	60306	86227	-	-	64009	66919	72473	-	-
Al	ICP-AES	ppm partial	1100	0	21217	13977	4800	57400	-	-	14000	18150	26500	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	78.6	*1.4*	*1.5*	<	5.6	<	<	<	<	<	3.3	-
B	ICP-AES	ppm partial	4.5	85.7	-	-	<	6	<	<	<	<	<	5	-
Ba	XRF	ppm	21	0	644	469	58	1997	-	-	513	646	767	-	-
Ba	ICP-AES	ppm partial	10	0	171	200	12	747	-	-	63	89	187	-	-
Bi	GFAAS	ppm partial	0.04	85.7	-	-	<	0.05	<	<	<	<	<	0.04	-
Ca	XRF	ppm	29	0	29229	20692	1158	63850	-	-	10153	29708	48191	-	-
Ca	ICP-AES	ppm partial	50	0	8206	7490	800	31600	-	-	4010	7675	9630	-	-
Ce	ICP-MS	ppm	0.22	0	71	42	11	182	-	-	35	65	86	-	-
Cl	XRF	ppm	45	0	435	503	60	1380	-	-	80	215	510	-	-
Co	ICP-MS	ppm	2	0	24	12	3.6	36	-	-	13	29	33	-	-
Co	ICP-AES	ppm partial	0.9	0	14	9.4	2.1	29	-	-	5.3	15	24	-	-
Cr	XRF	ppm	19	35.7	96	156	<	584	<	<	<	23	110	-	-
Cr	ICP-AES	ppm partial	5	28.6	31	40	<	140	<	<	<	8.9	43	-	-
Cu	XRF	ppm	17	35.7	77	74	<	301	<	<	<	63	100	-	-
Cu	ICP-AES	ppm partial	3	28.6	68	73	<	273	<	<	<	54	102	-	-
Dy	ICP-MS	ppm	0.55	0	4.5	2.0	1.1	8.4	-	-	3.2	4.0	6.2	-	-
Er	ICP-MS	ppm	0.3	0	2.7	1.2	0.7	5.0	-	-	2.1	2.4	3.8	-	-
Eu	ICP-MS	ppm	0.09	0	1.2	0.43	0.49	2.0	-	-	0.91	1.2	1.5	-	-
Fe	XRF	ppm	78	0	58524	12448	38850	77700	-	-	46775	62238	66589	-	-
Fe	ICP-AES	ppm partial	2300	0	48141	28448	6300	97100	-	-	31200	45250	74800	-	-
Ga	XRF	ppm	10	0	23	3	17	28	-	-	22	23	26	-	-
Gd	ICP-MS	ppm	0.5	0	5.4	2.3	1.2	9.8	-	-	3.5	5.0	7.1	-	-
Hf	ICP-MS	ppm	0.12	0	4.25	2.13	0.95	8.50	-	-	2.68	3.66	5.77	-	-
Ho	ICP-MS	ppm	0.09	0	0.91	0.39	0.25	1.7	-	-	0.65	0.82	1.3	-	-
K	XRF	ppm	25	0	20302	11296	1677	39674	-	-	13031	22120	27722	-	-
K	ICP-AES	ppm partial	100	0	11936	7984	100	26500	-	-	7800	11950	18900	-	-
La	ICP-MS	ppm	0.55	0	35	23	4.5	96	-	-	17	33	43	-	-
La	ICP-AES	ppm partial	1.3	0	29	17	3.5	67	-	-	16	26	39	-	-
Li	ICP-AES	ppm partial	3.5	21.4	17.2	10.6	<	34.3	<	<	6.4	14.1	26.8	-	-
Lu	ICP-MS	ppm	0.03	0	0.37	0.16	0.10	0.63	-	-	0.28	0.32	0.56	-	-
Mg	XRF	ppm	543	0	22106	14285	3859	52883	-	-	11517	17336	29788	-	-
Mg	ICP-AES	ppm partial	50	0	13114	12981	3090	55200	-	-	5330	10100	14000	-	-
Mn	XRF	ppm	93	0	721	372	163	1217	-	-	496	659	1054	-	-
Mn	ICP-AES	ppm partial	50	0	375	235	65	753	-	-	154	363	589	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	24664	6700	11649	38732	-	-	22037	24078	29383	-	-
Na	ICP-AES	ppm partial	150	0	586	278	300	1050	-	-	300	550	760	-	-
Nb	XRF	ppm	7	28.6	10	3	<	14	<	<	<	9	13	-	-
Nb	ICP-MS	ppm	0.16	0	7.9	3.2	1.0	12	-	-	5.7	8.0	10	-	-
Nd	ICP-MS	ppm	0.2	0	32	18	5.4	75	-	-	17	28	39	-	-
Ni	XRF	ppm	14	42.9	36	33	<	130	<	<	<	20	39	-	-
Ni	ICP-AES	ppm partial	3.5	28.6	14	8.1	<	37	<	<	<	14	17	-	-
P	XRF	ppm	105	0	732	340	183	1295	-	-	571	754	985	-	-
P	ICP-AES	ppm partial	6	0	663	307	164	1150	-	-	578	680	892	-	-
Pb	XRF	ppm	14	21.4	17	5	<	29	<	<	14	15	20	-	-
Pb	ICP-AES	ppm partial	8.7	100	-	-	<	<	<	<	<	<	<	<	<
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	8.5	5.0	1.4	21.3	-	-	4.2	7.7	10.5	-	-
Rb	XRF	ppm	5.5	7.1	70	34	<	106	<	-	46	86	99	-	-
Rb	ICP-MS	ppm	0.6	0	67	36	2.7	120	-	-	43	82	94	-	-
S	XRF	ppm	70	71.4	*66*	*94*	<	320	<	<	<	<	80	-	-
S	ICP-AES	ppm partial	14.3	42.9	97	90	<	290	<	<	<	48	133	-	-
Sc	ICP-MS	ppm	2.8	0	20	7.4	5.0	28	-	-	15	22	24	-	-
Sc	ICP-AES	ppm partial	0.4	0	6.9	5.5	0.57	18	-	-	3.8	5.2	7.7	-	-
Se	GFAAS	ppm partial	0.055	64.3	*0.05*	*0.03*	<	0.12	<	<	<	<	0.07	-	-
Sm	ICP-MS	ppm	0.5	0	5.6	2.6	1.2	11	-	-	3.4	5.1	7.4	-	-
Sr	XRF	ppm	4	0	200	139	22	442	-	-	47	247	321	-	-
Sr	ICP-AES	ppm partial	1.2	0	19	13	2.7	41	-	-	9.1	13	32	-	-
Ta	ICP-MS	ppm	0.06	0	0.54	0.19	0.21	0.80	-	-	0.37	0.55	0.67	-	-
Tb	ICP-MS	ppm	0.08	0	0.80	0.34	0.18	1.5	-	-	0.53	0.74	1.1	-	-
Te	GFAAS	ppb partial	5	71.4	*4*	*4*	<	15	<	<	<	<	6	-	-
Th	ICP-MS	ppm	0.13	0	7.2	3.0	1.2	12	-	-	4.6	8.0	9.2	-	-
Th	ICP-AES	ppm partial	5.6	14.3	14	6	<	23	<	<	7	16	18	-	-
Ti	XRF	ppm	30	0	4764	1374	1566	6660	-	-	3972	5076	5880	-	-
Ti	ICP-MS	ppm	10	0	4639	1410	1410	6680	-	-	4240	4745	5610	-	-
Ti	ICP-AES	ppm partial	2	0	2689	1448	116	5940	-	-	2070	2315	3620	-	-
Tm	ICP-MS	ppm	0.03	0	0.37	0.17	0.10	0.72	-	-	0.25	0.35	0.52	-	-
U	ICP-MS	ppm	0.08	0	1.60	0.69	0.18	2.43	-	-	1.16	1.83	2.18	-	-
V	XRF	ppm	6	0	141	77	22	260	-	-	63	162	200	-	-
V	ICP-MS	ppm	2	21.4	123	68	<	222	<	<	30	137	176	-	-
V	ICP-AES	ppm partial	0.6	0	66	62	2.0	204	-	-	7.8	51	125	-	-
Y	XRF	ppm	2.8	0	27	13	4	51	-	-	18	25	41	-	-
Y	ICP-MS	ppm	0.1	0	28	12	6.5	48	-	-	19	25	39	-	-
Y	ICP-AES	ppm partial	0.15	0	13	8.8	0.35	31	-	-	6.8	10.0	18	-	-
Yb	ICP-MS	ppm	0.22	0	2.5	1.1	0.58	4.7	-	-	1.8	2.2	3.5	-	-
Zn	XRF	ppm	4	0	69	62	13	239	-	-	25	45	89	-	-
Zn	ICP-AES	ppm partial	2	0	43	58	2.9	227	-	-	13	24	45	-	-
Zr	XRF	ppm	6	0	205	95	36	350	-	-	144	191	288	-	-
Zr	ICP-MS	ppm	3	0	174	94	35	361	-	-	97	148	248	-	-

Table 59. Chemical concentration summary statistics for map unit 67.

Map unit	67	Granodiorite, tonalite, quartz diorite, granite and syenite
Number of samples	124	
Unit area	6997.8	km^2
Percent of bedrock	2.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

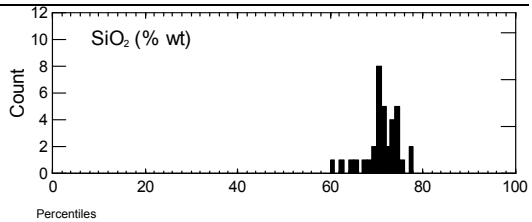


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**68.51**	4.35	54.80	76.80	60.62	62.49	65.05	**68.60**	72.00	73.90	74.19
TiO_2	XRF	%	**0.005**	0	**0.39**	0.19	0.06	1.11	0.12	0.18	0.24	**0.36**	0.47	0.62	0.72
Al_2O_3	XRF	%	**0.02**	0	**15.30**	1.06	13.10	20.70	13.70	14.00	14.50	**15.30**	15.90	16.51	16.96
FeO	XRF	%	**0.01**	0	**2.79**	1.41	0.40	7.82	0.95	1.21	1.71	**2.61**	3.58	4.61	5.47
MnO	XRF	%	**0.012**	0.8	**0.053**	0.026	<	0.129	0.018	0.022	0.031	**0.048**	0.069	0.085	0.105
MgO	XRF	%	**0.09**	1.6	**1.36**	0.99	<	6.31	0.25	0.39	0.60	**1.23**	1.86	2.72	3.33
CaO	XRF	%	**0.004**	0	**2.66**	1.33	0.40	6.23	0.77	0.94	1.72	**2.50**	3.52	4.34	5.10
Na_2O	XRF	%	**0.05**	0	**4.56**	0.75	3.16	8.75	3.54	3.63	4.11	**4.51**	4.96	5.42	5.67
K_2O	XRF	%	**0.003**	0	**3.29**	1.20	1.08	5.91	1.43	1.63	2.42	**3.25**	4.25	4.88	5.32
P_2O_5	XRF	%	**0.024**	3.2	**0.156**	0.088	<	0.498	0.045	0.059	0.089	**0.146**	0.195	0.281	0.322
C_{tot}	Leco	%	**0.05**	76.6	***0.05***	*0.09*	<	0.67	<	<	<	**<**	<	0.12	0.16
$C_{non\text{-}carb}$	Leco	%	**0.05**	92.7	**-**	-	<	0.05	<	<	<	**<**	<	<	0.05
F	Ion	%	**0.055**	67.7	***0.05***	*0.02*	<	0.12	<	<	<	**<**	0.06	0.07	0.08
Al	XRF	ppm	**106**	0	**80942**	5629	69299	109503	72473	74060	76705	**80937**	84111	87338	89718
Al	ICP-AES	ppm partial	**1100**	0	**10333**	5103	1400	23700	2572	4100	6330	**9500**	13800	17700	19030
As	GFAAS	ppm partial	**3**	96	**-**	-	<	5.4	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	98.4	**-**	-	<	4.1	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**1022**	505	80	3474	368	451	682	**961**	1263	1585	1909
Ba	ICP-AES	ppm partial	**10**	0.8	**148**	171	<	1070	24	31	54	**86**	156	317	469
Bi	GFAAS	ppm partial	**0.04**	68.5	***0.06***	*0.17*	<	1.1	<	<	<	**<**	0.05	0.10	0.21
Ca	XRF	ppm	**29**	0	**18990**	9488	2846	44545	5513	6707	12262	**17839**	25132	31038	36472
Ca	ICP-AES	ppm partial	**50**	0	**4143**	3422	151	24700	760	1100	1950	**3640**	5520	7603	9430
Ce	ICP-MS	ppm	**0.22**	0	**70**	31	3.4	161	24	34	50	**63**	88	117	129
Cl	XRF	ppm	**45**	6.5	**111**	55	<	430	<	50	70	**105**	140	171	190
Co	ICP-MS	ppm	**2**	7.3	**8.4**	5.4	<	27	<	2.3	3.8	**8.0**	11	16	20
Co	ICP-AES	ppm partial	**0.9**	2.4	**7.6**	4.6	<	20	1.3	2.2	4.0	**6.8**	11	14	17
Cr	XRF	ppm	**19**	25	**44**	68	<	725	<	<	<	**30**	47	67	91
Cr	ICP-AES	ppm partial	**5**	9.7	**24**	34	<	311	<	4.7	6.6	**15**	29	44	63
Cu	XRF	ppm	**17**	87.1	**-**	-	<	110	<	<	<	**<**	<	19	32
Cu	ICP-AES	ppm partial	**3**	18.5	**9.8**	12	<	91	<	<	3.7	**6.2**	10	19	28
Dy	ICP-MS	ppm	**0.55**	4.8	**1.9**	1.0	<	5.1	0.4	0.6	1.0	**1.9**	2.5	3.3	3.9
Er	ICP-MS	ppm	**0.3**	8.1	**0.9**	0.5	<	2.7	<	0.3	0.5	**0.8**	1.2	1.5	2.0
Eu	ICP-MS	ppm	**0.09**	0	**0.88**	0.42	0.13	2.4	0.36	0.44	0.58	**0.84**	1.1	1.4	1.7
Fe	XRF	ppm	**78**	0	**21671**	10917	3108	60761	7358	9378	13287	**20241**	27817	35851	42533
Fe	ICP-AES	ppm partial	**2300**	0	**19741**	8468	3650	41900	7320	9160	13050	**18250**	26000	32210	34900
Ga	XRF	ppm	**10**	0	**26**	4	17	37	20	21	23	**25**	28	31	32
Gd	ICP-MS	ppm	**0.5**	0.8	**3.5**	1.7	<	7.5	1.3	1.5	2.1	**3.5**	4.5	6.3	6.7
Hf	ICP-MS	ppm	**0.12**	0	**3.76**	1.34	0.89	12.1	2.25	2.48	2.97	**3.53**	4.42	5.35	5.84
Ho	ICP-MS	ppm	**0.09**	4.8	**0.34**	0.19	<	0.98	0.06	0.11	0.17	**0.32**	0.44	0.55	0.70
K	XRF	ppm	**25**	0	**27290**	9968	8964	49053	11836	13521	20045	**26934**	35234	40504	44115
K	ICP-AES	ppm partial	**100**	0	**7645**	4361	322	17800	999	2090	4215	**7000**	10850	14310	15350
La	ICP-MS	ppm	**0.55**	0	**36**	17	1.9	83	12	17	26	**33**	47	61	68
La	ICP-AES	ppm partial	**1.3**	0.8	**33**	16	<	85	13	16	22	**29**	41	55	71
Li	ICP-AES	ppm partial	**3.5**	4.8	**21.6**	13.9	<	87.7	4.2	8.6	11.8	**18.6**	26.6	37.1	45.0
Lu	ICP-MS	ppm	**0.03**	3.2	**0.12**	0.07	<	0.45	0.03	0.04	0.06	**0.11**	0.15	0.18	0.22
Mg	XRF	ppm	**543**	1.6	**8225**	5976	<	38049	1489	2334	3600	**7417**	11216	16408	20098
Mg	ICP-AES	ppm partial	**50**	0	**7443**	4646	200	19300	1094	1900	3450	**7330**	10150	14310	16150
Mn	XRF	ppm	**93**	0.8	**411**	202	<	1000	140	171	240	**372**	535	659	814
Mn	ICP-AES	ppm partial	**50**	0	**301**	136	55	759	113	132	195	**301**	380	493	524
Mo	XRF	ppm	**2.6**	88.7	**-**	-	<	5	<	<	<	**<**	<	3	3
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**33835**	5535	23447	64925	26245	26935	30496	**33464**	36766	40231	42064
Na	ICP-AES	ppm partial	**150**	0	**617**	157	300	1300	400	400	500	**600**	700	798	900
Nb	XRF	ppm	**7**	69.4	***5***	*5*	<	35	<	<	<	**<**	7	10	12
Nb	ICP-MS	ppm	**0.16**	0	**5.2**	3.3	0.66	23	1.7	2.4	3.4	**4.5**	6.0	9.0	11
Nd	ICP-MS	ppm	**0.2**	0	**28**	13	1.3	67	9.4	12	19	**28**	37	45	51
Ni	XRF	ppm	**14**	47.6	**22**	19	<	188	<	<	<	**14**	23	30	42
Ni	ICP-AES	ppm partial	**3.5**	6.5	**15**	14	<	106	<	3.9	5.9	**12**	19	24	36
P	XRF	ppm	**105**	0	**680**	384	<	2171	196	257	388	**637**	850	1225	1404
P	ICP-AES	ppm partial	**6**	0	**610**	346	18	1940	167	219	337	**583**	768	1090	1259
Pb	XRF	ppm	**14**	0	**33**	10	15	77	21	22	26	**32**	38	46	51
Pb	ICP-AES	ppm partial	**8.7**	62.1	***8***	*5*	<	45	<	<	<	**<**	10	13	16
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0.8	**7.9**	3.6	<	17.7	2.4	3.7	5.5	**7.4**	10.3	12.8	14.3
Rb	XRF	ppm	**5.5**	0	**102**	53	19	289	41	48	66	**91**	124	173	234
Rb	ICP-MS	ppm	**0.6**	0	**98**	50	18	276	40	47	63	**86**	115	162	224
S	XRF	ppm	**70**	81.5	**-**	-	<	1950	<	<	<	**<**	<	192	396
S	ICP-AES	ppm partial	**14.3**	26.6	**81**	186	<	1460	<	<	<	**24**	45	230	404
Sc	ICP-MS	ppm	**2.8**	23.4	**6.3**	3.6	<	16	<	<	2.8	**5.5**	8.3	11	14
Sc	ICP-AES	ppm partial	**0.4**	5.6	**1.9**	1.8	<	14	<	0.50	0.90	**1.5**	2.2	3.3	4.8
Se	GFAAS	ppm partial	**0.055**	98.4	**-**	-	<	0.07	<	<	<	**<**	<	<	<
Sm	ICP-MS	ppm	**0.5**	0.8	**4.6**	2.1	<	11	1.7	1.9	2.8	**4.2**	5.9	7.7	8.3
Sr	XRF	ppm	**4**	0	**544**	317	59	1897	127	198	315	**483**	725	985	1096
Sr	ICP-AES	ppm partial	**1.2**	0	**22**	17	2.2	107	4.4	5.8	11	**19**	32	43	51
Ta	ICP-MS	ppm	**0.06**	4	**0.41**	0.54	<	5.1	0.07	0.10	0.18	**0.29**	0.45	0.81	1.0
Tb	ICP-MS	ppm	**0.08**	1.6	**0.43**	0.21	<	1.0	0.15	0.18	0.26	**0.42**	0.54	0.74	0.88
Te	GFAAS	ppb partial	**5**	92.7	**-**	-	<	15	<	<	<	**<**	<	<	6
Th	ICP-MS	ppm	**0.13**	0	**10**	7.7	0.29	36	2.3	3.3	4.8	**8.1**	14	23	25
Th	ICP-AES	ppm partial	**5.6**	13.7	**14**	9	<	43	<	<	7	**11**	18	27	32
Ti	XRF	ppm	**30**	0	**2310**	1164	342	6660	744	1062	1422	**2136**	2820	3714	4326
Ti	ICP-MS	ppm	**10**	0	**2178**	1062	317	5830	774	1057	1375	**2075**	2795	3528	4143
Ti	ICP-AES	ppm partial	**2**	0	**1582**	798	26	3910	373	676	1015	**1555**	2125	2642	3034
Tm	ICP-MS	ppm	**0.03**	4	**0.12**	0.08	<	0.43	0.03	0.04	0.06	**0.11**	0.16	0.20	0.26
U	ICP-MS	ppm	**0.08**	0.8	**1.65**	2.09	<	17.0	0.27	0.36	0.60	**0.97**	1.67	3.87	5.00
V	XRF	ppm	**6**	1.6	**57**	35	<	180	10	20	29	**49**	74	105	119
V	ICP-MS	ppm	**2**	1.6	**42**	28	<	131	7.7	13	18	**37**	59	77	91
V	ICP-AES	ppm partial	**0.6**	1.6	**32**	21	<	100	5.0	9.0	15	**29**	45	61	72
Y	XRF	ppm	**2.8**	4	**11**	6	<	33	3	4	7	**11**	14	19	23
Y	ICP-MS	ppm	**0.1**	0	**10**	5.9	0.82	31	2.6	3.6	5.7	**9.9**	14	18	22
Y	ICP-AES	ppm partial	**0.15**	0	**5.3**	3.4	0.30	19	1.3	2.0	2.8	**4.5**	6.7	9.4	13
Yb	ICP-MS	ppm	**0.22**	4.8	**0.81**	0.50	<	3.0	0.15	0.25	0.44	**0.74**	1.0	1.3	1.6
Zn	XRF	ppm	**4**	0	**62**	25	7	138	26	30	40	**62**	79	96	99
Zn	ICP-AES	ppm partial	**2**	0	**50**	21	3.5	101	16	24	33	**52**	65	78	86
Zr	XRF	ppm	**6**	0	**168**	65	34	564	72	105	137	**166**	194	230	252
Zr	ICP-MS	ppm	**3**	0	**145**	57	33	508	71	92	114	**137**	170	202	217

Table 60. Chemical concentration summary statistics for map unit 68.

Map unit	68	Leucocratic granite and granodiorite
Number of samples	35	
Unit area	1730.9	km^2
Percent of bedrock	0.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

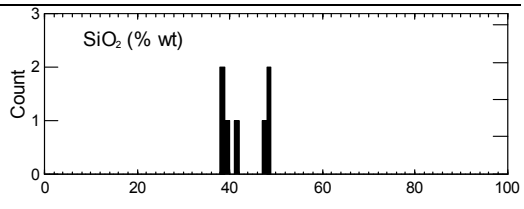


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	71.07	3.72	60.40	77.40	63.10	65.20	70.13	71.20	73.60	74.60	76.63
TiO_2	XRF	%	0.005	0	0.32	0.22	0.02	1.03	0.06	0.08	0.14	0.31	0.46	0.56	0.63
Al_2O_3	XRF	%	0.02	0	14.92	1.38	11.20	18.40	12.50	13.30	14.25	14.80	15.68	16.90	17.23
FeO	XRF	%	0.01	0	2.18	1.20	0.18	5.01	0.60	0.67	1.13	2.16	3.02	3.61	4.22
MnO	XRF	%	0.012	2.9	0.040	0.021	<	0.095	0.012	0.016	0.021	0.040	0.055	0.063	0.074
MgO	XRF	%	0.09	2.9	0.73	0.53	<	1.87	0.12	0.16	0.29	0.58	0.95	1.70	1.72
CaO	XRF	%	0.004	0	1.85	1.11	0.17	4.94	0.29	0.70	1.02	1.63	2.43	2.95	4.37
Na_2O	XRF	%	0.05	0	4.40	0.92	2.43	7.38	3.35	3.52	3.74	4.18	5.00	5.41	5.60
K_2O	XRF	%	0.003	0	3.74	1.87	0.82	8.79	1.44	1.68	2.01	4.20	4.87	5.97	6.28
P_2O_5	XRF	%	0.024	17.1	0.115	0.081	<	0.286	<	<	0.036	0.101	0.189	0.229	0.273
C_{tot}	Leco	%	0.05	85.7	-	-	<	0.21	<	<	<	<	<	0.08	0.15
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	74.3	*0.04*	*0.04*	<	0.17	<	<	<	<	0.05	0.11	0.12
Al	XRF	ppm	106	0	78927	7284	59248	97336	66125	70357	75383	78292	82921	89401	91120
Al	ICP-AES	ppm partial	1100	0	7446	3922	1800	15400	2525	2770	4125	7150	10500	13400	14775
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	100	-	-	<	<	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	820	507	135	2817	253	319	546	717	956	1321	1930
Ba	ICP-AES	ppm partial	10	0	92	85	15	364	17	20	34	70	123	201	323
Bi	GFAAS	ppm partial	0.04	77.1	*0.04*	*0.09*	<	0.44	<	<	<	<	<	0.09	0.25
Ca	XRF	ppm	29	0	13192	7901	1180	35321	2081	5012	7307	11655	17375	21093	31246
Ca	ICP-AES	ppm partial	50	0	2648	2240	200	10800	300	400	1000	1900	4058	4900	6873
Ce	ICP-MS	ppm	0.22	0	89	68	5.2	262	7.9	17	37	77	118	204	230
Cl	XRF	ppm	45	2.9	113	55	<	320	53	60	72	110	128	180	232
Co	ICP-MS	ppm	2	28.6	5.6	4.5	<	18	<	<	<	4.0	7.6	13	17
Co	ICP-AES	ppm partial	0.9	5.7	4.9	3.2	<	13	<	1.2	1.7	4.7	7.1	9.6	10
Cr	XRF	ppm	19	62.9	*17*	*9*	<	44	<	<	<	<	23	30	37
Cr	ICP-AES	ppm partial	5	37.1	10	6.3	<	34	<	<	<	8.2	13	17	24
Cu	XRF	ppm	17	94.3	-	-	<	26	<	<	<	<	<	<	14
Cu	ICP-AES	ppm partial	3	28.6	7.6	6.4	<	33	<	<	<	4.4	9.9	13	22
Dy	ICP-MS	ppm	0.55	11.4	2.4	1.9	<	9.4	<	<	1.0	1.7	3.1	4.5	6.4
Er	ICP-MS	ppm	0.3	5.7	1.2	1.2	<	5.7	<	0.3	0.5	0.9	1.4	2.5	4.2
Eu	ICP-MS	ppm	0.09	0	0.77	0.44	0.14	2.2	0.20	0.31	0.46	0.66	1.00	1.5	1.5
Fe	XRF	ppm	78	0	16946	9285	1399	38928	4646	5206	8803	16783	23465	28050	32774
Fe	ICP-AES	ppm partial	2300	0	17703	8799	2700	38100	5750	6300	10500	19100	24325	29000	32400
Ga	XRF	ppm	10	0	25	3	18	33	21	21	23	26	28	29	31
Gd	ICP-MS	ppm	0.5	5.7	3.9	2.4	<	9.3	<	1.0	1.9	3.5	5.9	7.3	8.2
Hf	ICP-MS	ppm	0.12	0	5.22	2.98	0.14	12.5	1.67	2.34	3.34	4.50	6.53	10.1	11.2
Ho	ICP-MS	ppm	0.09	8.6	0.44	0.40	<	1.9	<	0.09	0.17	0.33	0.56	0.97	1.4
K	XRF	ppm	25	0	31042	15521	6773	72957	11911	13944	16683	34860	40380	49551	52124
K	ICP-AES	ppm partial	100	0	5090	3465	1090	12400	1200	1330	1708	4400	7725	11100	11775
La	ICP-MS	ppm	0.55	0	47	36	3.2	132	4.3	8.6	19	38	66	112	117
La	ICP-AES	ppm partial	1.3	0	45	34	3.0	126	4.4	8.0	18	34	67	100	111
Li	ICP-AES	ppm partial	3.5	2.9	14.2	8.1	<	36.0	5.2	6.0	7.6	12.1	18.1	25.8	31.7
Lu	ICP-MS	ppm	0.03	5.7	0.16	0.17	<	0.81	<	0.04	0.07	0.13	0.19	0.30	0.60
Mg	XRF	ppm	543	2.9	4402	3196	<	11276	693	965	1731	3497	5716	10251	10341
Mg	ICP-AES	ppm partial	50	0	4375	3095	300	11100	850	1100	1800	3450	6025	9700	10600
Mn	XRF	ppm	93	2.9	310	163	<	736	93	124	163	310	426	488	574
Mn	ICP-AES	ppm partial	50	0	262	144	51	743	97	109	152	228	352	448	459
Mo	XRF	ppm	2.6	82.9	-	-	<	6	<	<	<	<	<	3	5
Mo	ICP-AES	ppm partial	2.6	97.1	-	-	<	3	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	32641	6789	18031	54760	24820	26118	27714	31016	37078	40142	41537
Na	ICP-AES	ppm partial	150	0	675	204	400	1300	400	496	510	644	775	900	1075
Nb	XRF	ppm	7	51.4	*8*	*5*	<	21	<	<	<	<	11	16	17
Nb	ICP-MS	ppm	0.16	0	6.4	4.6	0.91	19	1.6	1.8	2.8	4.8	9.8	13	14
Nd	ICP-MS	ppm	0.2	0	33	24	1.7	89	3.2	5.0	14	29	41	67	83
Ni	XRF	ppm	14	91.4	-	-	<	22	<	<	<	<	<	<	20
Ni	ICP-AES	ppm partial	3.5	14.3	7.5	4.7	<	24	<	<	3.9	5.4	10	13	17
P	XRF	ppm	105	0	501	353	<	1247	<	<	157	440	824	998	1190
P	ICP-AES	ppm partial	6	0	445	330	39	1170	52	56	138	411	756	882	1041
Pb	XRF	ppm	14	0	38	14	17	73	19	22	27	36	46	55	69
Pb	ICP-AES	ppm partial	8.7	62.9	*8*	*6*	<	24	<	<	<	<	11	15	23
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	2.9	9.7	7.3	<	28.0	0.95	1.7	4.1	8.4	12.3	21.4	25.6
Rb	XRF	ppm	5.5	0	133	82	29	321	43	51	72	102	172	270	291
Rb	ICP-MS	ppm	0.6	0	128	81	23	340	42	49	72	99	155	257	283
S	XRF	ppm	70	88.6	-	-	<	190	<	<	<	<	<	77	98
S	ICP-AES	ppm partial	14.3	17.1	46	45	<	216	<	<	16	27	60	105	130
Sc	ICP-MS	ppm	2.8	42.9	4.6	2.2	<	10	<	<	<	3.4	5.9	8.4	9.4
Sc	ICP-AES	ppm partial	0.4	5.7	2.2	1.6	<	5.6	<	0.40	1.0	1.7	3.2	5.0	5.3
Se	GFAAS	ppm partial	0.055	97.1	-	-	<	0.07	<	<	<	<	<	<	<
Sm	ICP-MS	ppm	0.5	2.9	5.0	3.3	<	11	0.62	0.82	2.3	4.5	7.6	11	11
Sr	XRF	ppm	4	0	364	234	57	874	73	106	180	307	527	738	826
Sr	ICP-AES	ppm partial	1.2	0	13	12	2.3	62	2.3	4.6	6.1	9.3	14	24	39
Ta	ICP-MS	ppm	0.06	2.9	0.40	0.30	<	1.3	0.07	0.11	0.20	0.31	0.53	0.70	1.1
Tb	ICP-MS	ppm	0.08	5.7	0.50	0.34	<	1.5	<	0.10	0.23	0.44	0.69	1.1	1.2
Te	GFAAS	ppb partial	5	91.4	-	-	<	18	<	<	<	<	<	<	7
Th	ICP-MS	ppm	0.13	0	19	17	1.4	86	1.8	3.6	8.2	18	28	40	44
Th	ICP-AES	ppm partial	5.6	14.3	24	17	<	86	<	<	12	19	32	47	52
Ti	XRF	ppm	30	0	1920	1296	120	6180	354	468	834	1842	2730	3372	3774
Ti	ICP-MS	ppm	10	0	1837	1221	121	5970	361	457	792	1690	2555	3290	3508
Ti	ICP-AES	ppm partial	2	0	1189	791	41	3090	143	196	454	1080	1803	2210	2508
Tm	ICP-MS	ppm	0.03	2.9	0.17	0.18	<	0.83	0.03	0.05	0.06	0.13	0.19	0.39	0.62
U	ICP-MS	ppm	0.08	0	2.98	3.42	0.37	14.5	0.39	0.55	1.05	1.50	3.72	9.68	10.6
V	XRF	ppm	6	5.7	37	24	<	105	<	9	15	31	50	66	84
V	ICP-MS	ppm	2	2.9	23	17	<	67	2.7	4.0	7.5	19	34	45	62
V	ICP-AES	ppm partial	0.6	0	19	15	0.6	52	1.8	3.4	5.6	19	26	44	48
Y	XRF	ppm	2.8	8.6	15	12	<	60	<	4	7	12	20	32	36
Y	ICP-MS	ppm	0.1	0	13	12	0.72	57	1.9	3.0	5.7	11	17	29	42
Y	ICP-AES	ppm partial	0.15	0	6.4	5.0	0.30	22	0.94	1.7	2.8	5.2	8.2	13	18
Yb	ICP-MS	ppm	0.22	5.7	1.1	1.1	<	5.3	<	0.28	0.43	0.85	1.3	2.1	4.0
Zn	XRF	ppm	4	0	48	24	10	92	12	19	25	43	70	80	82
Zn	ICP-AES	ppm partial	2	0	40	24	4.5	79	9.5	12	19	34	64	72	77
Zr	XRF	ppm	6	2.9	215	132	<	528	57	66	131	171	263	414	483
Zr	ICP-MS	ppm	3	0	199	129	4.5	503	49	64	119	162	254	374	494

Table 61. Chemical concentration summary statistics for map unit 70.

Map unit	**70**	**Metaperidotite, serpentinite and soapstone**	
Number of samples	7		
Unit area	107.3	km^2	
Percent of bedrock	0.03	%	

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

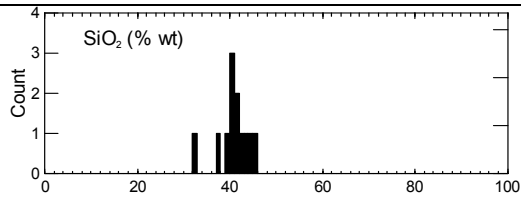


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**42.93**	4.67	38.20	48.00	-	-	-	**41.30**	-	-	-
TiO_2	XRF	%	**0.005**	0	**0.42**	0.39	0.09	0.89	-	-	-	**0.14**	-	-	-
Al_2O_3	XRF	%	**0.02**	0	**7.97**	6.03	2.80	14.80	-	-	-	**3.89**	-	-	-
FeO	XRF	%	**0.01**	0	**9.45**	2.34	6.48	12.20	-	-	-	**9.98**	-	-	-
MnO	XRF	%	**0.012**	0	**0.171**	0.039	0.127	0.219	-	-	-	**0.156**	-	-	-
MgO	XRF	%	**0.09**	0	**20.51**	13.14	6.72	37.10	-	-	-	**25.50**	-	-	-
CaO	XRF	%	**0.004**	0	**6.88**	3.69	0.39	10.40	-	-	-	**8.11**	-	-	-
Na_2O	XRF	%	**0.05**	57.1	**-**	-	<	3.34	<	<	<	**<**	1.96	-	-
K_2O	XRF	%	**0.003**	0	**0.21**	0.33	0.00	0.90	-	-	-	**0.01**	-	-	-
P_2O_5	XRF	%	**0.024**	57.1	**-**	-	<	0.073	<	<	<	**<**	0.061	-	-
C_{tot}	Leco	%	**0.05**	28.6	**1.1**	1.4	<	3.0	<	<	<	**0.28**	-	-	-
$C_{non\text{-}carb}$	Leco	%	**0.05**	57.1	**-**	-	<	0.05	<	<	<	**<**	0.05	-	-
F^-	Ion	%	**0.055**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Al	XRF	ppm	**106**	0	**42140**	31915	14812	78292	-	-	-	**20578**	-	-	-
Al	ICP-AES	ppm partial	**1100**	0	**8186**	5942	2880	15800	-	-	-	**4480**	-	-	-
As	GFAAS	ppm partial	**3**	57.1	**-**	-	<	271	<	<	<	**<**	12	-	-
Au	GFAAS	ppb partial	**2.5**	71.4	**-**	-	<	6.2	<	<	<	**<**	3.4	-	-
B	ICP-AES	ppm partial	**4.5**	85.7	**-**	-	<	6	<	<	<	**<**	<	-	-
Ba	XRF	ppm	**21**	28.6	**62**	63	<	164	<	<	<	**27**	-	-	-
Ba	ICP-AES	ppm partial	**10**	71.4	**-**	-	<	147	<	<	<	**<**	64	-	-
Bi	GFAAS	ppm partial	**0.04**	42.9	**0.12**	0.15	<	0.43	<	<	<	**0.05**	-	-	-
Ca	XRF	ppm	**29**	0	**49199**	26362	2781	74360	-	-	-	**57987**	-	-	-
Ca	ICP-AES	ppm partial	**50**	0	**21351**	20983	2300	52800	-	-	-	**11100**	-	-	-
Ce	ICP-MS	ppm	**0.22**	0	**8.0**	8.8	1.3	25	-	-	-	**5.9**	-	-	-
Cl	XRF	ppm	**45**	0	**244**	245	47	760	-	-	-	**210**	-	-	-
Co	ICP-MS	ppm	**2**	14.3	**67**	23	<	104	<	<	-	**53**	-	-	-
Co	ICP-AES	ppm partial	**0.9**	0	**42**	34	8.0	102	-	-	-	**27**	-	-	-
Cr	XRF	ppm	**19**	0	**2134**	1916	224	4502	-	-	-	**2270**	-	-	-
Cr	ICP-AES	ppm partial	**5**	0	**440**	440	17	1020	-	-	-	**282**	-	-	-
Cu	XRF	ppm	**17**	57.1	**-**	-	<	213	<	<	<	**<**	104	-	-
Cu	ICP-AES	ppm partial	**3**	14.3	**50**	71	<	185	<	<	-	**16**	-	-	-
Dy	ICP-MS	ppm	**0.55**	28.6	**1.8**	1.4	<	3.7	<	<	<	**0.8**	-	-	-
Er	ICP-MS	ppm	**0.3**	14.3	**1.2**	0.9	<	2.4	<	<	-	**0.6**	-	-	-
Eu	ICP-MS	ppm	**0.09**	0	**0.42**	0.32	0.11	0.82	-	-	-	**0.25**	-	-	-
Fe	XRF	ppm	**78**	0	**73388**	18205	50342	94794	-	-	-	**77545**	-	-	-
Fe	ICP-AES	ppm partial	**2300**	0	**29297**	22192	8030	66700	-	-	-	**23000**	-	-	-
Ga	XRF	ppm	**10**	42.9	**15**	8	<	25	<	<	<	**10**	-	-	-
Gd	ICP-MS	ppm	**0.5**	14.3	**1.6**	1.1	<	3.3	<	<	-	**1.0**	-	-	-
Hf	ICP-MS	ppm	**0.12**	0	**0.85**	0.61	0.19	1.66	-	-	-	**0.93**	-	-	-
Ho	ICP-MS	ppm	**0.09**	14.3	**0.38**	0.31	<	0.75	<	<	-	**0.18**	-	-	-
K	XRF	ppm	**25**	0	**1743**	2756	25	7453	-	-	-	**50**	-	-	-
K	ICP-AES	ppm partial	**100**	0	**1240**	2455	100	6700	-	-	-	**100**	-	-	-
La	ICP-MS	ppm	**0.55**	28.6	**3.9**	5.3	<	15	<	<	<	**2.0**	-	-	-
La	ICP-AES	ppm partial	**1.3**	57.1	**-**	-	<	5.3	<	<	<	**<**	2.0	-	-
Li	ICP-AES	ppm partial	**3.5**	57.1	**-**	-	<	17.6	<	<	<	**<**	11.7	-	-
Lu	ICP-MS	ppm	**0.03**	0	**0.16**	0.13	0.03	0.32	-	-	-	**0.09**	-	-	-
Mg	XRF	ppm	**543**	0	**123675**	79228	40522	223713	-	-	-	**153765**	-	-	-
Mg	ICP-AES	ppm partial	**50**	0	**60707**	69759	2950	174000	-	-	-	**37400**	-	-	-
Mn	XRF	ppm	**93**	0	**1325**	302	984	1697	-	-	-	**1209**	-	-	-
Mn	ICP-AES	ppm partial	**50**	0	**469**	323	120	1020	-	-	-	**388**	-	-	-
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	85.7	**-**	-	<	4	<	<	<	**<**	<	-	-
Na	XRF	ppm	**371**	57.1	**-**	-	<	24783	<	<	<	**<**	14528	-	-
Na	ICP-AES	ppm partial	**150**	42.9	**800**	837	<	2000	<	<	<	**200**	-	-	-
Nb	XRF	ppm	**7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Nb	ICP-MS	ppm	**0.16**	0	**1.0**	0.78	0.24	2.0	-	-	-	**1.1**	-	-	-
Nd	ICP-MS	ppm	**0.2**	0	**4.4**	3.2	1.2	8.8	-	-	-	**5.4**	-	-	-
Ni	XRF	ppm	**14**	0	**1167**	984	106	2328	-	-	-	**1730**	-	-	-
Ni	ICP-AES	ppm partial	**3.5**	0	**653**	633	38	1520	-	-	-	**558**	-	-	-
P	XRF	ppm	**105**	0	**-**	-	<	318	<	<	<	**<**	266	-	-
P	ICP-AES	ppm partial	**6**	0	**116**	113	16	275	-	-	-	**42**	-	-	-
Pb	XRF	ppm	**14**	28.6	**16**	2	<	19	<	<	<	**15**	-	-	-
Pb	ICP-AES	ppm partial	**8.7**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pd	GFAAS	ppb partial	**5**	85.7	**-**	-	<	6	<	<	<	**<**	<	-	-
Pr	ICP-MS	ppm	**0.74**	42.9	**1.3**	0.63	<	2.6	<	<	<	**0.98**	-	-	-
Rb	XRF	ppm	**5.5**	71.4	**-**	-	<	27	<	<	<	**<**	10	-	-
Rb	ICP-MS	ppm	**0.6**	42.9	**13**	19	<	51	<	<	<	**2.5**	-	-	-
S	XRF	ppm	**70**	28.6	**345**	407	<	1180	<	<	<	**230**	-	-	-
S	ICP-AES	ppm partial	**14.3**	0	**347**	425	41	1220	-	-	-	**167**	-	-	-
Sc	ICP-MS	ppm	**2.8**	14.3	**27**	18	<	50	<	<	-	**17**	-	-	-
Sc	ICP-AES	ppm partial	**0.4**	0	**3.9**	2.2	1.1	7.2	-	-	-	**3.4**	-	-	-
Se	GFAAS	ppm partial	**0.055**	42.9	**0.13**	0.12	<	0.36	<	<	<	**0.06**	-	-	-
Sm	ICP-MS	ppm	**0.5**	42.9	**1.6**	0.40	<	2.2	<	<	<	**1.3**	-	-	-
Sr	XRF	ppm	**4**	14.3	**100**	61	<	191	<	<	-	**106**	-	-	-
Sr	ICP-AES	ppm partial	**1.2**	0	**52**	69	2.5	175	-	-	-	**13**	-	-	-
Ta	ICP-MS	ppm	**0.06**	57.1	**-**	-	<	0.14	<	<	<	**<**	0.12	-	-
Tb	ICP-MS	ppm	**0.08**	0	**0.27**	0.20	0.11	0.57	-	-	-	**0.12**	-	-	-
Te	GFAAS	ppb partial	**5**	28.6	**27**	30	<	81	<	<	<	**14**	-	-	-
Th	ICP-MS	ppm	**0.13**	42.9	**0.74**	1.4	<	3.7	<	<	<	**0.18**	-	-	-
Th	ICP-AES	ppm partial	**5.6**	85.7	**-**	-	<	6	<	<	<	**<**	<	-	-
Ti	XRF	ppm	**30**	0	**2520**	2310	564	5364	-	-	-	**846**	-	-	-
Ti	ICP-MS	ppm	**10**	0	**2442**	2282	490	5400	-	-	-	**774**	-	-	-
Ti	ICP-AES	ppm partial	**2**	0	**445**	490	25	1240	-	-	-	**120**	-	-	-
Tm	ICP-MS	ppm	**0.03**	0	**0.17**	0.15	0.03	0.36	-	-	-	**0.07**	-	-	-
U	ICP-MS	ppm	**0.08**	71.4	**-**	-	<	0.39	<	<	<	**<**	0.11	-	-
V	XRF	ppm	**6**	0	**159**	116	57	300	-	-	-	**77**	-	-	-
V	ICP-MS	ppm	**2**	0	**144**	117	4.6	284	-	-	-	**76**	-	-	-
V	ICP-AES	ppm partial	**0.6**	0	**32**	18	9.8	58	-	-	-	**24**	-	-	-
Y	XRF	ppm	**2.8**	42.9	**11**	9	<	22	<	<	<	**4**	-	-	-
Y	ICP-MS	ppm	**0.1**	0	**11**	9.2	1.9	23	-	-	-	**4.9**	-	-	-
Y	ICP-AES	ppm partial	**0.15**	0	**1.7**	1.3	0.60	4.0	-	-	-	**0.93**	-	-	-
Yb	ICP-MS	ppm	**0.22**	14.3	**1.1**	0.89	<	2.2	<	<	-	**0.46**	-	-	-
Zn	XRF	ppm	**4**	0	**114**	22	83	148	-	-	-	**114**	-	-	-
Zn	ICP-AES	ppm partial	**2**	0	**27**	25	8.1	81	-	-	-	**24**	-	-	-
Zr	XRF	ppm	**6**	28.6	**26**	25	<	55	<	<	<	**7**	-	-	-
Zr	ICP-MS	ppm	**3**	0	**30**	19	4.6	52	-	-	-	**32**	-	-	-

Table 62. Chemical concentration summary statistics for map unit 71.

Map unit	71	Mafic metavolcanic rocks
Number of samples	12	
Unit area	72.8	km^2
Percent of bedrock	0.02	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

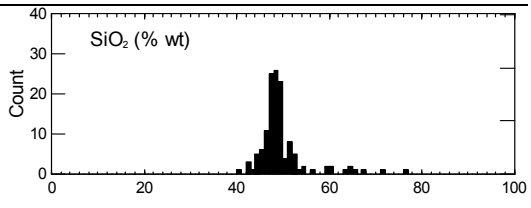


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	40.97	3.38	32.80	45.50	-	-	40.15	40.95	43.25	-	-
TiO_2	XRF	%	0.005	0	0.43	0.69	0.04	2.56	-	-	0.09	0.24	0.37	-	-
Al_2O_3	XRF	%	0.02	0	4.79	3.08	0.86	10.60	-	-	1.82	4.50	6.93	-	-
FeO	XRF	%	0.01	0	10.12	3.74	6.55	20.40	-	-	7.49	9.80	10.95	-	-
MnO	XRF	%	0.012	0	0.187	0.107	0.108	0.510	-	-	0.129	0.159	0.198	-	-
MgO	XRF	%	0.09	0	29.65	9.76	9.54	41.10	-	-	24.85	31.35	36.60	-	-
CaO	XRF	%	0.004	0	4.09	3.76	0.05	11.90	-	-	0.45	4.18	6.19	-	-
Na_2O	XRF	%	0.05	66.7	*0.31*	*0.56*	<	1.51	<	<	<	<	0.29	-	-
K_2O	XRF	%	0.003	33.3	0.11	0.30	<	1.04	<	<	<	0.01	0.05	-	-
P_2O_5	XRF	%	0.024	83.3	-	-	<	0.067	<	<	<	<	<	0.051	-
C_{tot}	Leco	%	0.05	16.7	1.2	2.2	<	6.6	<	<	0.08	0.33	0.71	-	-
$C_{non\text{-}carb}$	Leco	%	0.05	66.7	*0.04*	*0.03*	<	0.09	<	<	<	<	0.05	-	-
F	Ion	%	0.055	100	-	-	<	<	<	<	<	<	<	<	<
Al	XRF	ppm	106	0	25334	16298	4549	56074	-	-	9601	23779	36660	-	-
Al	ICP-AES	ppm partial	1100	8.3	8517	6982	<	22500	<	-	3150	6600	13050	-	-
As	GFAAS	ppm partial	3	66.7	*4.9*	*6.5*	<	18	<	<	<	<	7.4	-	-
Au	GFAAS	ppb partial	2.5	66.7	*4.7*	*9.4*	<	29.6	<	<	<	<	3.4	-	-
B	ICP-AES	ppm partial	4.5	75	*4*	*7*	<	23	<	<	<	<	<	13	-
Ba	XRF	ppm	21	58.3	*87*	*264*	<	923	<	<	<	<	25	-	-
Ba	ICP-AES	ppm partial	10	50	*43*	*111*	<	391	<	<	<	<	23	-	-
Bi	GFAAS	ppm partial	0.04	83.3	-	-	<	0.25	<	<	<	<	<	0.10	-
Ca	XRF	ppm	29	0	29258	26884	365	85085	-	-	3196	29887	44259	-	-
Ca	ICP-AES	ppm partial	50	0	5917	5713	300	16600	-	-	1300	2800	11650	-	-
Ce	ICP-MS	ppm	0.22	0	3.5	5.1	0.43	19	-	-	1.2	2.0	3.5	-	-
Cl	XRF	ppm	45	25	198	213	<	620	<	<	<	60	310	-	-
Co	ICP-MS	ppm	2	0	99	19	72	138	-	-	88	97	109	-	-
Co	ICP-AES	ppm partial	0.9	0	47	28	12	105	-	-	31	42	50	-	-
Cr	XRF	ppm	19	0	3054	1820	23	7191	-	-	2251	2632	3686	-	-
Cr	ICP-AES	ppm partial	5	0	885	763	7.9	2220	-	-	177	762	1580	-	-
Cu	XRF	ppm	17	58.3	*38*	*67*	<	239	<	<	<	<	49	-	-
Cu	ICP-AES	ppm partial	3	41.7	35	65	<	225	<	<	<	5.6	45	-	-
Dy	ICP-MS	ppm	0.55	33.3	1.2	0.9	<	3.5	<	<	<	0.8	1.5	-	-
Er	ICP-MS	ppm	0.3	33.3	0.7	0.5	<	1.6	<	<	<	0.4	1.0	-	-
Eu	ICP-MS	ppm	0.09	33.3	0.24	0.27	<	0.99	<	<	<	0.13	0.26	-	-
Fe	XRF	ppm	78	0	78656	29052	50894	158508	-	-	58197	76146	85082	-	-
Fe	ICP-AES	ppm partial	2300	0	43250	19272	20500	81600	-	-	32250	34500	51900	-	-
Ga	XRF	ppm	10	66.7	*9*	*6*	<	24	<	<	<	<	13	-	-
Gd	ICP-MS	ppm	0.5	33.3	1.1	1.0	<	3.8	<	<	<	0.7	1.3	-	-
Hf	ICP-MS	ppm	0.12	0	0.53	0.57	0.12	2.23	-	-	0.24	0.36	0.58	-	-
Ho	ICP-MS	ppm	0.09	33.3	0.25	0.18	<	0.65	<	<	<	0.15	0.34	-	-
K	XRF	ppm	25	33.3	921	2507	<	8632	<	<	<	66	432	-	-
K	ICP-AES	ppm partial	100	0	1417	3786	100	13300	-	-	100	100	400	-	-
La	ICP-MS	ppm	0.55	8.3	1.9	2.1	<	8.4	<	-	0.7	1.3	1.9	-	-
La	ICP-AES	ppm partial	1.3	75	*1.9*	*5.2*	<	18	<	<	<	<	<	7.7	-
Li	ICP-AES	ppm partial	3.5	66.7	*4.3*	*7.2*	<	24.8	<	<	<	<	5.4	-	-
Lu	ICP-MS	ppm	0.03	8.3	0.09	0.06	<	0.19	<	-	0.05	0.07	0.15	-	-
Mg	XRF	ppm	543	0	178759	58865	57526	247833	-	-	149846	189041	220698	-	-
Mg	ICP-AES	ppm partial	50	0	63567	44214	5800	137000	-	-	20750	62250	103950	-	-
Mn	XRF	ppm	93	0	1449	829	837	3953	-	-	1000	1232	1535	-	-
Mn	ICP-AES	ppm partial	50	0	534	231	181	1080	-	-	376	476	659	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	83.3	-	-	<	4	<	<	<	<	<	4	-
Na	XRF	ppm	371	66.7	*2278*	*4148*	<	11204	<	<	<	<	2115	-	-
Na	ICP-AES	ppm partial	150	0	342	334	200	1300	-	-	200	200	250	-	-
Nb	XRF	ppm	7	100	-	-	<	<	<	<	<	<	<	<	<
Nb	ICP-MS	ppm	0.16	8.3	0.78	0.96	<	3.6	<	-	0.27	0.46	0.88	-	-
Nd	ICP-MS	ppm	0.2	0	2.6	3.2	0.27	12	-	-	0.75	1.6	2.9	-	-
Ni	XRF	ppm	14	0	1675	948	355	3051	-	-	925	1417	2553	-	-
Ni	ICP-AES	ppm partial	3.5	0	561	574	14	2100	-	-	188	414	782	-	-
P	XRF	ppm	105	0	-	-	<	292	<	<	<	<	<	222	-
P	ICP-AES	ppm partial	6	0	116	131	28	468	-	-	47	68	118	-	-
Pb	XRF	ppm	14	50	*19*	*38*	<	138	<	<	<	<	16	-	-
Pb	ICP-AES	ppm partial	8.7	83.3	-	-	<	85	<	<	<	<	<	32	-
Pd	GFAAS	ppb partial	5	41.7	6	2	<	10	<	<	<	6	8	-	-
Pr	ICP-MS	ppm	0.74	75	*0.41*	*0.76*	<	2.7	<	<	<	<	<	1.3	-
Rb	XRF	ppm	5.5	83.3	-	-	<	26	<	<	<	<	<	15	-
Rb	ICP-MS	ppm	0.6	66.7	*3.2*	*7.8*	<	26	<	<	<	<	1.0	-	-
S	XRF	ppm	70	33.3	258	339	<	1150	<	<	<	145	210	-	-
S	ICP-AES	ppm partial	14.3	8.3	315	455	<	1550	<	-	59	182	265	-	-
Sc	ICP-MS	ppm	2.8	0	20	13	6.5	43	-	-	8.8	16	29	-	-
Sc	ICP-AES	ppm partial	0.4	0	3.4	1.8	0.90	7.1	-	-	2.2	3.0	4.7	-	-
Se	GFAAS	ppm partial	0.055	50	*0.07*	*0.07*	<	0.24	<	<	<	<	0.11	-	-
Sm	ICP-MS	ppm	0.5	58.3	*0.69*	*0.96*	<	3.4	<	<	<	<	0.96	-	-
Sr	XRF	ppm	4	25	28	33	<	99	<	<	<	8	46	-	-
Sr	ICP-AES	ppm partial	1.2	8.3	10	16	<	50	<	-	1.8	3.0	8.7	-	-
Ta	ICP-MS	ppm	0.06	75	*0.04*	*0.07*	<	0.23	<	<	<	<	<	0.13	-
Tb	ICP-MS	ppm	0.08	33.3	0.20	0.15	<	0.60	<	<	<	0.12	0.24	-	-
Te	GFAAS	ppb partial	5	50	*7*	*6*	<	22	<	<	<	<	11	-	-
Th	ICP-MS	ppm	0.13	41.7	0.25	0.35	<	1.3	<	<	<	0.14	0.18	-	-
Th	ICP-AES	ppm partial	5.6	75	*4*	*2*	<	9	<	<	<	<	<	8	-
Ti	XRF	ppm	30	0	2550	4140	228	15360	-	-	564	1446	2202	-	-
Ti	ICP-MS	ppm	10	0	2294	3410	176	12700	-	-	471	1485	2210	-	-
Ti	ICP-AES	ppm partial	2	0	806	1681	3.6	5810	-	-	130	216	282	-	-
Tm	ICP-MS	ppm	0.03	8.3	0.10	0.07	<	0.23	<	-	0.04	0.07	0.14	-	-
U	ICP-MS	ppm	0.08	83.3	-	-	<	0.24	<	<	<	<	<	0.13	-
V	XRF	ppm	6	0	150	188	26	719	-	-	49	109	151	-	-
V	ICP-MS	ppm	2	0	141	163	23	626	-	-	44	115	147	-	-
V	ICP-AES	ppm partial	0.6	0	56	71	3.9	270	-	-	21	35	60	-	-
Y	XRF	ppm	2.8	41.7	7	5	<	19	<	<	<	5	8	-	-
Y	ICP-MS	ppm	0.1	0	6.6	5.3	1.1	18	-	-	2.5	4.5	9.7	-	-
Y	ICP-AES	ppm partial	0.15	0	2.3	3.1	0.20	11	-	-	0.60	1.6	1.9	-	-
Yb	ICP-MS	ppm	0.22	8.3	0.64	0.45	<	1.4	<	-	0.24	0.46	1.0	-	-
Zn	XRF	ppm	4	0	111	88	37	352	-	-	65	82	111	-	-
Zn	ICP-AES	ppm partial	2	8.3	25	20	<	61	<	-	9.0	19	37	-	-
Zr	XRF	ppm	6	8.3	20	21	<	79	<	-	7	15	21	-	-
Zr	ICP-MS	ppm	3	0	17	16	4.8	64	-	-	7.5	13	21	-	-

Table 63. Chemical concentration summary statistics for map unit 72.

Map unit	72	Mafic metavolcanic rocks
Number of samples	133	
Unit area	2678.2	km^2
Percent of bedrock	0.8	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

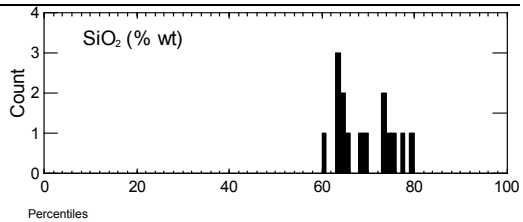


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	49.72	5.37	40.10	76.40	44.55	45.80	47.20	48.50	49.90	54.30	62.76
TiO_2	XRF	%	0.005	0	0.88	0.45	0.04	3.21	0.32	0.44	0.59	0.82	1.08	1.44	1.70
Al_2O_3	XRF	%	0.02	0	13.60	2.63	0.93	18.80	7.44	11.18	13.10	14.10	14.90	15.94	16.56
FeO	XRF	%	0.01	0	10.62	2.47	2.11	17.60	5.75	7.62	9.33	10.80	11.98	13.42	15.00
MnO	XRF	%	0.012	0	0.201	0.051	0.063	0.392	0.109	0.141	0.174	0.200	0.226	0.260	0.277
MgO	XRF	%	0.09	0	8.12	4.72	0.31	29.40	2.83	4.54	5.79	7.18	8.66	13.06	19.46
CaO	XRF	%	0.004	0	9.51	2.48	0.23	15.40	4.99	6.15	8.44	9.90	10.80	12.08	13.39
Na_2O	XRF	%	0.05	3	2.33	1.04	<	6.22	0.25	1.00	1.86	2.32	2.85	3.46	4.25
K_2O	XRF	%	0.003	0	0.46	0.43	0.00	2.69	0.04	0.08	0.18	0.35	0.60	1.01	1.38
P_2O_5	XRF	%	0.024	3.8	0.102	0.079	<	0.393	0.026	0.036	0.051	0.071	0.128	0.198	0.289
C_{tot}	Leco	%	0.05	75.2	*0.06*	*0.16*	<	1.2	<	<	<	<	<	0.16	0.27
$C_{non\text{-}carb}$	Leco	%	0.05	93.2	-	-	<	0.05	<	<	<	<	<	<	0.05
F	Ion	%	0.055	85.7	-	-	<	0.18	<	<	<	<	<	0.07	0.10
Al	XRF	ppm	106	0	71960	13907	4899	99452	39331	59142	69299	74589	78821	84323	87576
Al	ICP-AES	ppm partial	1100	0.8	13705	8804	<	53300	4815	5674	8050	10700	16250	26440	31685
As	GFAAS	ppm partial	3	85	-	-	<	414	<	<	<	<	<	5.4	8.4
Au	GFAAS	ppb partial	2.5	78.2	*2.3*	*8.0*	<	87.6	<	<	<	<	<	3.8	7.1
B	ICP-AES	ppm partial	4.5	97.7	-	-	<	5	<	<	<	<	<	<	<
Ba	XRF	ppm	21	3	125	146	<	1064	25	33	54	78	131	235	323
Ba	ICP-AES	ppm partial	10	15	46	66	<	431	<	<	13	20	54	95	172
Bi	GFAAS	ppm partial	0.04	66.2	*0.05*	*0.13*	<	1.1	<	<	<	<	0.05	0.10	0.14
Ca	XRF	ppm	29	0	67997	17761	1616	110110	35693	43973	60332	70785	77220	86372	95703
Ca	ICP-AES	ppm partial	50	0	10493	7301	338	39800	986	3640	6050	9700	12625	17320	27090
Ce	ICP-MS	ppm	0.22	0	17	25	0.60	181	2.3	3.8	6.1	8.8	17	32	52
Cl	XRF	ppm	45	6.8	288	463	<	3820	<	50	70	145	273	696	1208
Co	ICP-MS	ppm	2	0.8	49	16	<	116	13	27	45	50	57	65	75
Co	ICP-AES	ppm partial	0.9	0.8	17	9.8	<	56	6.9	8.3	10	14	19	34	40
Cr	XRF	ppm	19	5.3	453	724	<	5140	<	31	97	240	421	1144	1528
Cr	ICP-AES	ppm partial	5	9	118	263	<	1710	<	5.8	16	38	78	229	681
Cu	XRF	ppm	17	13.5	89	67	<	349	<	<	37	77	117	189	224
Cu	ICP-AES	ppm partial	3	0.8	83	65	<	341	6.4	11	36	76	112	169	213
Dy	ICP-MS	ppm	0.55	0.8	3.9	5.1	<	58	1.2	1.7	2.3	3.1	4.0	5.7	7.7
Er	ICP-MS	ppm	0.3	0.8	2.3	2.9	<	33	0.8	1.0	1.4	2.0	2.5	3.4	3.9
Eu	ICP-MS	ppm	0.09	1.5	0.87	0.51	<	3.6	0.25	0.42	0.60	0.74	0.99	1.4	1.8
Fe	XRF	ppm	78	0	82510	19223	16364	136752	44639	59215	72455	83916	93054	104273	116550
Fe	ICP-AES	ppm partial	2300	0	20632	11469	6320	82900	8003	8980	12900	18100	26100	33240	44910
Ga	XRF	ppm	10	2.3	21	5	<	36	12	14	17	21	24	28	31
Gd	ICP-MS	ppm	0.5	2.3	3.6	4.5	<	46.9	1.0	1.6	2.2	2.7	3.7	5.4	7.4
Hf	ICP-MS	ppm	0.12	0	1.72	1.87	0.15	17.4	0.43	0.55	0.90	1.22	1.92	3.07	3.63
Ho	ICP-MS	ppm	0.09	0	0.80	1.1	0.11	11.9	0.25	0.35	0.48	0.66	0.84	1.1	1.4
K	XRF	ppm	25	0	3826	3577	33	22327	315	672	1511	2880	4980	8342	11446
K	ICP-AES	ppm partial	100	0	1478	2411	100	12800	100	100	200	600	1300	3752	7328
La	ICP-MS	ppm	0.55	1.5	7.6	11	<	80	1.0	1.6	2.5	3.6	8.1	18	30
La	ICP-AES	ppm partial	1.3	41.4	4.7	8.8	<	78	<	<	<	1.7	5.0	10	17
Li	ICP-AES	ppm partial	3.5	29.3	11.4	22.2	<	244	<	<	<	6.2	13.2	20.9	26.2
Lu	ICP-MS	ppm	0.03	0	0.32	0.33	0.04	3.65	0.11	0.14	0.21	0.28	0.37	0.45	0.59
Mg	XRF	ppm	543	0	48988	28431	1875	177282	17077	27388	34932	43295	52220	78752	117314
Mg	ICP-AES	ppm partial	50	0	9864	10017	307	63100	2142	3346	4978	6700	11075	19120	29115
Mn	XRF	ppm	93	0	1558	395	488	3038	845	1093	1349	1550	1752	2015	2147
Mn	ICP-AES	ppm partial	50	0	278	141	91	1090	114	136	184	248	330	459	541
Mo	XRF	ppm	2.6	98.5	-	-	<	9	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	97.7	-	-	<	16	<	<	<	<	<	<	<
Na	XRF	ppm	371	3	17252	7680	<	46152	1862	7405	13779	17214	21110	25658	31535
Na	ICP-AES	ppm partial	150	3	1289	976	<	5900	200	280	617	1100	1608	2616	3066
Nb	XRF	ppm	7	81.2	-	-	<	33	<	<	<	<	<	8	10
Nb	ICP-MS	ppm	0.16	0.8	3.2	4.0	<	31	0.66	0.96	1.4	2.0	3.6	6.5	8.2
Nd	ICP-MS	ppm	0.2	0	11	15	0.35	112	2.1	3.1	5.1	6.9	12	18	27
Ni	XRF	ppm	14	6.8	203	296	<	1730	<	36	68	123	195	365	784
Ni	ICP-AES	ppm partial	3.5	2.3	74	129	<	877	4.5	12	22	37	58	127	334
P	XRF	ppm	105	0	445	344	<	1713	113	157	222	310	558	863	1260
P	ICP-AES	ppm partial	6	0	399	318	29	1600	96	136	196	280	529	809	1136
Pb	XRF	ppm	14	23.3	18	8	<	93	<	<	14	16	19	24	29
Pb	ICP-AES	ppm partial	8.7	92.5	-	-	<	43	<	<	<	<	<	<	10
Pd	GFAAS	ppb partial	5	54.1	7	7	<	61	<	<	<	<	9	15	18
Pr	ICP-MS	ppm	0.74	14.3	2.4	3.4	<	23.9	<	<	0.99	1.4	2.4	4.3	6.4
Rb	XRF	ppm	5.5	35.3	17	20	<	136	<	<	<	9	19	37	53
Rb	ICP-MS	ppm	0.6	6	14	20	<	129	<	0.9	2.0	6.9	18	33	54
S	XRF	ppm	70	28.6	649	1191	<	10100	<	<	<	280	813	1326	1786
S	ICP-AES	ppm partial	14.3	12.8	691	1208	<	9700	<	<	74	328	904	1412	2038
Sc	ICP-MS	ppm	2.8	0	40	11	3.6	61	17	25	36	42	47	52	56
Sc	ICP-AES	ppm partial	0.4	0.8	4.1	2.7	<	22	1.0	1.4	2.2	3.8	5.2	7.0	8.4
Se	GFAAS	ppm partial	0.055	29.3	0.19	0.16	<	0.77	<	<	<	0.13	0.27	0.38	0.57
Sm	ICP-MS	ppm	0.5	2.3	2.9	3.7	<	35	0.71	1.1	1.6	2.1	2.9	4.3	5.9
Sr	XRF	ppm	4	0.8	177	134	<	835	25	67	105	145	205	317	441
Sr	ICP-AES	ppm partial	1.2	2.3	18	25	<	213	1.9	3.3	4.8	9.9	21	43	55
Ta	ICP-MS	ppm	0.06	12	0.21	0.35	<	3.5	<	<	0.08	0.13	0.23	0.39	0.47
Tb	ICP-MS	ppm	0.08	0.8	0.60	0.78	<	8.6	0.19	0.27	0.36	0.46	0.63	0.90	1.2
Te	GFAAS	ppb partial	5	15	21	27	<	161	<	<	7	14	22	36	49
Th	ICP-MS	ppm	0.13	13.5	0.85	1.4	<	8.5	<	<	0.17	0.32	0.93	2.2	3.0
Th	ICP-AES	ppm partial	5.6	94	-	-	<	19	<	<	<	<	<	<	6
Ti	XRF	ppm	30	0	5298	2694	210	19260	1944	2664	3558	4932	6450	8616	10200
Ti	ICP-MS	ppm	10	0	5232	2699	174	18600	2012	2440	3485	4760	6335	8530	10012
Ti	ICP-AES	ppm partial	2	0	1160	734	9.6	3730	166	379	600	1020	1545	2134	2426
Tm	ICP-MS	ppm	0.03	0	0.34	0.41	0.05	4.55	0.11	0.15	0.20	0.29	0.39	0.49	0.60
U	ICP-MS	ppm	0.08	35.3	0.23	0.25	<	1.46	<	<	<	0.11	0.29	0.52	0.79
V	XRF	ppm	6	0	260	99	10	705	83	130	210	266	314	372	425
V	ICP-MS	ppm	2	0.8	245	96	<	635	69	116	207	246	298	343	417
V	ICP-AES	ppm partial	0.6	0.8	49	32	<	176	14	18	26	43	62	93	109
Y	XRF	ppm	2.8	1.5	22	26	<	295	7	10	13	18	23	32	40
Y	ICP-MS	ppm	0.1	0	24	30	3.4	340	7.2	10	14	20	25	33	41
Y	ICP-AES	ppm partial	0.15	0	4.5	9.1	0.20	103	0.52	0.89	1.7	3.1	5.1	7.3	8.6
Yb	ICP-MS	ppm	0.22	0	2.2	2.5	0.37	27	0.75	0.98	1.4	1.9	2.5	3.1	3.9
Zn	XRF	ppm	4	0	114	69	48	716	62	76	88	105	120	141	163
Zn	ICP-AES	ppm partial	2	0	31	64	3.2	710	7.6	10	15	19	31	48	62
Zr	XRF	ppm	6	1.5	75	84	<	745	15	25	39	53	84	135	166
Zr	ICP-MS	ppm	3	0	64	72	7.3	610	15	21	32	43	69	114	143

Table 64. Chemical concentration summary statistics for map unit 73.

Map unit	73	Intermediate and felsic metavolcanic rocks
Number of samples	15	
Unit area	218.3	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

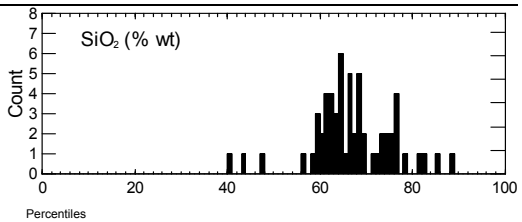


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	69.05	5.89	60.90	79.10	-	-	63.83	68.00	74.13	-	-
TiO_2	XRF	%	0.005	0	0.52	0.19	0.22	0.79	-	-	0.32	0.57	0.65	-	-
Al_2O_3	XRF	%	0.02	0	14.59	2.07	8.92	16.50	-	-	13.25	15.30	16.03	-	-
FeO	XRF	%	0.01	0	4.40	2.13	0.32	6.98	-	-	2.84	5.16	5.82	-	-
MnO	XRF	%	0.012	6.7	0.076	0.040	<	0.176	<	-	0.055	0.083	0.090	-	-
MgO	XRF	%	0.09	0	1.81	1.22	0.10	3.75	-	-	0.72	1.97	2.86	-	-
CaO	XRF	%	0.004	0	3.11	1.98	0.31	6.85	-	-	1.64	2.57	4.84	-	-
Na_2O	XRF	%	0.05	0	3.21	1.55	0.07	5.50	-	-	2.58	3.28	4.23	-	-
K_2O	XRF	%	0.003	0	1.87	0.86	0.13	3.02	-	-	1.52	2.01	2.33	-	-
P_2O_5	XRF	%	0.024	6.7	0.147	0.101	<	0.345	<	-	0.070	0.131	0.193	-	-
C_{tot}	Leco	%	0.05	86.7	-	-	<	0.14	<	<	<	<	<	0.08	-
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	86.7	-	-	<	0.07	<	<	<	<	<	0.06	-
Al	XRF	ppm	106	0	77171	10945	47187	87285	-	-	70093	80937	84772	-	-
Al	ICP-AES	ppm partial	1100	0	18140	14077	2000	58800	-	-	8050	19200	22550	-	-
As	GFAAS	ppm partial	3	86.7	-	-	<	14	<	<	<	<	<	3.5	-
Au	GFAAS	ppb partial	2.5	93.3	-	-	<	3.3	<	<	<	<	<	<	-
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	593	359	58	1150	-	-	368	576	904	-	-
Ba	ICP-AES	ppm partial	10	0	323	336	11	939	-	-	35	149	544	-	-
Bi	GFAAS	ppm partial	0.04	46.7	0.07	0.04	<	0.17	<	<	<	0.04	0.11	-	-
Ca	XRF	ppm	29	0	22215	14143	2195	48978	-	-	11712	18376	34627	-	-
Ca	ICP-AES	ppm partial	50	0	3887	3753	200	15800	-	-	1675	2700	5125	-	-
Ce	ICP-MS	ppm	0.22	0	59	62	3.4	269	-	-	28	43	68	-	-
Cl	XRF	ppm	45	26.7	83	41	<	180	<	<	<	70	88	-	-
Co	ICP-MS	ppm	2	6.7	15	7.1	<	30	<	-	7.5	14	19	-	-
Co	ICP-AES	ppm partial	0.9	0	12	7.4	1.5	29	-	-	6.0	14	16	-	-
Cr	XRF	ppm	19	13.3	86	74	<	274	<	<	28	55	125	-	-
Cr	ICP-AES	ppm partial	5	13.3	48	53	<	195	<	<	7.3	24	75	-	-
Cu	XRF	ppm	17	66.7	*16*	*20*	<	76	<	<	<	<	24	-	-
Cu	ICP-AES	ppm partial	3	6.7	16	19	<	66	<	-	4.0	8.4	20	-	-
Dy	ICP-MS	ppm	0.55	0	2.7	1.3	0.6	5.0	-	-	1.7	2.6	3.7	-	-
Er	ICP-MS	ppm	0.3	0	1.5	0.9	0.3	3.3	-	-	0.9	1.3	2.1	-	-
Eu	ICP-MS	ppm	0.09	0	0.90	0.47	0.21	1.8	-	-	0.48	0.88	1.2	-	-
Fe	XRF	ppm	78	0	34211	16558	2486	54235	-	-	22043	40093	45221	-	-
Fe	ICP-AES	ppm partial	2300	0	28200	17491	3200	62200	-	-	10575	35900	39900	-	-
Ga	XRF	ppm	10	0	27	4	20	37	-	-	23	27	29	-	-
Gd	ICP-MS	ppm	0.5	0	3.5	2.0	0.8	7.1	-	-	1.8	3.8	4.3	-	-
Hf	ICP-MS	ppm	0.12	0	3.49	1.34	0.61	5.79	-	-	3.09	3.53	4.14	-	-
Ho	ICP-MS	ppm	0.09	0	0.53	0.29	0.13	1.0	-	-	0.31	0.49	0.73	-	-
K	XRF	ppm	25	0	15488	7138	1112	25066	-	-	12575	16683	19322	-	-
K	ICP-AES	ppm partial	100	0	9100	7562	200	18500	-	-	925	11800	16175	-	-
La	ICP-MS	ppm	0.55	0	32	37	2.1	159	-	-	16	24	34	-	-
La	ICP-AES	ppm partial	1.3	6.7	32	39	<	167	<	-	15	24	32	-	-
Li	ICP-AES	ppm partial	3.5	13.3	28.7	32.5	<	123	<	<	8.2	21.3	30.0	-	-
Lu	ICP-MS	ppm	0.03	0	0.22	0.14	0.06	0.54	-	-	0.12	0.17	0.30	-	-
Mg	XRF	ppm	543	0	10914	7332	603	22613	-	-	4330	11879	17216	-	-
Mg	ICP-AES	ppm partial	50	0	9727	6818	300	18500	-	-	2350	12100	14775	-	-
Mn	XRF	ppm	93	6.7	589	310	<	1364	<	-	426	643	698	-	-
Mn	ICP-AES	ppm partial	50	0	328	171	73	582	-	-	143	359	466	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	86.7	-	-	<	4	<	<	<	<	<	3	-
Na	XRF	ppm	371	0	23781	11508	519	40810	-	-	19129	24338	31350	-	-
Na	ICP-AES	ppm partial	150	0	720	797	200	3500	-	-	400	400	700	-	-
Nb	XRF	ppm	7	46.7	8	2	<	12	<	<	<	7	9	-	-
Nb	ICP-MS	ppm	0.16	0	6.1	3.9	0.91	16	-	-	4.0	4.9	8.0	-	-
Nd	ICP-MS	ppm	0.2	0	23	19	2.7	80	-	-	11	19	31	-	-
Ni	XRF	ppm	14	13.3	37	34	<	133	<	<	15	26	40	-	-
Ni	ICP-AES	ppm partial	3.5	6.7	31	29	<	117	<	-	14	22	40	-	-
P	XRF	ppm	105	0	641	440	<	1504	<	-	305	571	841	-	-
P	ICP-AES	ppm partial	6	0	568	401	59	1310	-	-	284	493	752	-	-
Pb	XRF	ppm	14	0	25	7	15	44	-	-	21	24	26	-	-
Pb	ICP-AES	ppm partial	8.7	80	7	*3*	<	12	<	<	<	<	<	12	-
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	6.7	6.7	6.4	<	27.6	<	-	3.0	4.8	7.9	-	-
Rb	XRF	ppm	5.5	0	62	36	6	133	-	-	40	55	94	-	-
Rb	ICP-MS	ppm	0.6	0	56	32	2.7	117	-	-	36	50	86	-	-
S	XRF	ppm	70	60	*408*	*1235*	<	4840	<	<	<	<	158	-	-
S	ICP-AES	ppm partial	14.3	33.3	447	1318	<	5100	<	<	<	52	254	-	-
Sc	ICP-MS	ppm	2.8	0	12	6.5	3.1	24	-	-	7.1	11	16	-	-
Sc	ICP-AES	ppm partial	0.4	0	3.8	3.5	0.40	10	-	-	1.1	2.1	7.5	-	-
Se	GFAAS	ppm partial	0.055	86.7	-	-	<	0.39	<	<	<	<	<	0.07	-
Sm	ICP-MS	ppm	0.5	0	3.9	2.6	0.83	9.7	-	-	1.9	3.9	5.1	-	-
Sr	XRF	ppm	4	0	328	270	20	1062	-	-	185	243	389	-	-
Sr	ICP-AES	ppm partial	1.2	0	27	67	2.5	270	-	-	4.6	8.0	15	-	-
Ta	ICP-MS	ppm	0.06	6.7	0.39	0.21	<	0.83	<	-	0.25	0.38	0.54	-	-
Tb	ICP-MS	ppm	0.08	0	0.49	0.26	0.12	0.93	-	-	0.25	0.52	0.61	-	-
Te	GFAAS	ppb partial	5	80	*6*	*19*	<	75	<	<	<	<	<	11	-
Th	ICP-MS	ppm	0.13	6.7	6.2	6.0	<	26	<	-	3.5	4.6	6.7	-	-
Th	ICP-AES	ppm partial	5.6	26.7	11	8	<	39	<	<	<	9	12	-	-
Ti	XRF	ppm	30	0	3132	1152	1320	4722	-	-	1926	3390	3894	-	-
Ti	ICP-MS	ppm	10	0	2889	1055	1270	4590	-	-	1795	3240	3640	-	-
Ti	ICP-AES	ppm partial	2	0	1507	1154	20	3220	-	-	348	1990	2450	-	-
Tm	ICP-MS	ppm	0.03	0	0.22	0.13	0.05	0.52	-	-	0.13	0.20	0.30	-	-
U	ICP-MS	ppm	0.08	0	1.10	0.56	0.16	2.18	-	-	0.65	1.14	1.50	-	-
V	XRF	ppm	6	0	91	46	25	173	-	-	54	96	127	-	-
V	ICP-MS	ppm	2	0	69	40	8.6	137	-	-	36	80	95	-	-
V	ICP-AES	ppm partial	0.6	0	42	34	2.3	98	-	-	8.2	41	72	-	-
Y	XRF	ppm	2.8	0	16	8	3	30	-	-	9	14	21	-	-
Y	ICP-MS	ppm	0.1	0	16	8.9	3.5	31	-	-	9.5	14	24	-	-
Y	ICP-AES	ppm partial	0.15	0	8.2	6.7	0.50	23	-	-	2.6	8.1	12	-	-
Yb	ICP-MS	ppm	0.22	0	1.5	0.91	0.38	3.5	-	-	0.81	1.2	2.1	-	-
Zn	XRF	ppm	4	0	63	31	16	130	-	-	35	66	77	-	-
Zn	ICP-AES	ppm partial	2	0	50	32	8.8	118	-	-	17	56	65	-	-
Zr	XRF	ppm	6	0	170	66	24	289	-	-	136	174	198	-	-
Zr	ICP-MS	ppm	3	0	141	56	21	251	-	-	121	144	169	-	-

Table 65. Chemical concentration summary statistics for map unit 74.

Map unit	74	Metasedimentary rocks
Number of samples	59	
Unit area	2743.7	km^2
Percent of bedrock	0.8	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics: 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

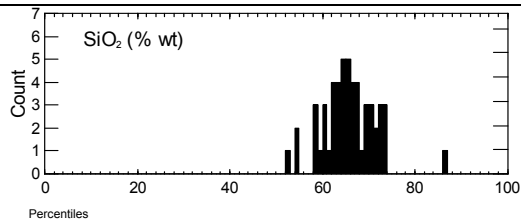


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	66.85	8.80	40.90	88.40	51.55	59.04	62.35	66.30	73.28	76.62	81.91
TiO_2	XRF	%	0.005	0	0.51	0.25	0.04	0.89	0.09	0.14	0.30	0.54	0.73	0.79	0.80
Al_2O_3	XRF	%	0.02	0	14.61	3.14	1.06	19.90	8.79	10.50	13.70	15.20	16.25	17.50	18.80
FeO	XRF	%	0.01	0	5.60	6.84	0.24	46.43	0.40	1.06	2.15	4.76	6.39	7.59	10.92
MnO	XRF	%	0.012	6.8	0.071	0.038	<	0.199	<	0.025	0.040	0.071	0.088	0.107	0.151
MgO	XRF	%	0.09	0	2.38	1.51	0.09	6.41	0.23	0.39	1.11	2.21	3.47	4.38	4.73
CaO	XRF	%	0.004	0	2.30	1.42	0.04	7.04	0.23	0.70	1.30	2.18	2.89	4.11	4.85
Na_2O	XRF	%	0.05	3.4	3.26	1.39	<	7.99	0.17	1.73	2.49	3.27	4.02	4.72	5.11
K_2O	XRF	%	0.003	0	2.06	0.99	0.05	5.42	0.43	0.61	1.52	1.95	2.71	3.15	3.58
P_2O_5	XRF	%	0.024	6.8	0.126	0.092	<	0.420	<	0.027	0.059	0.106	0.151	0.244	0.311
C_{tot}	Leco	%	0.05	83.1	-	-	<	0.35	<	<	<	<	<	0.08	0.11
$C_{non\text{-}carb}$	Leco	%	0.05	86.4	-	-	<	0.33	<	<	<	<	<	0.07	0.10
F	Ion	%	0.055	83.1	-	-	<	0.11	<	<	<	<	<	0.08	0.09
Al	XRF	ppm	106	0	77266	16632	5607	105271	46504	55545	72473	80408	85963	92575	99426
Al	ICP-AES	ppm partial	1100	0	20637	13499	1600	52100	2124	2650	9200	20400	30275	38220	45655
As	GFAAS	ppm partial	3	78	*8.0*	*23*	<	124	<	<	<	<	<	26	50
Au	GFAAS	ppb partial	2.5	84.7	-	-	<	14.9	<	<	<	<	<	4.0	7.9
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	597	496	42	2590	76	142	333	459	695	1233	1722
Ba	ICP-AES	ppm partial	10	0	206	187	10	839	14	19	50	140	317	476	585
Bi	GFAAS	ppm partial	0.04	33.9	0.24	0.94	<	7.3	<	<	<	0.11	0.19	0.26	0.32
Ca	XRF	ppm	29	0	16416	10160	315	50336	1630	4984	9281	15587	20664	29372	34678
Ca	ICP-AES	ppm partial	50	0	2308	3022	100	19600	242	313	640	1300	2853	5004	7134
Ce	ICP-MS	ppm	0.22	0	41	26	3.9	120	8.7	15	24	36	49	82	102
Cl	XRF	ppm	45	18.6	141	159	<	940	<	<	50	76	142	356	449
Co	ICP-MS	ppm	2	10.2	17	13	<	43	<	<	5.7	14	29	35	40
Co	ICP-AES	ppm partial	0.9	1.7	17	12	<	46	1.2	2.1	6.4	15	28	32	35
Cr	XRF	ppm	19	13.6	145	126	<	502	<	<	23	131	249	321	328
Cr	ICP-AES	ppm partial	5	16.9	105	102	<	423	<	<	7.5	91	191	225	278
Cu	XRF	ppm	17	42.4	37	26	<	99	<	<	<	22	55	81	91
Cu	ICP-AES	ppm partial	3	10.2	33	29	<	94	<	<	7.6	22	57	81	88
Dy	ICP-MS	ppm	0.55	5.1	2.3	1.2	<	4.9	<	0.7	1.1	2.4	3.1	3.7	4.5
Er	ICP-MS	ppm	0.3	6.8	1.3	0.8	<	3.1	<	0.3	0.5	1.4	1.8	2.4	2.6
Eu	ICP-MS	ppm	0.09	1.7	0.82	0.39	<	2.2	0.26	0.36	0.58	0.78	1.0	1.3	1.6
Fe	XRF	ppm	78	0	43520	53139	1865	360761	3116	8221	16667	36985	49627	58935	84856
Fe	ICP-AES	ppm partial	2300	1.7	39229	38884	<	284000	3240	9006	17425	35900	48750	56000	70920
Ga	XRF	ppm	10	1.7	24	6	<	36	13	15	21	24	28	31	33
Gd	ICP-MS	ppm	0.5	1.7	2.9	1.6	<	7.5	0.7	1.0	1.8	2.6	3.8	5.2	5.7
Hf	ICP-MS	ppm	0.12	0	3.07	1.07	0.26	5.92	1.25	1.87	2.46	3.07	3.71	4.36	4.89
Ho	ICP-MS	ppm	0.09	6.8	0.45	0.25	<	1.0	<	0.13	0.18	0.48	0.63	0.79	0.91
K	XRF	ppm	25	0	17098	8184	432	44986	3569	5022	12616	16185	22493	26162	29706
K	ICP-AES	ppm partial	100	0	9593	7046	119	25100	400	599	2615	9180	14500	19740	21900
La	ICP-MS	ppm	0.55	0	21	14	2.3	61	4.5	5.6	12	19	25	42	53
La	ICP-AES	ppm partial	1.3	0	17	12	1.7	59	3.2	4.6	9.9	13	21	37	46
Li	ICP-AES	ppm partial	3.5	15.3	33.8	24.5	<	106	<	<	13.7	33.7	44.3	63.9	86.2
Lu	ICP-MS	ppm	0.03	6.8	0.19	0.12	<	0.56	<	0.04	0.08	0.20	0.25	0.34	0.39
Mg	XRF	ppm	543	0	14376	9123	543	38652	1405	2322	6663	13326	20894	26399	28540
Mg	ICP-AES	ppm partial	50	0	13326	9132	100	37600	336	1160	5375	12200	20575	23780	26785
Mn	XRF	ppm	93	6.8	550	295	<	1542	<	194	310	550	682	829	1170
Mn	ICP-AES	ppm partial	50	6.8	326	166	<	741	<	104	210	322	435	563	624
Mo	XRF	ppm	2.6	93.2	-	-	<	4	<	<	<	<	<	<	3
Mo	ICP-AES	ppm partial	2.6	91.5	-	-	<	6	<	<	<	<	<	<	3
Na	XRF	ppm	371	3.4	24197	10306	<	59286	1291	12866	18498	24263	29791	35022	37946
Na	ICP-AES	ppm partial	150	0	575	250	200	1700	300	337	400	542	695	800	1047
Nb	XRF	ppm	7	64.4	*6*	*3*	<	18	<	<	<	<	8	10	12
Nb	ICP-MS	ppm	0.16	0	4.8	2.8	0.19	16	1.4	1.7	3.2	4.5	5.7	8.1	11
Nd	ICP-MS	ppm	0.2	0	18	11	1.3	56	4.6	7.2	11	16	22	35	45
Ni	XRF	ppm	14	25.4	69	61	<	234	<	<	<	35	104	165	171
Ni	ICP-AES	ppm partial	3.5	5.1	59	55	<	182	<	3.8	11	35	102	146	159
P	XRF	ppm	105	0	549	401	<	1831	<	118	257	462	658	1064	1356
P	ICP-AES	ppm partial	6	0	479	379	14	1700	66	100	236	407	573	1051	1237
Pb	XRF	ppm	14	8.5	35	69	<	554	<	16	20	25	30	36	40
Pb	ICP-AES	ppm partial	8.7	74.6	*11*	*59*	<	452	<	<	<	<	7	11	13
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	1.7	4.9	3.1	<	14.7	1.1	1.8	2.8	4.4	5.7	9.8	11.9
Rb	XRF	ppm	5.5	3.4	71	37	<	179	6	15	53	71	90	121	137
Rb	ICP-MS	ppm	0.6	1.7	67	35	<	161	7.6	16	47	65	87	116	131
S	XRF	ppm	70	40.7	1180	1610	<	5640	<	<	<	216	1628	4086	4978
S	ICP-AES	ppm partial	14.3	20.3	1229	1760	<	6310	<	<	21	257	1710	4378	5073
Sc	ICP-MS	ppm	2.8	11.9	15	10	<	54	<	<	5.6	13	21	26	31
Sc	ICP-AES	ppm partial	0.4	11.9	7.5	7.1	<	27	<	<	1.9	3.9	12	18	22
Se	GFAAS	ppm partial	0.055	45.8	0.16	0.12	<	0.48	<	<	<	0.08	0.25	0.37	0.38
Sm	ICP-MS	ppm	0.5	1.7	3.2	1.8	<	9.4	0.83	1.0	2.1	2.8	4.1	5.8	6.9
Sr	XRF	ppm	4	0	297	240	18	1186	39	77	153	247	332	553	906
Sr	ICP-AES	ppm partial	1.2	1.7	9.7	12	<	75	2.3	2.5	3.4	5.4	11	18	33
Ta	ICP-MS	ppm	0.06	5.1	0.38	0.33	<	1.9	<	0.10	0.19	0.32	0.43	0.53	1.3
Tb	ICP-MS	ppm	0.08	3.4	0.42	0.22	<	0.95	0.10	0.14	0.23	0.43	0.55	0.75	0.83
Te	GFAAS	ppb partial	5	32.2	25	29	<	132	<	<	<	11	35	60	98
Th	ICP-MS	ppm	0.13	0	5.6	5.1	0.34	36	0.39	1.6	3.3	4.8	6.2	9.3	13
Th	ICP-AES	ppm partial	5.6	37.3	9	6	<	41	<	<	<	9	10	14	18
Ti	XRF	ppm	30	0	3042	1494	228	5340	510	864	1794	3234	4368	4734	4818
Ti	ICP-MS	ppm	10	0	2856	1388	228	4800	542	851	1613	3200	4163	4438	4646
Ti	ICP-AES	ppm partial	2	0	1607	965	12	3530	40	231	756	1510	2308	2922	3336
Tm	ICP-MS	ppm	0.03	5.1	0.19	0.12	<	0.48	<	0.05	0.08	0.21	0.27	0.34	0.39
U	ICP-MS	ppm	0.08	0	1.37	1.36	0.11	8.93	0.16	0.29	0.64	1.24	1.46	2.53	3.93
V	XRF	ppm	6	1.7	106	69	<	330	15	20	51	104	158	190	208
V	ICP-MS	ppm	2	1.7	89	64	<	330	8.1	14	36	85	131	161	183
V	ICP-AES	ppm partial	0.6	1.7	71	53	<	184	1.2	7.2	26	60	114	137	170
Y	XRF	ppm	2.8	8.5	14	8	<	33	<	3	5	14	20	24	27
Y	ICP-MS	ppm	0.1	0	14	7.9	0.66	34	2.3	3.9	5.8	14	19	23	27
Y	ICP-AES	ppm partial	0.15	0	4.8	3.4	0.30	18	1.0	1.4	2.6	4.0	6.8	8.9	12
Yb	ICP-MS	ppm	0.22	6.8	1.3	0.79	<	3.5	<	0.31	0.50	1.4	1.7	2.4	2.7
Zn	XRF	ppm	4	1.7	97	125	<	936	9	22	45	80	115	130	150
Zn	ICP-AES	ppm partial	2	6.8	77	146	<	1100	<	4.7	19	50	92	106	121
Zr	XRF	ppm	6	0	138	51	9	261	47	70	115	138	167	201	221
Zr	ICP-MS	ppm	3	0	119	45	10	253	44	66	94	114	145	174	190

Table 66. Chemical concentration summary statistics for map unit 75.

Map unit	75	Paragneisses
Number of samples	53	
Unit area	3114.8	km^2
Percent of bedrock	0.9	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

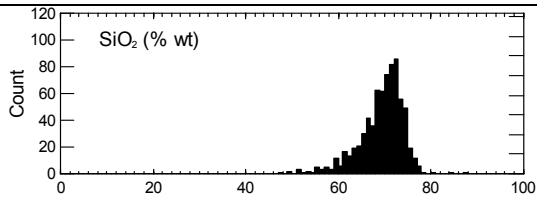


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	65.71	5.82	52.90	86.90	55.20	58.64	62.70	65.40	69.40	72.40	73.54
TiO_2	XRF	%	0.005	0	0.59	0.22	0.09	1.04	0.20	0.23	0.50	0.63	0.69	0.90	0.93
Al_2O_3	XRF	%	0.02	0	15.46	1.98	6.11	21.30	12.59	13.92	14.98	15.70	16.03	16.78	17.61
FeO	XRF	%	0.01	0	4.91	1.86	0.81	9.08	1.41	2.08	3.92	5.25	5.89	6.84	8.16
MnO	XRF	%	0.012	0	0.072	0.037	0.016	0.220	0.022	0.025	0.043	0.067	0.095	0.119	0.125
MgO	XRF	%	0.09	0	2.62	1.65	0.15	10.10	0.41	0.79	1.28	2.75	3.28	3.90	5.35
CaO	XRF	%	0.004	0	2.78	1.47	0.28	7.29	0.55	1.14	1.79	2.72	3.45	4.69	5.88
Na_2O	XRF	%	0.05	0	3.70	1.11	0.30	5.43	1.14	2.58	3.27	3.89	4.40	4.90	5.14
K_2O	XRF	%	0.003	0	2.74	1.32	0.75	6.74	1.16	1.46	2.04	2.41	3.11	4.35	6.29
P_2O_5	XRF	%	0.024	1.9	0.175	0.222	<	1.590	0.033	0.044	0.064	0.143	0.177	0.299	0.384
C_{tot}	Leco	%	0.05	86.8	-	-	<	0.43	<	<	<	<	<	0.08	0.29
$C_{non\text{-}carb}$	Leco	%	0.05	90.6	-	-	<	0.41	<	<	<	<	<	<	0.10
F	Ion	%	0.055	64.2	*0.05*	*0.06*	<	0.38	<	<	<	<	0.07	0.08	0.11
Al	XRF	ppm	106	0	81794	10464	32322	112677	66601	73637	79218	83053	84772	88766	93157
Al	ICP-AES	ppm partial	1100	0	20611	9825	3300	42100	5110	7220	12425	21200	27375	32960	35865
As	GFAAS	ppm partial	3	98.1	-	-	<	9.7	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	92.5	-	-	<	6.0	<	<	<	<	<	<	3.5
B	ICP-AES	ppm partial	4.5	98.1	-	-	<	5	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	592	265	80	1217	220	298	412	574	742	1058	1115
Ba	ICP-AES	ppm partial	10	0	300	204	21	811	36	47	112	304	414	581	668
Bi	GFAAS	ppm partial	0.04	49.1	0.09	0.13	<	0.87	<	<	<	0.04	0.07	0.19	0.28
Ca	XRF	ppm	29	0	19906	10489	1995	52124	3947	8122	12763	19448	24668	33562	42028
Ca	ICP-AES	ppm partial	50	0	2747	3064	300	17300	500	680	1075	1900	2900	5540	9535
Ce	ICP-MS	ppm	0.22	0	65	86	0.68	641	21	24	36	50	62	99	142
Cl	XRF	ppm	45	3.8	128	78	<	420	50	58	70	100	160	214	259
Co	ICP-MS	ppm	2	5.7	21	17	<	113	<	4.6	12	20	24	31	48
Co	ICP-AES	ppm partial	0.9	1.9	17	8.7	<	36	2.5	4.7	9.7	17	23	26	33
Cr	XRF	ppm	19	13.2	146	102	<	612	<	<	83	152	189	251	276
Cr	ICP-AES	ppm partial	5	3.8	115	90	<	494	5.4	8.4	55	105	159	226	243
Cu	XRF	ppm	17	41.5	37	41	<	286	<	<	<	25	42	55	88
Cu	ICP-AES	ppm partial	3	15.1	30	40	<	261	<	<	4.1	22	38	53	82
Dy	ICP-MS	ppm	0.55	5.7	2.9	3.9	<	30	<	0.9	1.8	2.6	3.0	3.9	4.5
Er	ICP-MS	ppm	0.3	7.5	1.6	2.1	<	16	<	0.4	0.8	1.3	1.7	2.1	2.3
Eu	ICP-MS	ppm	0.09	1.9	1.0	0.70	<	4.9	0.37	0.45	0.63	0.93	1.1	1.5	1.7
Fe	XRF	ppm	78	0	38127	14468	6294	70552	10963	16162	30420	40793	45750	53178	63419
Fe	ICP-AES	ppm partial	2300	0	37036	13978	7400	67700	13565	16880	29775	37700	45675	53720	60530
Ga	XRF	ppm	10	0	25	5	12	52	19	20	23	26	27	29	32
Gd	ICP-MS	ppm	0.5	1.9	4.2	5.2	<	39.6	1.2	1.3	2.3	3.6	4.4	5.6	6.6
Hf	ICP-MS	ppm	0.12	0	4.47	4.31	0.17	30.8	2.26	2.49	3.19	3.58	4.24	5.34	9.44
Ho	ICP-MS	ppm	0.09	1.9	0.56	0.75	<	5.7	0.09	0.16	0.31	0.49	0.57	0.75	0.85
K	XRF	ppm	25	0	22717	10923	6192	55942	9620	12101	16915	20003	25788	36138	52199
K	ICP-AES	ppm partial	100	0	14343	7285	2300	28300	2675	4500	7875	14900	19875	24320	25470
La	ICP-MS	ppm	0.55	1.9	33	46	<	340	9.7	12	18	24	29	49	64
La	ICP-AES	ppm partial	1.3	0	31	50	6.4	358	8.8	11	15	21	27	43	81
Li	ICP-AES	ppm partial	3.5	0	26.3	19.1	4.0	94.0	6.1	6.5	13.4	24.8	31.0	45.8	72.4
Lu	ICP-MS	ppm	0.03	0	0.22	0.28	0.03	2.13	0.03	0.06	0.11	0.20	0.26	0.31	0.33
Mg	XRF	ppm	543	0	15799	9925	905	60903	2442	4788	7718	16583	19778	23505	32279
Mg	ICP-AES	ppm partial	50	0	14347	7802	900	37000	2085	4320	7175	15600	19350	23440	23855
Mn	XRF	ppm	93	0	558	287	124	1705	171	194	333	519	736	922	969
Mn	ICP-AES	ppm partial	50	0	415	203	93	871	113	163	239	421	569	696	747
Mo	XRF	ppm	2.6	96.2	-	-	<	7	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	84.9	-	-	<	9	<	<	<	<	<	3	4
Na	XRF	ppm	371	0	27447	8221	2226	40291	8444	19114	24249	28864	32663	36373	38139
Na	ICP-AES	ppm partial	150	0	765	213	300	1200	400	500	600	700	925	1020	1100
Nb	XRF	ppm	7	47.2	13	31	<	231	<	<	<	7	9	12	16
Nb	ICP-MS	ppm	0.16	0	9.5	26	0.66	196	2.1	2.8	4.4	4.9	7.8	10.0	13
Nd	ICP-MS	ppm	0.2	0	28	35	0.44	257	8.3	9.4	16	23	27	44	56
Ni	XRF	ppm	14	18.9	62	52	<	342	<	<	21	62	79	104	129
Ni	ICP-AES	ppm partial	3.5	1.9	54	42	<	242	4.5	8.5	22	51	68	94	126
P	XRF	ppm	105	0	763	968	<	6932	144	192	279	623	772	1304	1674
P	ICP-AES	ppm partial	6	0	637	847	33	6030	59	129	240	536	642	1086	1431
Pb	XRF	ppm	14	1.9	147	846	<	6190	17	19	25	28	33	49	63
Pb	ICP-AES	ppm partial	8.7	64.2	*103*	*711*	<	5180	<	<	<	<	9	15	20
Pd	GFAAS	ppb partial	5	96.2	-	-	<	9	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	1.9	7.5	9.7	<	72.2	2.4	2.8	4.1	5.9	6.9	11.5	16.8
Rb	XRF	ppm	5.5	0	111	85	30	605	40	50	72	88	130	161	220
Rb	ICP-MS	ppm	0.6	1.9	100	82	<	574	28	37	60	78	119	148	202
S	XRF	ppm	70	34	1356	1719	<	6500	<	<	<	570	2033	3478	6116
S	ICP-AES	ppm partial	14.3	13.2	1428	1848	<	7620	<	<	27	489	2383	3604	5898
Sc	ICP-MS	ppm	2.8	9.4	14	7.0	<	38	<	2.4	9.1	15	17	21	26
Sc	ICP-AES	ppm partial	0.4	0	7.9	5.4	0.40	24	1.1	1.7	3.1	8.1	12	14	15
Se	GFAAS	ppm partial	0.055	41.5	0.15	0.12	<	0.59	<	<	<	0.08	0.20	0.33	0.35
Sm	ICP-MS	ppm	0.5	1.9	4.8	5.7	<	43	1.4	1.6	2.4	4.2	4.7	7.1	7.9
Sr	XRF	ppm	4	0	338	205	17	1180	28	76	223	333	437	532	650
Sr	ICP-AES	ppm partial	1.2	0	11	9.9	1.3	51	2.0	3.7	5.8	8.9	13	19	33
Ta	ICP-MS	ppm	0.06	5.7	0.66	1.7	<	12	<	0.18	0.27	0.36	0.63	0.85	0.94
Tb	ICP-MS	ppm	0.08	1.9	0.58	0.75	<	5.8	0.14	0.19	0.30	0.50	0.57	0.74	0.88
Te	GFAAS	ppb partial	5	30.2	28	65	<	472	<	<	<	12	28	45	69
Th	ICP-MS	ppm	0.13	0	9.3	8.6	0.14	44	1.9	3.0	5.0	5.8	11	18	23
Th	ICP-AES	ppm partial	5.6	1.9	15	13	<	69	6	7	9	11	17	24	41
Ti	XRF	ppm	30	0	3534	1308	558	6240	1188	1356	3012	3786	4134	5376	5568
Ti	ICP-MS	ppm	10	0	3229	1428	462	8830	931	1212	2550	3400	3863	4590	5204
Ti	ICP-AES	ppm partial	2	0	2452	1002	399	4310	626	982	1665	2690	3263	3686	3797
Tm	ICP-MS	ppm	0.03	1.9	0.23	0.30	<	2.25	0.03	0.05	0.13	0.20	0.25	0.31	0.35
U	ICP-MS	ppm	0.08	1.9	1.81	1.59	<	8.44	0.30	0.44	0.90	1.46	1.90	3.49	4.09
V	XRF	ppm	6	0	109	47	9	200	22	27	81	119	141	156	174
V	ICP-MS	ppm	2	0	91	53	2.7	312	13	19	59	96	112	144	161
V	ICP-AES	ppm partial	0.6	0	77	40	1.5	175	5.3	20	48	86	106	120	129
Y	XRF	ppm	2.8	1.9	17	22	<	166	4	4	10	14	18	21	25
Y	ICP-MS	ppm	0.1	0	16	21	0.84	161	2.7	4.9	9.7	15	17	22	25
Y	ICP-AES	ppm partial	0.15	0	8.8	18	0.60	132	2.0	2.8	4.2	6.2	8.2	9.8	12
Yb	ICP-MS	ppm	0.22	7.5	1.5	2.1	<	16	<	0.34	0.80	1.4	1.6	2.0	2.3
Zn	XRF	ppm	4	0	143	412	9	3060	12	16	39	90	118	168	199
Zn	ICP-AES	ppm partial	2	5.7	123	388	<	2870	<	14	28	69	101	133	185
Zr	XRF	ppm	6	0	203	208	61	1517	95	109	140	157	178	259	427
Zr	ICP-MS	ppm	3	0	176	183	6.3	1300	71	90	124	137	157	236	387

Table 67. Chemical concentration summary statistics for map unit 76.

Map unit	76	Tonalite-trondhjemite-granodiorite geniss and migmatite
Number of samples	735	
Unit area	55413.3	km^2
Percent of bedrock	16.4	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

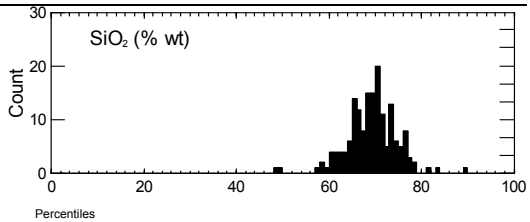


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**69.30**	4.84	47.00	87.00	59.83	62.90	66.90	**70.20**	72.60	74.30	75.10
TiO_2	XRF	%	**0.005**	0	**0.38**	0.22	0.03	1.61	0.09	0.14	0.22	**0.35**	0.49	0.66	0.80
Al_2O_3	XRF	%	**0.02**	0	**15.25**	1.31	6.00	19.40	13.10	13.90	14.60	**15.30**	16.00	16.70	17.10
FeO	XRF	%	**0.01**	0	**2.84**	1.73	0.32	12.90	0.86	1.08	1.63	**2.39**	3.63	5.18	6.21
MnO	XRF	%	**0.012**	1.2	**0.050**	0.030	<	0.192	0.017	0.021	0.029	**0.042**	0.064	0.089	0.107
MgO	XRF	%	**0.09**	1.6	**1.25**	1.04	<	8.09	0.18	0.29	0.55	**0.92**	1.61	2.76	3.31
CaO	XRF	%	**0.004**	0	**2.73**	1.43	0.04	10.40	0.81	1.04	1.72	**2.58**	3.44	4.44	5.27
Na_2O	XRF	%	**0.05**	0	**4.52**	0.78	0.17	7.55	3.26	3.65	4.09	**4.56**	5.00	5.38	5.65
K_2O	XRF	%	**0.003**	0	**2.60**	1.26	0.22	6.92	1.02	1.25	1.66	**2.32**	3.38	4.48	5.07
P_2O_5	XRF	%	**0.024**	8	**0.130**	0.117	<	1.660	<	0.029	0.065	**0.107**	0.159	0.245	0.298
C_{tot}	Leco	%	**0.05**	88.3	**-**	-	<	0.76	<	<	<	**<**	<	0.06	0.10
$C_{non\text{-}carb}$	Leco	%	**0.05**	96.3	**-**	-	<	0.38	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	75.9	***0.04***	*0.03*	<	0.26	<	<	<	**<**	<	0.07	0.09
Al	XRF	ppm	**106**	0	**80657**	6909	31740	102626	69299	73531	77234	**80937**	84640	88343	90459
Al	ICP-AES	ppm partial	**1100**	0.1	**10320**	6119	<	44900	3100	4000	6000	**9200**	13200	18000	21575
As	GFAAS	ppm partial	**3**	99	**-**	-	<	53	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	99.2	**-**	-	<	11.1	<	<	<	**<**	<	<	<
B	ICP-AES	ppm partial	**4.5**	98.8	**-**	-	<	10	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0.1	**796**	501	<	3906	241	312	467	**684**	1010	1380	1690
Ba	ICP-AES	ppm partial	**10**	0.3	**153**	181	<	2420	27	36	55	**90**	183	338	463
Bi	GFAAS	ppm partial	**0.04**	87.3	**-**	-	<	1.0	<	<	<	**<**	<	0.05	0.08
Ca	XRF	ppm	**29**	0	**19527**	10210	286	74360	5784	7436	12298	**18447**	24582	31746	37645
Ca	ICP-AES	ppm partial	**50**	0	**3165**	2671	100	30800	400	800	1600	**2580**	3900	6000	7700
Ce	ICP-MS	ppm	**0.22**	0	**66**	54	2.1	383	15	21	32	**50**	80	128	175
Cl	XRF	ppm	**45**	4.5	**147**	244	<	5470	50	60	75	**110**	170	238	310
Co	ICP-MS	ppm	**2**	10.5	**8.3**	6.8	<	51	<	<	3.6	**6.4**	11	17	22
Co	ICP-AES	ppm partial	**0.9**	2.3	**7.4**	5.4	<	38	1.3	2.1	3.6	**6.3**	9.4	14	17
Cr	XRF	ppm	**19**	38.6	**35**	39	<	388	<	<	<	**21**	31	60	102
Cr	ICP-AES	ppm partial	**5**	24.1	**18**	32	<	334	<	<	5.1	**8.9**	17	34	59
Cu	XRF	ppm	**17**	76.9	***13***	*30*	<	531	<	<	<	**<**	<	30	47
Cu	ICP-AES	ppm partial	**3**	13.5	**14**	27	<	474	<	<	4.0	**7.1**	15	28	46
Dy	ICP-MS	ppm	**0.55**	13.7	**2.2**	3.1	<	29	<	<	0.8	**1.4**	2.5	3.8	5.7
Er	ICP-MS	ppm	**0.3**	19.5	**1.2**	1.9	<	17	<	<	0.4	**0.7**	1.3	2.1	3.0
Eu	ICP-MS	ppm	**0.09**	0.1	**0.83**	0.53	<	4.8	0.33	0.40	0.52	**0.67**	0.98	1.4	1.8
Fe	XRF	ppm	**78**	0	**22059**	13473	2486	100233	6643	8392	12673	**18594**	28197	40249	48221
Fe	ICP-AES	ppm partial	**2300**	0	**20128**	10890	2600	103000	6700	8700	12500	**18400**	25100	33000	40350
Ga	XRF	ppm	**10**	0.1	**25**	4	<	42	19	21	23	**25**	27	29	31
Gd	ICP-MS	ppm	**0.5**	1.8	**3.4**	3.3	<	30.4	0.8	1.0	1.6	**2.6**	4.0	6.1	8.2
Hf	ICP-MS	ppm	**0.12**	0	**4.08**	2.63	0.17	24.7	1.83	2.22	2.78	**3.41**	4.39	6.19	8.95
Ho	ICP-MS	ppm	**0.09**	12.1	**0.42**	0.63	<	5.8	<	<	0.14	**0.26**	0.47	0.73	1.1
K	XRF	ppm	**25**	0	**21613**	10441	1809	57436	8491	10375	13778	**19256**	28013	37184	42056
K	ICP-AES	ppm partial	**100**	0	**7045**	4790	200	26800	1113	1700	3700	**6300**	9588	12900	16575
La	ICP-MS	ppm	**0.55**	0	**35**	29	1.2	233	8.7	11	18	**26**	43	71	96
La	ICP-AES	ppm partial	**1.3**	0.5	**32**	29	<	215	4.2	6.7	13	**24**	40	67	90
Li	ICP-AES	ppm partial	**3.5**	6.4	**17.6**	12.7	<	83.6	<	4.8	8.6	**14.7**	22.8	32.2	41.4
Lu	ICP-MS	ppm	**0.03**	7.1	**0.16**	0.26	<	2.49	<	0.03	0.05	**0.09**	0.17	0.30	0.43
Mg	XRF	ppm	**543**	1.6	**7544**	6295	<	48783	1091	1749	3317	**5548**	9708	16643	19959
Mg	ICP-AES	ppm partial	**50**	0	**6780**	5111	126	37600	1000	1700	3200	**5510**	8900	13700	17625
Mn	XRF	ppm	**93**	1.2	**388**	233	<	1488	132	163	225	**326**	496	690	829
Mn	ICP-AES	ppm partial	**50**	0.1	**286**	146	<	1040	100	127	180	**257**	364	478	555
Mo	XRF	ppm	**2.6**	98.5	**-**	-	<	5	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	98.6	**-**	-	<	4	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**33561**	5751	1261	56021	24211	27083	30348	**33835**	37100	39920	41908
Na	ICP-AES	ppm partial	**150**	0	**642**	202	200	2020	400	400	500	**600**	716	873	1000
Nb	XRF	ppm	**7**	71.3	***5***	*7*	<	65	<	<	<	**<**	7	11	17
Nb	ICP-MS	ppm	**0.16**	0	**5.3**	5.7	0.34	54	1.2	1.7	2.6	**4.0**	6.0	8.8	14
Nd	ICP-MS	ppm	**0.2**	0	**26**	21	0.85	153	5.7	8.0	13	**20**	31	49	68
Ni	XRF	ppm	**14**	63.8	***15***	*19*	<	183	<	<	<	**<**	18	33	48
Ni	ICP-AES	ppm partial	**3.5**	10.6	**13**	17	<	183	<	<	5.0	**7.8**	14	24	35
P	XRF	ppm	**105**	0	**567**	510	<	7238	<	126	283	**467**	693	1068	1299
P	ICP-AES	ppm partial	**6**	0.3	**510**	478	<	6820	53	93	251	**418**	637	968	1210
Pb	XRF	ppm	**14**	1.5	**30**	13	<	117	17	18	22	**27**	34	44	55
Pb	ICP-AES	ppm partial	**8.7**	79	***6***	*6*	<	84	<	<	<	**<**	<	12	16
Pd	GFAAS	ppb partial	**5**	99.3	**-**	-	<	17	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	1.6	**7.3**	6.1	<	39.1	1.6	2.2	3.6	**5.6**	8.8	13.9	19.8
Rb	XRF	ppm	**5.5**	0.3	**78**	42	<	273	24	33	49	**69**	99	135	163
Rb	ICP-MS	ppm	**0.6**	0	**73**	40	2.4	258	20	31	46	**65**	93	130	151
S	XRF	ppm	**70**	69.9	***184***	*627*	<	8660	<	<	<	**<**	90	370	788
S	ICP-AES	ppm partial	**14.3**	21.8	**211**	707	<	10400	<	<	16	**36**	130	390	749
Sc	ICP-MS	ppm	**2.8**	30.1	**6.4**	5.4	<	47	<	<	<	**4.2**	7.9	13	17
Sc	ICP-AES	ppm partial	**0.4**	7.1	**2.4**	2.7	<	26	<	0.45	0.90	**1.6**	2.8	4.3	7.3
Se	GFAAS	ppm partial	**0.055**	94	**-**	-	<	0.65	<	<	<	**<**	<	<	0.08
Sm	ICP-MS	ppm	**0.5**	1.5	**4.1**	3.5	<	29	0.94	1.3	2.0	**3.1**	4.9	8.0	10
Sr	XRF	ppm	**4**	0	**396**	213	7	1969	118	156	252	**367**	506	660	814
Sr	ICP-AES	ppm partial	**1.2**	0.1	**14**	13	<	111	3.6	4.6	7.4	**11**	16	24	37
Ta	ICP-MS	ppm	**0.06**	7.1	**0.35**	0.42	<	3.1	<	0.07	0.13	**0.22**	0.41	0.72	1.1
Tb	ICP-MS	ppm	**0.08**	4.1	**0.45**	0.52	<	4.9	0.09	0.12	0.20	**0.33**	0.54	0.79	1.1
Te	GFAAS	ppb partial	**5**	88	**-**	-	<	232	<	<	<	**<**	<	5	12
Th	ICP-MS	ppm	**0.13**	1.1	**9.6**	10	<	86	0.63	1.1	3.0	**6.6**	12	21	28
Th	ICP-AES	ppm partial	**5.6**	25.7	**14**	12	<	106	<	<	<	**10**	17	27	35
Ti	XRF	ppm	**30**	0	**2292**	1314	150	9660	564	846	1344	**2082**	2934	3954	4770
Ti	ICP-MS	ppm	**10**	0	**2162**	1249	154	9150	566	794	1270	**1950**	2700	3750	4408
Ti	ICP-AES	ppm partial	**2**	0	**1490**	856	22	5880	301	483	893	**1380**	1980	2610	3093
Tm	ICP-MS	ppm	**0.03**	9.1	**0.17**	0.28	<	2.50	<	0.03	0.05	**0.09**	0.18	0.30	0.44
U	ICP-MS	ppm	**0.08**	1.6	**1.34**	2.49	<	28.2	0.13	0.21	0.38	**0.75**	1.41	2.57	3.44
V	XRF	ppm	**6**	0.8	**55**	42	<	310	9	15	26	**43**	71	111	142
V	ICP-MS	ppm	**2**	1.8	**40**	37	<	371	4.7	7.9	16	**28**	50	85	116
V	ICP-AES	ppm partial	**0.6**	0.3	**30**	26	<	274	2.6	5.3	11	**23**	41	59	77
Y	XRF	ppm	**2.8**	14.3	**13**	18	<	174	<	<	4	**8**	14	23	31
Y	ICP-MS	ppm	**0.1**	0	**13**	19	0.24	171	1.8	2.5	4.2	**7.8**	14	22	32
Y	ICP-AES	ppm partial	**0.15**	0.4	**6.2**	12	<	123	0.80	1.1	2.0	**3.5**	6.2	9.7	15
Yb	ICP-MS	ppm	**0.22**	13.7	**1.1**	1.8	<	16	<	<	0.31	**0.60**	1.2	2.0	2.9
Zn	XRF	ppm	**4**	0.5	**59**	63	<	1173	17	20	33	**51**	73	103	118
Zn	ICP-AES	ppm partial	**2**	0.3	**47**	48	<	1120	11	16	27	**42**	58	78	95
Zr	XRF	ppm	**6**	0	**180**	119	8	1200	74	93	119	**153**	200	277	380
Zr	ICP-MS	ppm	**3**	0	**161**	107	5.4	1010	68	80	106	**135**	179	257	353

Table 68. Chemical concentration summary statistics for map unit 77.

Map unit	**77**	**Garnet-bearing paragneiss**
Number of samples	168	
Unit area	11958.7	km^2
Percent of bedrock	3.5	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

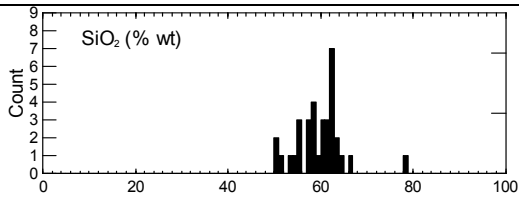


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**69.17**	5.40	48.30	89.00	60.45	62.83	65.95	**69.40**	72.80	75.74	76.92
TiO_2	XRF	%	**0.005**	0	**0.67**	0.24	0.12	1.58	0.24	0.41	0.55	**0.67**	0.78	0.94	1.03
Al_2O_3	XRF	%	**0.02**	0	**15.03**	2.50	4.78	22.30	10.99	12.20	13.60	**15.10**	16.35	17.90	19.31
FeO	XRF	%	**0.01**	0	**5.43**	1.70	1.15	11.97	2.49	3.20	4.52	**5.71**	6.32	7.27	7.92
MnO	XRF	%	**0.012**	0	**0.061**	0.018	0.015	0.125	0.035	0.039	0.049	**0.061**	0.071	0.081	0.091
MgO	XRF	%	**0.09**	0	**1.96**	0.83	0.18	6.65	0.70	1.04	1.56	**1.98**	2.29	2.70	3.01
CaO	XRF	%	**0.004**	0	**1.43**	1.31	0.34	10.70	0.50	0.60	0.73	**0.90**	1.45	3.44	3.94
Na_2O	XRF	%	**0.05**	0	**1.93**	0.91	0.76	5.13	1.03	1.09	1.32	**1.66**	2.09	3.28	4.01
K_2O	XRF	%	**0.003**	0	**3.09**	1.06	0.19	5.76	1.07	1.68	2.43	**3.20**	3.76	4.39	4.64
P_2O_5	XRF	%	**0.024**	3.6	**0.064**	0.053	<	0.425	0.028	0.037	0.044	**0.052**	0.062	0.074	0.175
C_{tot}	Leco	%	**0.05**	94.6	**-**	-	<	0.22	<	<	<	**<**	<	<	0.07
$C_{non\text{-}carb}$	Leco	%	**0.05**	98.2	**-**	-	<	0.22	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	78	***0.04***	*0.03*	<	0.16	<	<	<	**<**	<	0.09	0.11
Al	XRF	ppm	**106**	0	**79482**	13236	25286	117967	58137	64538	71944	**79879**	86492	94691	102150
Al	ICP-AES	ppm partial	**1100**	0	**9348**	5688	1750	37700	3532	4100	5745	**8275**	11400	15980	18020
As	GFAAS	ppm partial	**3**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	81	**-**	-	<	6.8	<	<	<	**<**	<	3.2	3.9
B	ICP-AES	ppm partial	**4.5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Ba	XRF	ppm	**21**	0	**905**	327	83	1941	377	492	746	**899**	1066	1321	1470
Ba	ICP-AES	ppm partial	**10**	1.2	**107**	148	<	1230	22	28	37	**59**	112	239	362
Bi	GFAAS	ppm partial	**0.04**	98.8	**-**	-	<	0.91	<	<	<	**<**	<	<	<
Ca	XRF	ppm	**29**	0	**10217**	9338	2424	76505	3568	4269	5241	**6414**	10368	24567	28142
Ca	ICP-AES	ppm partial	**50**	0	**1009**	2128	168	21700	227	250	300	**399**	808	2420	3426
Ce	ICP-MS	ppm	**0.22**	0	**85**	70	9.9	830	38	48	66	**79**	93	104	115
Cl	XRF	ppm	**45**	1.2	**205**	224	<	1810	58	65	88	**138**	229	413	531
Co	ICP-MS	ppm	**2**	3	**13**	6.3	<	47	5.1	6.7	9.5	**13**	15	19	21
Co	ICP-AES	ppm partial	**0.9**	0	**7.9**	5.2	1.3	41	2.4	2.9	4.5	**7.0**	10	13	16
Cr	XRF	ppm	**19**	4.8	**108**	43	<	327	18	49	84	**114**	132	147	159
Cr	ICP-AES	ppm partial	**5**	3.6	**31**	26	<	241	7.1	11	16	**26**	37	53	68
Cu	XRF	ppm	**17**	60.7	***20***	*20*	<	140	<	<	<	**<**	24	38	53
Cu	ICP-AES	ppm partial	**3**	1.2	**22**	20	<	146	4.7	7.0	10	**17**	28	40	56
Dy	ICP-MS	ppm	**0.55**	0.6	**4.8**	1.8	<	13	1.9	2.6	3.8	**4.8**	5.8	6.7	7.2
Er	ICP-MS	ppm	**0.3**	0.6	**2.9**	1.3	<	9.5	1.0	1.4	2.2	**2.9**	3.6	4.1	4.6
Eu	ICP-MS	ppm	**0.09**	0	**1.4**	0.32	0.44	2.9	0.84	1.1	1.2	**1.3**	1.5	1.8	1.8
Fe	XRF	ppm	**78**	0	**42222**	13193	8951	92984	19347	24841	35097	**44359**	49083	56519	61515
Fe	ICP-AES	ppm partial	**2300**	0	**15654**	8209	5620	58600	7394	8440	11025	**13300**	17875	24380	30935
Ga	XRF	ppm	**10**	0	**25**	5	12	51	17	18	22	**25**	27	31	34
Gd	ICP-MS	ppm	**0.5**	0.6	**5.7**	2.4	<	26.1	2.8	3.5	4.8	**5.6**	6.5	7.6	8.1
Hf	ICP-MS	ppm	**0.12**	0	**5.69**	1.68	0.82	14.1	2.41	4.18	5.05	**5.73**	6.36	7.30	8.27
Ho	ICP-MS	ppm	**0.09**	0.6	**1.00**	0.40	<	3.0	0.37	0.48	0.76	**1.0**	1.2	1.4	1.5
K	XRF	ppm	**25**	0	**25664**	8806	1594	47808	8914	13919	20128	**26560**	31208	36437	38529
K	ICP-AES	ppm partial	**100**	0	**3552**	3691	100	23100	730	840	1213	**2480**	4518	8070	11445
La	ICP-MS	ppm	**0.55**	0	**45**	29	4.8	351	18	26	37	**43**	50	54	60
La	ICP-AES	ppm partial	**1.3**	0.6	**19**	19	<	231	4.6	8.8	13	**18**	23	28	32
Li	ICP-AES	ppm partial	**3.5**	39.3	**5.4**	3.1	<	31.4	<	<	<	**4.2**	6.4	8.4	10.2
Lu	ICP-MS	ppm	**0.03**	1.2	**0.42**	0.17	<	1.18	0.13	0.22	0.33	**0.42**	0.51	0.61	0.65
Mg	XRF	ppm	**543**	0	**11819**	5017	1085	40100	4227	6289	9377	**11939**	13809	16287	18156
Mg	ICP-AES	ppm partial	**50**	0	**5121**	3978	586	29200	1500	1768	2730	**4060**	5995	9492	12735
Mn	XRF	ppm	**93**	0	**473**	140	116	969	271	302	380	**473**	550	628	705
Mn	ICP-AES	ppm partial	**50**	1.8	**99**	42	<	318	57	63	75	**91**	106	143	170
Mo	XRF	ppm	**2.6**	97.6	**-**	-	<	7	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	96.4	**-**	-	<	5	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	0	**14335**	6774	5602	38065	7643	8110	9757	**12280**	15508	24360	29762
Na	ICP-AES	ppm partial	**150**	0	**486**	314	190	3300	265	300	341	**404**	499	731	970
Nb	XRF	ppm	**7**	26.8	**11**	5	<	49	<	<	<	**9**	14	17	19
Nb	ICP-MS	ppm	**0.16**	0	**9.4**	5.6	1.1	49	3.0	3.6	6.1	**9.2**	12	15	16
Nd	ICP-MS	ppm	**0.2**	0	**35**	36	3.2	418	15	18	25	**32**	38	45	50
Ni	XRF	ppm	**14**	13.1	**37**	21	<	143	<	<	22	**34**	48	62	70
Ni	ICP-AES	ppm partial	**3.5**	1.2	**33**	21	<	127	6.0	11	18	**29**	43	59	68
P	XRF	ppm	**105**	0	**279**	231	<	1853	122	161	192	**227**	270	323	763
P	ICP-AES	ppm partial	**6**	0	**106**	227	16	1720	21	28	35	**47**	68	131	446
Pb	XRF	ppm	**14**	0.6	**33**	9	<	85	18	23	29	**33**	37	42	44
Pb	ICP-AES	ppm partial	**8.7**	89.3	**-**	-	<	20	<	<	<	**<**	<	9	10
Pd	GFAAS	ppb partial	**5**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Pr	ICP-MS	ppm	**0.74**	0	**9.6**	9.1	1.1	108.0	3.8	5.2	7.1	**8.9**	10.4	12.2	13.6
Rb	XRF	ppm	**5.5**	1.8	**75**	30	<	133	14	32	57	**77**	96	110	121
Rb	ICP-MS	ppm	**0.6**	0.6	**78**	31	<	139	15	38	58	**81**	99	115	129
S	XRF	ppm	**70**	53	***507***	*1196*	<	8870	<	<	<	**<**	457	1227	2108
S	ICP-AES	ppm partial	**14.3**	11.3	**555**	1293	<	10500	<	<	27	**110**	531	1434	2070
Sc	ICP-MS	ppm	**2.8**	1.8	**18**	7.1	<	38	5.9	9.1	14	**19**	23	27	30
Sc	ICP-AES	ppm partial	**0.4**	0	**2.4**	1.5	0.41	13	0.91	1.1	1.6	**2.2**	2.9	3.5	4.9
Se	GFAAS	ppm partial	**0.055**	50	***0.08***	*0.09*	<	0.63	<	<	<	**<**	0.09	0.17	0.22
Sm	ICP-MS	ppm	**0.5**	0.6	**6.0**	4.7	<	56	2.5	3.4	4.4	**5.6**	6.6	7.7	8.7
Sr	XRF	ppm	**4**	0	**267**	117	57	995	168	178	199	**229**	289	473	496
Sr	ICP-AES	ppm partial	**1.2**	0	**8.1**	8.1	1.7	85	3.1	3.5	4.3	**6.0**	9.2	14	20
Ta	ICP-MS	ppm	**0.06**	3.6	**0.47**	0.59	<	6.4	0.08	0.13	0.22	**0.38**	0.54	0.72	0.91
Tb	ICP-MS	ppm	**0.08**	0.6	**0.86**	0.29	<	2.4	0.41	0.51	0.71	**0.85**	0.99	1.2	1.3
Te	GFAAS	ppb partial	**5**	12.5	**25**	17	<	126	<	<	12	**22**	33	45	53
Th	ICP-MS	ppm	**0.13**	0.6	**11**	23	<	271	0.78	1.6	4.2	**8.2**	12	16	18
Th	ICP-AES	ppm partial	**5.6**	33.9	**10**	15	<	183	<	<	<	**7**	11	13	15
Ti	XRF	ppm	**30**	0	**4026**	1446	744	9480	1410	2478	3294	**4038**	4698	5664	6186
Ti	ICP-MS	ppm	**10**	0	**3894**	1477	806	10700	1561	2272	3145	**3790**	4480	5440	6671
Ti	ICP-AES	ppm partial	**2**	0	**1201**	1250	13	6200	72	119	299	**804**	1668	2634	4226
Tm	ICP-MS	ppm	**0.03**	1.2	**0.43**	0.18	<	1.24	0.12	0.20	0.33	**0.41**	0.52	0.62	0.68
U	ICP-MS	ppm	**0.08**	0.6	**0.68**	0.36	<	2.28	0.21	0.25	0.43	**0.65**	0.84	1.08	1.40
V	XRF	ppm	**6**	0.6	**118**	44	<	336	31	64	100	**120**	141	167	180
V	ICP-MS	ppm	**2**	1.2	**98**	42	<	322	27	52	76	**97**	119	142	157
V	ICP-AES	ppm partial	**0.6**	0	**42**	37	1.8	259	7.1	10	16	**35**	55	88	110
Y	XRF	ppm	**2.8**	0.6	**32**	11	<	84	12	16	24	**31**	39	42	47
Y	ICP-MS	ppm	**0.1**	0	**30**	12	1.1	88	11	14	24	**30**	37	42	45
Y	ICP-AES	ppm partial	**0.15**	0	**4.3**	2.4	0.80	18	1.7	2.3	3.0	**3.9**	4.8	6.1	8.7
Yb	ICP-MS	ppm	**0.22**	0.6	**2.9**	1.2	<	8.2	0.83	1.5	2.2	**2.9**	3.5	4.0	4.7
Zn	XRF	ppm	**4**	0	**95**	42	22	382	37	54	72	**93**	111	134	143
Zn	ICP-AES	ppm partial	**2**	0	**37**	34	5.7	368	12	14	19	**29**	42	68	93
Zr	XRF	ppm	**6**	0	**238**	70	40	669	113	177	214	**238**	260	289	320
Zr	ICP-MS	ppm	**3**	0	**217**	67	24	599	78	164	192	**216**	244	271	313

Table 69. Chemical concentration summary statistics for map unit 78.

Map unit	78	Orthopyroxene diorite
Number of samples	34	
Unit area	1013.6	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

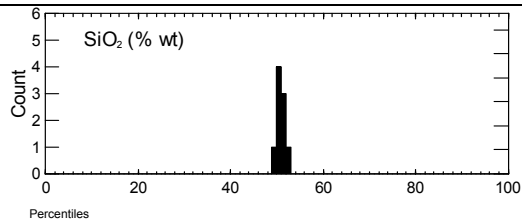


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	59.75	5.15	50.10	78.00	50.50	53.41	57.00	60.35	62.30	63.67	66.06
TiO_2	XRF	%	0.005	0	0.79	0.24	0.15	1.32	0.30	0.47	0.68	0.79	0.89	1.10	1.21
Al_2O_3	XRF	%	0.02	0	17.10	1.99	11.40	20.30	12.40	15.29	16.10	17.20	18.60	19.62	19.88
FeO	XRF	%	0.01	0	6.42	1.64	2.46	10.90	4.24	4.95	5.42	6.11	7.30	8.65	9.38
MnO	XRF	%	0.012	0	0.093	0.037	0.040	0.193	0.044	0.050	0.072	0.089	0.106	0.142	0.187
MgO	XRF	%	0.09	2.9	3.74	2.35	<	16.00	1.75	2.47	2.91	3.40	3.98	4.78	6.05
CaO	XRF	%	0.004	0	5.66	1.29	1.82	8.04	3.65	4.23	4.85	5.79	6.31	7.29	7.71
Na_2O	XRF	%	0.05	0	3.34	0.57	1.41	4.50	2.17	2.81	3.10	3.42	3.72	3.94	4.05
K_2O	XRF	%	0.003	0	1.54	0.76	0.19	3.35	0.42	0.76	0.95	1.38	2.19	2.41	3.09
P_2O_5	XRF	%	0.024	2.9	0.280	0.143	<	0.524	0.044	0.054	0.202	0.268	0.405	0.478	0.512
C_{tot}	Leco	%	0.05	85.3	-	-	<	0.09	<	<	<	<	<	0.06	0.09
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	50	*0.07*	*0.04*	<	0.19	<	<	<	<	0.08	0.13	0.17
Al	XRF	ppm	106	0	90475	10506	60306	107387	65596	80884	85169	90988	98394	103790	105165
Al	ICP-AES	ppm partial	1100	0	14172	9867	1990	58900	2808	4833	8100	13650	16500	19950	26780
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	97.1	-	-	<	4.7	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	547	199	103	932	196	275	389	583	654	796	864
Ba	ICP-AES	ppm partial	10	2.9	217	180	<	660	35	42	66	164	352	478	605
Bi	GFAAS	ppm partial	0.04	100	-	-	<	<	<	<	<	<	<	<	<
Ca	XRF	ppm	29	0	40462	9224	13013	57486	26083	30245	34678	41399	45117	52102	55112
Ca	ICP-AES	ppm partial	50	0	7817	5776	652	34100	1370	2812	4800	6435	10300	12320	14500
Ce	ICP-MS	ppm	0.22	0	60	44	11	234	21	27	38	51	69	87	176
Cl	XRF	ppm	45	0	230	136	80	788	91	104	140	193	279	391	434
Co	ICP-MS	ppm	2	5.9	21	9.9	<	69	<	13	17	20	23	31	32
Co	ICP-AES	ppm partial	0.9	0	11	5.0	0.9	24	2.9	5.6	8.6	11	15	18	18
Cr	XRF	ppm	19	2.9	135	254	<	1549	47	52	63	84	109	123	265
Cr	ICP-AES	ppm partial	5	5.9	45	27	<	156	<	15	32	41	54	73	97
Cu	XRF	ppm	17	47.1	30	21	<	94	<	<	<	18	34	74	79
Cu	ICP-AES	ppm partial	3	0	31	22	5.6	101	13	14	18	23	33	73	83
Dy	ICP-MS	ppm	0.55	0	2.9	1.4	0.7	6.1	1.1	1.2	1.9	2.6	3.7	5.1	5.8
Er	ICP-MS	ppm	0.3	2.9	1.5	0.9	<	3.9	0.4	0.5	0.9	1.5	1.9	2.9	3.4
Eu	ICP-MS	ppm	0.09	0	1.4	0.36	0.41	2.3	0.73	0.96	1.2	1.4	1.6	1.8	2.0
Fe	XRF	ppm	78	0	49891	12735	19083	84693	32960	38485	42113	47475	56698	67234	72844
Fe	ICP-AES	ppm partial	2300	0	20139	7376	7400	40400	8460	9397	15300	19950	25600	29160	32360
Ga	XRF	ppm	10	0	25	3	18	32	20	22	23	25	28	30	31
Gd	ICP-MS	ppm	0.5	0	4.7	1.7	1.4	9.4	1.9	2.9	3.8	4.3	5.8	7.3	7.5
Hf	ICP-MS	ppm	0.12	0	3.44	1.65	0.54	6.78	0.79	1.05	2.40	3.47	4.43	5.43	6.56
Ho	ICP-MS	ppm	0.09	0	0.56	0.28	0.11	1.3	0.18	0.21	0.40	0.57	0.68	0.99	1.1
K	XRF	ppm	25	0	12765	6275	1544	27805	3503	6325	7844	11454	18177	20003	25647
K	ICP-AES	ppm partial	100	0	4608	3569	259	14300	629	885	1540	4115	6350	8627	12540
La	ICP-MS	ppm	0.55	0	29	24	4.1	125	9.3	14	17	24	32	41	93
La	ICP-AES	ppm partial	1.3	0	12	10	1.3	49	3.7	4.8	6.8	8.9	13	24	36
Li	ICP-AES	ppm partial	3.5	17.6	6.5	2.6	<	14.4	<	<	4.1	6.2	8.3	9.2	10.7
Lu	ICP-MS	ppm	0.03	0	0.21	0.13	0.05	0.68	0.07	0.09	0.12	0.19	0.25	0.33	0.52
Mg	XRF	ppm	543	2.9	22570	14164	<	96480	10565	14888	17547	20502	23999	28799	36457
Mg	ICP-AES	ppm partial	50	0	6557	3956	266	19100	1272	2318	3870	5870	8580	12440	13040
Mn	XRF	ppm	93	0	721	287	310	1496	341	388	558	690	822	1101	1449
Mn	ICP-AES	ppm partial	50	0	122	55	54	267	55	60	86	111	144	209	221
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	24812	4215	10462	33390	16131	20872	23002	25339	27602	29235	30081
Na	ICP-AES	ppm partial	150	0	2154	1224	687	7380	775	891	1300	2100	2700	3310	3464
Nb	XRF	ppm	7	64.7	*6*	*3*	<	20	<	<	<	<	8	9	10
Nb	ICP-MS	ppm	0.16	0	5.6	3.1	0.62	19	2.0	2.8	3.9	5.3	6.7	7.7	9.6
Nd	ICP-MS	ppm	0.2	0	30	17	6.2	86	13	14	21	25	35	46	76
Ni	XRF	ppm	14	2.9	53	61	<	374	15	19	27	37	61	81	99
Ni	ICP-AES	ppm partial	3.5	2.9	33	34	<	206	5.9	9.6	20	25	34	54	67
P	XRF	ppm	105	0	1221	623	<	2285	192	235	881	1168	1766	2084	2232
P	ICP-AES	ppm partial	6	0	1013	601	17	2050	28	75	675	1050	1410	1859	1996
Pb	XRF	ppm	14	8.8	22	5	<	33	<	14	18	22	26	28	32
Pb	ICP-AES	ppm partial	8.7	97.1	-	-	<	14	<	<	<	<	<	<	<
Pd	GFAAS	ppb partial	5	97.1	-	-	<	7	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	7.5	4.8	1.3	25.8	2.9	3.3	5.0	6.2	8.7	11.6	19.9
Rb	XRF	ppm	5.5	8.8	35	23	<	87	<	5	16	32	52	70	76
Rb	ICP-MS	ppm	0.6	0	35	24	1.3	80	1.7	2.9	17	33	50	73	78
S	XRF	ppm	70	8.8	598	833	<	4330	<	72	126	302	750	1617	1800
S	ICP-AES	ppm partial	14.3	0	657	949	74	5050	81	96	145	318	737	1668	2104
Sc	ICP-MS	ppm	2.8	2.9	20	8.4	<	41	5.8	11	16	18	23	32	37
Sc	ICP-AES	ppm partial	0.4	2.9	3.4	1.5	<	6.6	1.3	1.7	2.1	3.1	4.3	5.5	6.1
Se	GFAAS	ppm partial	0.055	67.6	*0.05*	*0.06*	<	0.28	<	<	<	<	0.06	0.12	0.20
Sm	ICP-MS	ppm	0.5	0	5.3	2.2	1.3	9.9	2.4	2.7	4.1	4.9	6.3	8.8	9.8
Sr	XRF	ppm	4	0	567	184	116	1080	292	314	470	570	648	775	816
Sr	ICP-AES	ppm partial	1.2	0	55	54	3.5	322	5.9	18	24	42	70	94	97
Ta	ICP-MS	ppm	0.06	2.9	0.26	0.16	<	0.86	0.08	0.12	0.15	0.24	0.33	0.44	0.57
Tb	ICP-MS	ppm	0.08	0	0.59	0.24	0.18	1.2	0.22	0.32	0.48	0.55	0.70	0.91	1.0
Te	GFAAS	ppb partial	5	50	*7*	*6*	<	26	<	<	<	<	9	16	22
Th	ICP-MS	ppm	0.13	14.7	2.7	7.1	<	35	<	<	0.25	0.48	1.2	4.6	20
Th	ICP-AES	ppm partial	5.6	85.3	-	-	<	24	<	<	<	<	<	6	15
Ti	XRF	ppm	30	0	4710	1446	924	7920	1818	2802	4062	4728	5316	6600	7272
Ti	ICP-MS	ppm	10	0	4498	1547	772	7880	1136	2351	4140	4370	5360	6501	6838
Ti	ICP-AES	ppm partial	2	0	1922	1254	187	5850	237	643	880	1785	2830	3556	3722
Tm	ICP-MS	ppm	0.03	0	0.22	0.13	0.03	0.55	0.05	0.06	0.14	0.19	0.26	0.39	0.52
U	ICP-MS	ppm	0.08	17.6	0.24	0.35	<	2.03	<	<	0.08	0.16	0.26	0.35	0.66
V	XRF	ppm	6	2.9	161	40	<	295	100	121	139	154	183	210	238
V	ICP-MS	ppm	2	2.9	134	52	<	303	20	94	112	132	155	173	205
V	ICP-AES	ppm partial	0.6	0	79	38	1.3	146	4.8	23	53	85	107	124	125
Y	XRF	ppm	2.8	0	17	8	6	34	7	8	11	16	21	28	31
Y	ICP-MS	ppm	0.1	0	16	8.1	4.1	32	4.6	5.5	10	16	20	30	31
Y	ICP-AES	ppm partial	0.15	0	7.9	4.9	0.50	21	0.73	1.5	4.3	7.5	11	15	18
Yb	ICP-MS	ppm	0.22	0	1.4	0.91	0.28	4.0	0.33	0.44	0.83	1.3	1.7	2.5	3.7
Zn	XRF	ppm	4	0	112	23	78	164	84	86	95	108	128	141	160
Zn	ICP-AES	ppm partial	2	0	34	19	8.4	97	12	15	22	30	44	54	78
Zr	XRF	ppm	6	0	154	71	18	323	48	54	123	146	199	230	291
Zr	ICP-MS	ppm	3	0	134	69	16	285	35	40	98	136	173	226	273

Table 70. Chemical concentration summary statistics for map unit 79.

Map unit	79	Anorthosite
Number of samples	9	
Unit area	301.2	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

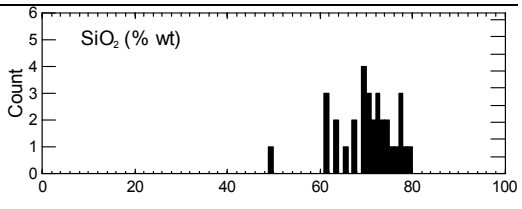


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	50.98	0.86	49.90	52.70	-	-	-	50.90	-	-	-
TiO_2	XRF	%	0.005	0	0.16	0.05	0.08	0.22	-	-	-	0.17	-	-	-
Al_2O_3	XRF	%	0.02	0	28.83	0.82	27.70	30.20	-	-	-	28.60	-	-	-
FeO	XRF	%	0.01	0	1.44	0.61	0.57	2.18	-	-	-	1.67	-	-	-
MnO	XRF	%	0.012	0	0.027	0.009	0.014	0.041	-	-	-	0.029	-	-	-
MgO	XRF	%	0.09	0	0.63	0.35	0.16	1.10	-	-	-	0.79	-	-	-
CaO	XRF	%	0.004	0	12.89	0.47	12.10	13.50	-	-	-	12.90	-	-	-
Na_2O	XRF	%	0.05	0	3.32	0.24	2.94	3.67	-	-	-	3.23	-	-	-
K_2O	XRF	%	0.003	0	0.23	0.07	0.15	0.37	-	-	-	0.22	-	-	-
P_2O_5	XRF	%	0.024	88.9	-	-	<	0.025	<	<	<	<	<	-	-
C_{tot}	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	100	-	-	<	<	<	<	<	<	<	<	<
Al	XRF	ppm	106	0	152527	4338	146533	159758	-	-	-	151294	-	-	-
Al	ICP-AES	ppm partial	1100	0	78300	10219	63400	93700	-	-	-	78600	-	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	100	-	-	<	<	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	102	48	51	209	-	-	-	81	-	-	-
Ba	ICP-AES	ppm partial	10	0	39	16	18	74	-	-	-	36	-	-	-
Bi	GFAAS	ppm partial	0.04	100	-	-	<	<	<	<	<	<	<	<	<
Ca	XRF	ppm	29	0	92156	3382	86515	96525	-	-	-	92235	-	-	-
Ca	ICP-AES	ppm partial	50	0	53989	6396	43600	61300	-	-	-	56400	-	-	-
Ce	ICP-MS	ppm	0.22	0	5.0	2.5	1.6	8.6	-	-	-	5.5	-	-	-
Cl	XRF	ppm	45	0	172	58	99	246	-	-	-	144	-	-	-
Co	ICP-MS	ppm	2	33.3	3.4	1.3	<	5.7	<	<	<	2.9	-	-	-
Co	ICP-AES	ppm partial	0.9	0	2.6	1.5	1.1	6.1	-	-	-	2.0	-	-	-
Cr	XRF	ppm	19	55.6	-	-	<	32	<	<	<	<	24	-	-
Cr	ICP-AES	ppm partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Cu	XRF	ppm	17	55.6	-	-	<	43	<	<	<	<	23	-	-
Cu	ICP-AES	ppm partial	3	0	22	15	4.3	47	-	-	-	19	-	-	-
Dy	ICP-MS	ppm	0.55	88.9	-	-	<	0.6	<	<	<	<	<	-	-
Er	ICP-MS	ppm	0.3	88.9	-	-	<	0.3	<	<	<	<	<	-	-
Eu	ICP-MS	ppm	0.09	0	0.53	0.06	0.45	0.65	-	-	-	0.51	-	-	-
Fe	XRF	ppm	78	0	11189	4709	4421	16923	-	-	-	12937	-	-	-
Fe	ICP-AES	ppm partial	2300	0	5601	1998	3520	9800	-	-	-	4690	-	-	-
Ga	XRF	ppm	10	0	25	2	22	29	-	-	-	25	-	-	-
Gd	ICP-MS	ppm	0.5	55.6	-	-	<	0.7	<	<	<	<	0.5	-	-
Hf	ICP-MS	ppm	0.12	33.3	1.93	2.33	<	7.14	<	<	<	0.57	-	-	-
Ho	ICP-MS	ppm	0.09	55.6	-	-	<	0.13	<	<	<	<	0.11	-	-
K	XRF	ppm	25	0	1934	548	1278	3030	-	-	-	1801	-	-	-
K	ICP-AES	ppm partial	100	0	612	102	428	723	-	-	-	626	-	-	-
La	ICP-MS	ppm	0.55	0	2.5	1.3	0.8	4.3	-	-	-	3.0	-	-	-
La	ICP-AES	ppm partial	1.3	100	-	-	<	<	<	<	<	<	<	<	<
Li	ICP-AES	ppm partial	3.5	88.9	-	-	<	3.6	<	<	<	<	<	-	-
Lu	ICP-MS	ppm	0.03	22.2	0.04	0.01	<	0.06	<	<	-	0.03	-	-	-
Mg	XRF	ppm	543	0	3823	2104	971	6633	-	-	-	4740	-	-	-
Mg	ICP-AES	ppm partial	50	0	1526	1098	521	4020	-	-	-	1170	-	-	-
Mn	XRF	ppm	93	0	209	70	109	318	-	-	-	225	-	-	-
Mn	ICP-AES	ppm partial	50	0	76	33	53	147	-	-	-	56	-	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	24605	1796	21815	27231	-	-	-	23967	-	-	-
Na	ICP-AES	ppm partial	150	0	11634	1279	9210	13300	-	-	-	11700	-	-	-
Nb	XRF	ppm	7	100	-	-	<	<	<	<	<	<	<	<	<
Nb	ICP-MS	ppm	0.16	11.1	0.68	0.24	<	0.97	<	<	-	0.75	-	-	-
Nd	ICP-MS	ppm	0.2	0	2.2	0.97	0.75	3.7	-	-	-	2.3	-	-	-
Ni	XRF	ppm	14	33.3	21	6	<	34	<	<	<	21	-	-	-
Ni	ICP-AES	ppm partial	3.5	0	8.1	3.7	4.4	16	-	-	-	7.4	-	-	-
P	XRF	ppm	105	0	-	-	<	109	<	<	<	<	<	-	-
P	ICP-AES	ppm partial	6	0	50	23	16	89	-	-	-	52	-	-	-
Pb	XRF	ppm	14	22.2	15	1	<	18	<	<	-	15	-	-	-
Pb	ICP-AES	ppm partial	8.7	0	18	6	12	32	-	-	-	16	-	-	-
Pd	GFAAS	ppb partial	5	66.7	-	-	<	7	<	<	<	<	5	-	-
Pr	ICP-MS	ppm	0.74	77.8	-	-	<	0.94	<	<	<	<	<	-	-
Rb	XRF	ppm	5.5	88.9	-	-	<	6	<	<	<	<	<	-	-
Rb	ICP-MS	ppm	0.6	0	2.1	0.8	0.9	3.2	-	-	-	1.9	-	-	-
S	XRF	ppm	70	88.9	-	-	<	88	<	<	<	<	<	-	-
S	ICP-AES	ppm partial	14.3	0	38	21	15	75	-	-	-	34	-	-	-
Sc	ICP-MS	ppm	2.8	44.4	3.7	0.6	<	4.6	<	<	<	3.4	-	-	-
Sc	ICP-AES	ppm partial	0.4	22.2	0.61	0.25	<	1.2	<	<	-	0.52	-	-	-
Se	GFAAS	ppm partial	0.055	100	-	-	<	<	<	<	<	<	<	<	<
Sm	ICP-MS	ppm	0.5	44.4	0.55	0.05	<	0.64	<	<	<	0.51	-	-	-
Sr	XRF	ppm	4	0	320	42	283	399	-	-	-	306	-	-	-
Sr	ICP-AES	ppm partial	1.2	0	139	22	106	175	-	-	-	146	-	-	-
Ta	ICP-MS	ppm	0.06	33.3	0.07	0.01	<	0.08	<	<	<	0.07	-	-	-
Tb	ICP-MS	ppm	0.08	66.7	-	-	<	0.10	<	<	<	<	0.08	-	-
Te	GFAAS	ppb partial	5	88.9	-	-	<	6	<	<	<	<	<	-	-
Th	ICP-MS	ppm	0.13	22.2	0.28	0.16	<	0.67	<	<	-	0.22	-	-	-
Th	ICP-AES	ppm partial	5.6	0	9	1	7	11	-	-	-	9	-	-	-
Ti	XRF	ppm	30	0	936	282	474	1296	-	-	-	1044	-	-	-
Ti	ICP-MS	ppm	10	0	976	274	497	1380	-	-	-	994	-	-	-
Ti	ICP-AES	ppm partial	2	0	216	87	118	398	-	-	-	205	-	-	-
Tm	ICP-MS	ppm	0.03	22.2	0.04	0.01	<	0.07	<	<	-	0.04	-	-	-
U	ICP-MS	ppm	0.08	44.4	0.11	0.04	<	0.21	<	<	<	0.09	-	-	-
V	XRF	ppm	6	0	27	13	7	51	-	-	-	26	-	-	-
V	ICP-MS	ppm	2	0	22	8.9	7.3	35	-	-	-	22	-	-	-
V	ICP-AES	ppm partial	0.6	0	7.0	3.9	2.5	16	-	-	-	5.5	-	-	-
Y	XRF	ppm	2.8	33.3	4	1	<	5	<	<	<	4	-	-	-
Y	ICP-MS	ppm	0.1	0	2.5	0.97	0.63	3.5	-	-	-	2.5	-	-	-
Y	ICP-AES	ppm partial	0.15	0	0.40	0.17	0.17	0.69	-	-	-	0.38	-	-	-
Yb	ICP-MS	ppm	0.22	44.4	0.27	0.08	<	0.41	<	<	<	0.23	-	-	-
Zn	XRF	ppm	4	0	26	10	15	50	-	-	-	24	-	-	-
Zn	ICP-AES	ppm partial	2	0	12	9.4	4.9	35	-	-	-	8.8	-	-	-
Zr	XRF	ppm	6	0	14	8	6	33	-	-	-	11	-	-	-
Zr	ICP-MS	ppm	3	11.1	76	98	<	293	<	<	-	29	-	-	-

Table 71. Chemical concentration summary statistics for map unit 80.

Map unit	80	Gneissic granite, granite gneiss and hornblende gneiss
Number of samples	32	
Unit area	2332.8	km^2
Percent of bedrock	0.7	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

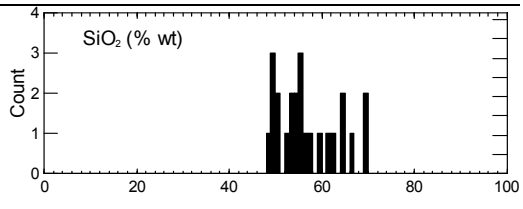


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	70.34	6.35	49.60	79.20	61.03	61.72	67.65	70.95	74.30	77.70	78.78
TiO_2	XRF	%	0.005	3.1	0.38	0.24	<	1.02	0.10	0.11	0.19	0.31	0.48	0.76	0.86
Al_2O_3	XRF	%	0.02	0	14.48	2.10	9.31	18.00	10.86	11.47	13.20	14.80	15.80	17.16	17.66
FeO	XRF	%	0.01	0	3.37	1.88	0.23	7.93	0.96	1.12	1.72	3.40	4.64	5.69	6.53
MnO	XRF	%	0.012	0	0.064	0.037	0.017	0.156	0.021	0.023	0.035	0.058	0.091	0.118	0.136
MgO	XRF	%	0.09	6.3	1.31	1.10	<	5.17	<	0.15	0.49	1.18	1.73	2.83	3.34
CaO	XRF	%	0.004	0	3.35	1.87	0.53	7.69	0.59	0.78	1.92	3.52	4.77	5.96	6.11
Na_2O	XRF	%	0.05	0	4.05	1.08	1.18	5.88	1.86	2.79	3.45	4.10	4.72	5.34	5.76
K_2O	XRF	%	0.003	0	1.68	1.36	0.32	6.89	0.36	0.37	0.91	1.42	1.86	3.39	4.37
P_2O_5	XRF	%	0.024	9.4	0.128	0.129	<	0.551	<	0.018	0.040	0.082	0.155	0.291	0.456
C_{tot}	Leco	%	0.05	87.5	-	-	<	0.12	<	<	<	<	<	0.06	0.08
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	78.1	*0.03*	*0.05*	<	0.25	<	<	<	<	<	0.09	0.10
Al	XRF	ppm	106	0	76610	11093	49250	95220	57449	60676	69828	78292	83582	90776	93421
Al	ICP-AES	ppm partial	1100	0	8498	5460	1100	24300	3030	3300	4300	6740	10700	15950	20870
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	93.8	-	-	<	3.3	<	<	<	<	<	<	2.3
B	ICP-AES	ppm partial	4.5	96.9	-	-	<	5	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	551	329	80	1472	127	188	294	528	691	999	1243
Ba	ICP-AES	ppm partial	10	3.1	157	167	<	805	14	21	42	92	231	355	403
Bi	GFAAS	ppm partial	0.04	96.9	-	-	<	0.04	<	<	<	<	<	<	<
Ca	XRF	ppm	29	0	23924	13335	3768	54984	4204	5563	13692	25168	34106	42621	43665
Ca	ICP-AES	ppm partial	50	0	3744	2532	200	8640	293	470	1850	3425	5690	7343	8240
Ce	ICP-MS	ppm	0.22	0	45	38	3.6	146	5.4	12	18	34	54	109	129
Cl	XRF	ppm	45	9.4	165	131	<	566	<	35	80	131	195	315	506
Co	ICP-MS	ppm	2	21.9	7.4	5.4	<	23	<	<	2.2	6.5	11	13	18
Co	ICP-AES	ppm partial	0.9	3.1	6.0	4.2	<	20	1.1	1.8	3.1	5.6	7.6	10	16
Cr	XRF	ppm	19	56.3	*31*	*35*	<	129	<	<	<	<	47	77	121
Cr	ICP-AES	ppm partial	5	40.6	15	18	<	65	<	<	<	6.0	14	46	58
Cu	XRF	ppm	17	84.4	-	-	<	64	<	<	<	<	<	34	45
Cu	ICP-AES	ppm partial	3	15.6	12	15	<	65	<	<	3.7	6.2	12	34	54
Dy	ICP-MS	ppm	0.55	9.4	2.4	1.6	<	6.8	<	0.5	1.1	2.0	3.6	4.8	5.7
Er	ICP-MS	ppm	0.3	9.4	1.5	1.3	<	6.0	<	0.2	0.5	1.2	1.8	3.1	4.5
Eu	ICP-MS	ppm	0.09	3.1	0.87	0.53	<	2.5	0.26	0.32	0.49	0.72	1.1	1.6	2.0
Fe	XRF	ppm	78	0	26208	14592	1787	61616	7420	8695	13388	26379	36045	44242	50769
Fe	ICP-AES	ppm partial	2300	3.1	19513	9314	<	41800	7390	8200	11550	16800	26550	30270	38550
Ga	XRF	ppm	10	0	22	4	14	34	15	16	20	22	24	26	29
Gd	ICP-MS	ppm	0.5	0	3.1	1.9	0.6	7.6	0.7	1.0	1.6	2.8	4.3	6.1	7.1
Hf	ICP-MS	ppm	0.12	0	3.38	2.57	0.54	12.2	1.14	1.21	1.59	2.45	4.45	6.27	9.12
Ho	ICP-MS	ppm	0.09	9.4	0.50	0.38	<	1.6	<	0.08	0.20	0.40	0.69	1.0	1.4
K	XRF	ppm	25	0	13911	11313	2689	57187	2955	3038	7512	11745	15438	28137	36246
K	ICP-AES	ppm partial	100	0	3978	3674	100	17400	508	593	1400	3250	5400	8343	11282
La	ICP-MS	ppm	0.55	3.1	23	20	<	79	2.8	5.6	8.7	16	30	53	73
La	ICP-AES	ppm partial	1.3	6.3	15	16	<	58	<	2.6	4.5	9.3	20	48	50
Li	ICP-AES	ppm partial	3.5	25	7.9	4.0	<	19.5	<	<	<	6.6	9.5	12.9	17.6
Lu	ICP-MS	ppm	0.03	9.4	0.23	0.24	<	1.19	<	0.03	0.08	0.17	0.28	0.48	0.72
Mg	XRF	ppm	543	6.3	7899	6639	<	31175	<	923	2925	7115	10432	17059	20116
Mg	ICP-AES	ppm partial	50	0	5401	5277	100	24200	510	880	1850	3755	6795	11770	17270
Mn	XRF	ppm	93	0	496	287	132	1209	163	178	271	450	705	915	1054
Mn	ICP-AES	ppm partial	50	3.1	217	118	<	549	65	76	137	187	274	394	437
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	30051	8028	8756	43630	13764	20680	25599	30422	34985	39623	42761
Na	ICP-AES	ppm partial	150	0	731	329	200	1530	310	400	500	646	930	1316	1393
Nb	XRF	ppm	7	75	*5*	*5*	<	24	<	<	<	<	<	12	14
Nb	ICP-MS	ppm	0.16	0	5.1	4.2	1.3	20	1.3	1.4	2.3	3.6	6.5	10	14
Nd	ICP-MS	ppm	0.2	0	19	14	2.0	50	2.8	5.1	8.6	16	26	47	47
Ni	XRF	ppm	14	65.6	*17*	*10*	<	43	<	<	<	<	22	30	36
Ni	ICP-AES	ppm partial	3.5	25	10	9.5	<	33	<	<	<	4.6	18	26	29
P	XRF	ppm	105	0	558	562	<	2402	<	78	174	358	676	1269	1988
P	ICP-AES	ppm partial	6	0	473	541	19	2240	26	37	108	302	575	1119	1911
Pb	XRF	ppm	14	18.8	21	7	<	42	<	<	15	21	25	32	38
Pb	ICP-AES	ppm partial	8.7	90.6	-	-	<	12	<	<	<	<	<	<	9
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	6.3	5.2	4.1	<	14.9	<	1.3	2.2	4.1	6.3	12.9	13.4
Rb	XRF	ppm	5.5	9.4	46	55	<	243	<	6	13	31	53	96	194
Rb	ICP-MS	ppm	0.6	0	45	53	0.8	236	1.8	3.8	16	30	53	92	181
S	XRF	ppm	70	75	99	*248*	<	1330	<	<	<	<	<	230	458
S	ICP-AES	ppm partial	14.3	18.8	136	288	<	1580	<	<	18	48	111	286	511
Sc	ICP-MS	ppm	2.8	18.8	11	6.5	<	23	<	<	4.6	10	14	21	22
Sc	ICP-AES	ppm partial	0.4	3.1	3.2	2.1	<	8.9	0.91	1.1	1.4	2.4	4.8	5.7	8.1
Se	GFAAS	ppm partial	0.055	87.5	-	-	<	0.14	<	<	<	<	<	0.08	0.09
Sm	ICP-MS	ppm	0.5	3.1	3.4	2.2	<	8.5	0.85	1.1	1.7	2.9	4.4	6.9	8.0
Sr	XRF	ppm	4	0	390	278	26	1268	54	85	186	326	592	756	855
Sr	ICP-AES	ppm partial	1.2	0	13	15	1.2	62	2.1	2.9	5.6	9.7	13	31	58
Ta	ICP-MS	ppm	0.06	9.4	0.31	0.35	<	1.5	<	0.05	0.10	0.16	0.35	0.83	1.1
Tb	ICP-MS	ppm	0.08	0	0.45	0.28	0.09	1.2	0.09	0.11	0.23	0.37	0.68	0.80	0.88
Te	GFAAS	ppb partial	5	75	*6*	*11*	<	42	<	<	<	<	<	25	38
Th	ICP-MS	ppm	0.13	6.3	4.7	5.8	<	20	<	0.21	0.93	2.4	5.9	16	18
Th	ICP-AES	ppm partial	5.6	62.5	*6*	*6*	<	24	<	<	<	<	8	15	22
Ti	XRF	ppm	30	3.1	2250	1434	<	6120	576	672	1134	1878	2892	4536	5178
Ti	ICP-MS	ppm	10	0	2088	1346	47	5670	565	706	1050	1705	2685	4266	4657
Ti	ICP-AES	ppm partial	2	0	1175	869	4.4	4610	95	376	535	1045	1560	2082	2207
Tm	ICP-MS	ppm	0.03	3.1	0.22	0.22	<	1.02	0.03	0.04	0.08	0.16	0.28	0.46	0.71
U	ICP-MS	ppm	0.08	3.1	0.93	0.91	<	3.81	0.09	0.11	0.35	0.65	1.19	2.20	3.30
V	XRF	ppm	6	3.1	64	50	<	219	8	11	20	58	93	127	141
V	ICP-MS	ppm	2	9.4	48	40	<	173	<	3.8	12	44	73	97	103
V	ICP-AES	ppm partial	0.6	3.1	32	25	<	103	1.7	4.5	8.2	30	46	63	70
Y	XRF	ppm	2.8	6.3	15	11	<	48	<	3	7	13	20	31	42
Y	ICP-MS	ppm	0.1	0	15	12	2.0	50	2.4	3.4	6.4	12	20	31	46
Y	ICP-AES	ppm partial	0.15	0	4.9	5.4	1.4	32	1.8	1.9	2.4	3.2	5.5	7.9	11
Yb	ICP-MS	ppm	0.22	9.4	1.5	1.6	<	7.6	<	0.15	0.46	1.1	1.9	3.2	5.0
Zn	XRF	ppm	4	0	52	25	5	114	18	25	32	49	68	86	96
Zn	ICP-AES	ppm partial	2	3.1	32	19	<	83	4.9	8.1	22	28	40	58	79
Zr	XRF	ppm	6	0	144	105	11	474	28	43	69	109	212	278	327
Zr	ICP-MS	ppm	3	0	132	110	13	477	16	39	59	91	195	256	406

Table 72. Chemical concentration summary statistics for map unit 81.

Map unit	81	Foliated gabbro and granodiorite (1.95 - 1.93 Ga)
Number of samples	24	
Unit area	918.4	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

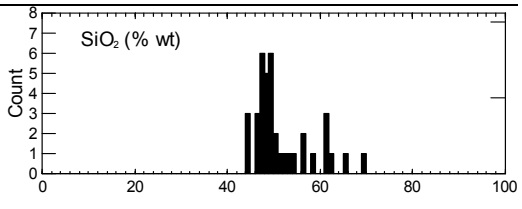


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	56.75	6.51	48.10	69.60	48.73	49.09	51.40	55.50	61.85	66.89	69.53
TiO_2	XRF	%	0.005	0	0.67	0.34	0.19	1.42	0.25	0.30	0.42	0.60	0.89	1.16	1.34
Al_2O_3	XRF	%	0.02	0	15.42	3.54	1.82	22.50	9.23	13.48	14.45	15.90	17.10	18.02	19.49
FeO	XRF	%	0.01	0	7.58	2.42	4.65	13.00	4.77	4.82	5.79	7.18	8.54	11.66	12.40
MnO	XRF	%	0.012	0	0.138	0.046	0.077	0.252	0.078	0.083	0.102	0.136	0.158	0.202	0.225
MgO	XRF	%	0.09	0	5.43	3.83	1.19	19.60	1.24	1.91	2.65	4.96	6.62	8.73	12.08
CaO	XRF	%	0.004	0	7.36	3.14	3.01	18.30	3.72	4.11	4.91	7.69	8.60	10.50	12.84
Na_2O	XRF	%	0.05	0	2.96	1.02	0.26	4.40	0.62	1.17	2.70	3.17	3.53	4.23	4.34
K_2O	XRF	%	0.003	0	1.26	0.86	0.03	3.23	0.13	0.27	0.54	1.16	1.65	2.70	2.97
P_2O_5	XRF	%	0.024	4.2	0.193	0.128	<	0.561	0.017	0.069	0.105	0.178	0.249	0.387	0.483
C_{tot}	Leco	%	0.05	91.7	-	-	<	0.08	<	<	<	<	<	<	0.06
$C_{non-carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	45.8	0.08	0.03	<	0.16	<	<	<	0.06	0.09	0.15	0.15
Al	XRF	ppm	106	0	81561	18732	9628	119025	48806	71309	76441	84111	90459	95326	103102
Al	ICP-AES	ppm partial	1100	4.2	21223	21595	<	80300	3150	5400	9350	13600	21150	62780	79250
As	GFAAS	ppm partial	3	79.2	*2.0*	*2.2*	<	9.4	<	<	<	<	<	4.7	7.2
Au	GFAAS	ppb partial	2.5	87.5	-	-	<	5.6	<	<	<	<	<	2.6	4.3
B	ICP-AES	ppm partial	4.5	91.7	-	-	<	8	<	<	<	<	<	<	6
Ba	XRF	ppm	21	0	388	228	39	808	61	90	182	401	531	735	767
Ba	ICP-AES	ppm partial	10	0	145	100	11	422	16	34	61	135	206	260	330
Bi	GFAAS	ppm partial	0.04	95.8	-	-	<	0.09	<	<	<	<	<	<	<
Ca	XRF	ppm	29	0	52624	22415	21522	130845	26577	29387	35107	54948	61490	75075	91806
Ca	ICP-AES	ppm partial	50	0	12886	15482	1300	59500	2980	4510	4900	7800	11150	46120	53410
Ce	ICP-MS	ppm	0.22	0	47	31	8.8	126	13	15	27	39	60	95	120
Cl	XRF	ppm	45	0	306	183	63	650	63	71	115	315	440	536	608
Co	ICP-MS	ppm	2	0	28	14	10	53	11	12	16	26	35	49	52
Co	ICP-AES	ppm partial	0.9	0	12	4.7	5.0	23	5.4	6.3	8.5	9.9	15	19	21
Cr	XRF	ppm	19	0	163	197	22	958	23	25	58	92	234	317	534
Cr	ICP-AES	ppm partial	5	0	44	29	6.9	109	9.2	11	22	39	55	83	108
Cu	XRF	ppm	17	45.8	40	42	<	161	<	<	<	20	41	111	154
Cu	ICP-AES	ppm partial	3	12.5	35	43	<	161	<	<	11	19	38	108	151
Dy	ICP-MS	ppm	0.55	0	3.3	1.3	0.6	5.2	1.1	1.7	2.2	3.2	4.3	4.9	5.0
Er	ICP-MS	ppm	0.3	0	1.8	0.8	0.4	3.2	0.6	1.0	1.3	1.9	2.4	3.0	3.1
Eu	ICP-MS	ppm	0.09	0	1.2	0.48	0.46	2.5	0.56	0.75	0.91	1.2	1.5	2.0	2.2
Fe	XRF	ppm	78	0	58873	18819	36131	101010	37055	37475	45012	55750	66356	90614	96371
Fe	ICP-AES	ppm partial	2300	0	23188	10312	10200	53900	11530	12550	16550	21550	26000	36770	47390
Ga	XRF	ppm	10	4.2	22	4	<	32	11	17	20	22	24	28	29
Gd	ICP-MS	ppm	0.5	0	4.5	1.8	1.0	8.2	1.5	2.5	3.3	4.4	5.7	6.7	7.7
Hf	ICP-MS	ppm	0.12	0	2.41	1.59	0.63	7.27	0.64	0.72	1.45	1.90	3.04	4.30	6.16
Ho	ICP-MS	ppm	0.09	0	0.66	0.28	0.11	1.1	0.20	0.36	0.47	0.69	0.86	1.1	1.1
K	XRF	ppm	25	0	10466	7113	241	26809	1096	2249	4490	9628	13654	22393	24659
K	ICP-AES	ppm partial	100	0	5604	4777	100	18300	240	390	2650	4645	6650	12970	18160
La	ICP-MS	ppm	0.55	0	21	15	3.9	60	4.2	5.5	10	18	26	46	57
La	ICP-AES	ppm partial	1.3	4.2	14	11	<	38	1.1	2.9	3.8	12	23	30	36
Li	ICP-AES	ppm partial	3.5	25	7.9	5.6	<	23.1	<	<	<	5.6	9.8	14.9	22.6
Lu	ICP-MS	ppm	0.03	0	0.26	0.12	0.04	0.43	0.08	0.10	0.18	0.26	0.38	0.42	0.43
Mg	XRF	ppm	543	0	32731	23101	7176	118188	7471	11505	15949	29909	39919	52660	72812
Mg	ICP-AES	ppm partial	50	0	9401	6793	2600	36300	3930	4500	5230	7500	11400	14920	22720
Mn	XRF	ppm	93	0	1070	357	597	1953	605	643	791	1054	1225	1566	1744
Mn	ICP-AES	ppm partial	50	0	240	154	54	542	85	100	116	192	363	491	541
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	21934	7554	1929	32648	4600	8652	20034	23521	26193	31379	32181
Na	ICP-AES	ppm partial	150	4.2	1991	2204	<	9780	350	590	800	900	2300	5390	6770
Nb	XRF	ppm	7	70.8	*6*	*5*	<	18	<	<	<	<	7	13	17
Nb	ICP-MS	ppm	0.16	0	5.4	3.9	0.23	15	1.5	2.3	2.9	4.3	4.9	12	15
Nd	ICP-MS	ppm	0.2	0	25	13	4.3	60	9.8	13	14	21	31	44	54
Ni	XRF	ppm	14	16.7	62	53	<	198	<	<	19	39	92	134	185
Ni	ICP-AES	ppm partial	3.5	0	29	29	4.4	99	4.6	4.9	9.8	17	31	90	96
P	XRF	ppm	105	0	841	558	<	2446	74	301	458	776	1086	1687	2106
P	ICP-AES	ppm partial	6	0	742	510	31	2250	73	221	390	675	942	1487	1886
Pb	XRF	ppm	14	12.5	22	6	<	38	<	<	17	21	25	31	37
Pb	ICP-AES	ppm partial	8.7	75	*7*	*5*	<	20	<	<	<	<	<	15	19
Pd	GFAAS	ppb partial	5	83.3	-	-	<	7	<	<	<	<	<	5	6
Pr	ICP-MS	ppm	0.74	0	6.0	3.6	1.1	15.7	2.0	2.5	3.5	5.0	7.8	11.5	14.3
Rb	XRF	ppm	5.5	8.3	35	32	<	132	<	5	13	27	45	80	115
Rb	ICP-MS	ppm	0.6	0	33	31	1.2	131	1.4	1.5	13	25	47	71	109
S	XRF	ppm	70	62.5	*295*	*423*	<	1390	<	<	<	<	547	839	1376
S	ICP-AES	ppm partial	14.3	8.3	300	469	<	1550	<	14	21	34	509	975	1522
Sc	ICP-MS	ppm	2.8	0	28	14	10.0	71	12	14	19	26	32	50	58
Sc	ICP-AES	ppm partial	0.4	0	3.7	2.1	1.2	10	1.3	1.7	2.6	3.1	4.4	6.5	8.6
Se	GFAAS	ppm partial	0.055	66.7	*0.06*	*0.07*	<	0.26	<	<	<	<	0.08	0.19	0.22
Sm	ICP-MS	ppm	0.5	0	4.8	2.1	1.0	10	1.8	2.7	3.3	4.4	5.9	7.7	9.0
Sr	XRF	ppm	4	0	472	281	83	1285	143	193	249	434	633	800	1038
Sr	ICP-AES	ppm partial	1.2	0	59	83	5.1	308	7.6	9.3	13	20	60	186	284
Ta	ICP-MS	ppm	0.06	4.2	0.35	0.28	<	1.0	0.06	0.08	0.17	0.24	0.36	0.83	0.91
Tb	ICP-MS	ppm	0.08	0	0.63	0.23	0.14	1.0	0.20	0.37	0.46	0.60	0.79	0.93	0.98
Te	GFAAS	ppb partial	5	58.3	*6*	*8*	<	30	<	<	<	<	7	20	27
Th	ICP-MS	ppm	0.13	4.2	3.6	4.7	<	19	0.09	0.15	0.51	2.3	4.4	11	14
Th	ICP-AES	ppm partial	5.6	45.8	9	5	<	22	<	<	<	6	9	16	19
Ti	XRF	ppm	30	0	4032	2028	1164	8520	1500	1776	2490	3576	5364	6936	8016
Ti	ICP-MS	ppm	10	0	3873	2033	1060	8750	1396	1657	2300	3235	5015	7166	7994
Ti	ICP-AES	ppm partial	2	0	1478	809	82	3990	270	689	1085	1430	1650	2159	3458
Tm	ICP-MS	ppm	0.03	0	0.27	0.12	0.07	0.49	0.11	0.13	0.18	0.26	0.36	0.46	0.48
U	ICP-MS	ppm	0.08	8.3	1.31	1.47	<	5.40	<	0.08	0.19	0.90	1.81	3.65	5.08
V	XRF	ppm	6	0	185	80	69	366	74	88	127	167	238	310	342
V	ICP-MS	ppm	2	0	164	77	56	310	57	76	104	162	207	292	304
V	ICP-AES	ppm partial	0.6	0	72	40	6.4	197	25	35	42	64	97	115	148
Y	XRF	ppm	2.8	0	19	8	5	38	8	10	13	19	25	30	33
Y	ICP-MS	ppm	0.1	0	19	8.2	3.6	33	6.1	9.5	14	20	25	31	32
Y	ICP-AES	ppm partial	0.15	0	5.8	5.4	0.20	25	0.78	1.5	2.6	5.3	6.6	8.9	20
Yb	ICP-MS	ppm	0.22	0	1.8	0.81	0.24	3.3	0.62	0.84	1.2	1.8	2.3	3.0	3.1
Zn	XRF	ppm	4	0	94	32	18	141	41	54	81	91	123	138	140
Zn	ICP-AES	ppm partial	2	0	33	22	8.4	79	11	17	20	24	37	77	78
Zr	XRF	ppm	6	0	102	68	18	283	19	21	57	93	132	204	242
Zr	ICP-MS	ppm	3	0	93	65	17	285	19	21	54	72	120	173	244

Table 73. Chemical concentration summary statistics for map unit 82.

Map unit	82	Paleoproterozoic mafic and felsic metavolcanic rocks
Number of samples	38	
Unit area	645.7	km^2
Percent of bedrock	0.2	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

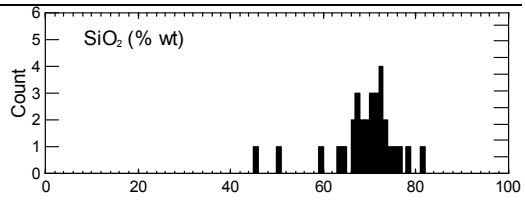


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	51.69	6.23	44.00	69.00	44.28	46.42	47.60	49.65	54.70	61.58	64.46
TiO_2	XRF	%	0.005	0	1.11	0.58	0.38	2.34	0.39	0.44	0.71	0.89	1.64	2.03	2.20
Al_2O_3	XRF	%	0.02	0	14.48	1.38	11.80	18.30	12.20	12.54	13.70	14.40	15.20	15.90	17.26
FeO	XRF	%	0.01	0	10.37	2.69	5.53	15.70	5.89	6.46	8.68	10.08	12.40	13.57	14.78
MnO	XRF	%	0.012	0	0.183	0.041	0.077	0.266	0.103	0.126	0.164	0.190	0.213	0.230	0.235
MgO	XRF	%	0.09	0	5.86	2.30	1.28	14.40	2.69	3.27	4.29	5.88	6.99	8.16	9.41
CaO	XRF	%	0.004	0	8.61	2.37	2.92	13.90	4.61	5.10	7.22	9.00	10.10	11.30	11.82
Na_2O	XRF	%	0.05	0	3.08	0.68	1.49	4.71	1.90	2.44	2.65	2.95	3.55	3.96	4.28
K_2O	XRF	%	0.003	0	0.93	0.58	0.24	2.69	0.28	0.32	0.48	0.82	1.13	1.80	2.15
P_2O_5	XRF	%	0.024	0	0.202	0.153	0.069	0.954	0.071	0.078	0.115	0.163	0.236	0.330	0.403
C_{tot}	Leco	%	0.05	84.2	-	-	<	0.75	<	<	<	<	<	0.10	0.26
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	39.5	0.10	0.07	<	0.42	<	<	<	0.07	0.08	0.18	0.26
Al	XRF	ppm	106	0	76620	7284	62422	96807	64538	66337	72473	76176	80408	84111	91305
Al	ICP-AES	ppm partial	1100	0	12970	8182	4490	51900	5400	6600	8300	11350	14800	21060	23580
As	GFAAS	ppm partial	3	92.1	-	-	<	12	<	<	<	<	<	<	3.7
Au	GFAAS	ppb partial	2.5	89.5	-	-	<	5.9	<	<	<	<	<	2.4	3.9
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	272	253	42	1111	55	71	110	180	310	600	935
Ba	ICP-AES	ppm partial	10	7.9	132	197	<	901	<	11	17	34	175	296	615
Bi	GFAAS	ppm partial	0.04	76.3	*0.03*	*0.06*	<	0.31	<	<	<	<	<	0.06	0.20
Ca	XRF	ppm	29	0	61526	16917	20878	99385	32933	36486	51623	64314	72215	80795	84513
Ca	ICP-AES	ppm partial	50	0	11740	5983	5100	33100	5680	6390	8220	10650	13600	16350	26360
Ce	ICP-MS	ppm	0.22	0	32	30	5.8	147	7.4	9.2	14	25	40	69	107
Cl	XRF	ppm	45	2.6	239	227	<	1100	50	55	100	170	270	496	781
Co	ICP-MS	ppm	2	0	37	14	9.4	60	11	14	29	38	48	53	55
Co	ICP-AES	ppm partial	0.9	0	13	5.5	1.9	26	4.3	5.8	9.6	13	17	20	22
Cr	XRF	ppm	19	2.6	191	235	<	1354	37	42	69	107	215	356	561
Cr	ICP-AES	ppm partial	5	2.6	36	23	<	110	9.7	13	20	28	45	65	91
Cu	XRF	ppm	17	15.8	83	88	<	413	<	<	22	45	101	212	262
Cu	ICP-AES	ppm partial	3	7.9	79	88	<	382	<	6.1	21	42	95	215	277
Dy	ICP-MS	ppm	0.55	0	3.9	1.5	1.3	8.1	1.5	2.2	3.1	3.7	4.7	6.3	6.9
Er	ICP-MS	ppm	0.3	0	2.3	0.8	0.8	4.4	0.9	1.3	1.8	2.3	2.6	3.6	4.0
Eu	ICP-MS	ppm	0.09	0	1.2	0.49	0.48	2.8	0.54	0.59	0.81	1.0	1.5	1.7	2.1
Fe	XRF	ppm	78	0	80536	20901	42968	121989	45734	50171	67444	78322	96348	105439	114825
Fe	ICP-AES	ppm partial	2300	0	24549	12006	4900	53900	7140	8485	15800	22900	29800	42700	47080
Ga	XRF	ppm	10	0	23	4	12	32	14	17	20	23	25	27	31
Gd	ICP-MS	ppm	0.5	0	4.3	2.0	1.7	12.0	1.8	2.1	2.9	3.8	5.2	6.7	7.1
Hf	ICP-MS	ppm	0.12	0	2.53	1.64	0.30	7.90	0.53	1.02	1.32	2.05	3.60	4.26	6.01
Ho	ICP-MS	ppm	0.09	0	0.79	0.30	0.27	1.6	0.32	0.43	0.62	0.77	0.90	1.3	1.4
K	XRF	ppm	25	0	7686	4839	1959	22327	2316	2639	4009	6814	9379	14915	17845
K	ICP-AES	ppm partial	100	0	3653	4331	200	14400	230	300	700	1190	5800	11180	12820
La	ICP-MS	ppm	0.55	2.6	15	14	<	63	2.6	3.5	5.4	11	16	33	51
La	ICP-AES	ppm partial	1.3	7.9	10	11	<	45	<	1.4	2.7	4.9	14	25	37
Li	ICP-AES	ppm partial	3.5	31.6	9.9	10.8	<	52.4	<	<	<	5.9	11.1	23.5	36.3
Lu	ICP-MS	ppm	0.03	0	0.32	0.11	0.11	0.61	0.16	0.18	0.26	0.30	0.35	0.50	0.55
Mg	XRF	ppm	543	0	35324	13881	7718	86832	16197	19688	25869	35426	42150	49193	56718
Mg	ICP-AES	ppm partial	50	0	8782	4480	1900	21900	2800	4960	5700	7150	10800	15410	17060
Mn	XRF	ppm	93	0	1418	318	597	2062	798	977	1271	1473	1651	1783	1821
Mn	ICP-AES	ppm partial	50	0	309	133	104	684	130	155	225	275	392	466	591
Mo	XRF	ppm	2.6	97.4	-	-	<	7	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	97.4	-	-	<	8	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	22883	5038	11056	34948	14098	18105	19663	21852	26341	29391	31758
Na	ICP-AES	ppm partial	150	0	1278	805	400	4600	400	600	800	1100	1400	2061	2996
Nb	XRF	ppm	7	57.9	*9*	*8*	<	36	<	<	<	<	13	22	25
Nb	ICP-MS	ppm	0.16	0	7.7	7.4	0.59	31	0.88	1.7	2.4	3.7	11	19	21
Nd	ICP-MS	ppm	0.2	0	18	14	4.7	75	6.0	6.3	8.4	14	22	29	47
Ni	XRF	ppm	14	7.9	74	62	<	365	<	18	39	60	84	122	171
Ni	ICP-AES	ppm partial	3.5	2.6	24	17	<	98	5.1	8.1	12	21	32	39	42
P	XRF	ppm	105	0	881	667	301	4159	310	340	501	711	1029	1439	1757
P	ICP-AES	ppm partial	6	0	804	591	259	3670	286	328	445	658	948	1349	1576
Pb	XRF	ppm	14	18.4	20	7	<	56	<	<	16	18	22	26	26
Pb	ICP-AES	ppm partial	8.7	94.7	-	-	<	13	<	<	<	<	<	<	7
Pd	GFAAS	ppb partial	5	71.1	*4*	*6*	<	24	<	<	<	<	5	14	19
Pr	ICP-MS	ppm	0.74	0	4.2	3.6	0.95	19.0	1.2	1.3	1.8	3.5	5.2	7.9	12.3
Rb	XRF	ppm	5.5	10.5	25	21	<	87	<	<	10	18	33	56	74
Rb	ICP-MS	ppm	0.6	0	25	23	1.4	84	3.5	4.6	8.1	18	36	66	77
S	XRF	ppm	70	31.6	456	546	<	2640	<	<	<	230	600	1182	1402
S	ICP-AES	ppm partial	14.3	13.2	512	610	<	2740	<	<	32	283	705	1411	1548
Sc	ICP-MS	ppm	2.8	0	37	12	12	60	15	21	28	39	44	51	57
Sc	ICP-AES	ppm partial	0.4	0	5.6	2.7	2.0	15	2.4	2.7	3.8	5.1	6.6	9.2	10
Se	GFAAS	ppm partial	0.055	44.7	0.17	0.17	<	0.72	<	<	<	0.09	0.24	0.37	0.57
Sm	ICP-MS	ppm	0.5	0	3.9	2.2	1.3	13	1.4	1.9	2.3	3.3	4.8	5.8	8.0
Sr	XRF	ppm	4	0	274	142	90	794	106	139	182	245	319	428	575
Sr	ICP-AES	ppm partial	1.2	0	16	24	4.7	155	5.5	6.0	7.5	11	14	25	27
Ta	ICP-MS	ppm	0.06	2.6	0.46	0.39	<	1.3	0.07	0.12	0.17	0.23	0.68	1.1	1.2
Tb	ICP-MS	ppm	0.08	0	0.66	0.29	0.22	1.6	0.24	0.32	0.48	0.61	0.79	1.0	1.2
Te	GFAAS	ppb partial	5	34.2	13	10	<	53	<	<	<	7	17	26	31
Th	ICP-MS	ppm	0.13	0	1.9	2.5	0.15	11	0.22	0.27	0.56	1.2	1.9	4.3	8.9
Th	ICP-AES	ppm partial	5.6	78.9	*4*	*3*	<	15	<	<	<	<	<	7	8
Ti	XRF	ppm	30	0	6660	3486	2268	14040	2316	2658	4266	5328	9840	12186	13188
Ti	ICP-MS	ppm	10	0	6417	3477	2100	14100	2356	2642	3830	5255	9430	12500	13520
Ti	ICP-AES	ppm partial	2	0	1588	821	203	3340	316	529	1050	1635	2060	2870	3106
Tm	ICP-MS	ppm	0.03	0	0.33	0.12	0.11	0.60	0.14	0.19	0.26	0.32	0.36	0.52	0.57
U	ICP-MS	ppm	0.08	0	0.62	0.69	0.09	4.04	0.11	0.16	0.22	0.48	0.70	1.18	1.65
V	XRF	ppm	6	0	261	91	67	448	93	142	203	266	332	359	406
V	ICP-MS	ppm	2	0	228	88	40	414	70	85	177	239	295	325	361
V	ICP-AES	ppm partial	0.6	0	61	29	16	126	19	25	39	55	84	96	114
Y	XRF	ppm	2.8	0	22	8	6	42	8	11	17	21	25	34	39
Y	ICP-MS	ppm	0.1	0	24	8.8	8.1	46	9.4	13	19	23	27	37	42
Y	ICP-AES	ppm partial	0.15	0	5.1	3.0	0.60	13	1.4	1.8	3.1	4.7	6.4	8.6	12
Yb	ICP-MS	ppm	0.22	0	2.2	0.77	0.76	4.0	0.95	1.2	1.7	2.1	2.4	3.4	3.8
Zn	XRF	ppm	4	0	113	25	59	162	75	82	95	116	129	150	158
Zn	ICP-AES	ppm partial	2	0	35	24	6.4	97	9.2	11	20	26	37	74	88
Zr	XRF	ppm	6	0	109	81	7	400	14	35	57	76	158	191	271
Zr	ICP-MS	ppm	3	0	99	77	11	385	16	31	47	71	130	170	258

Table 74. Chemical concentration summary statistics for map unit 83.

Map unit	83	Paleoproterozoic metasedimentary rocks
Number of samples	31	
Unit area	1161.5	km^2
Percent of bedrock	0.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

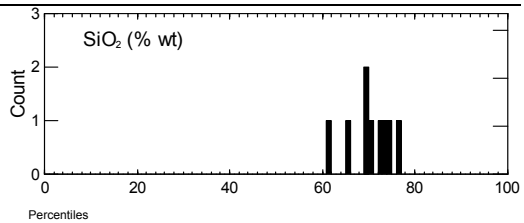


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	69.07	7.20	45.60	81.20	50.93	61.50	67.20	70.60	72.90	76.02	78.61
TiO_2	XRF	%	0.005	0	0.50	0.30	0.11	1.49	0.15	0.22	0.27	0.41	0.64	0.80	1.17
Al_2O_3	XRF	%	0.02	0	14.32	2.86	6.12	20.50	11.41	11.68	12.43	14.30	15.45	18.40	20.46
FeO	XRF	%	0.01	0	4.99	2.62	0.93	11.25	1.82	1.87	3.00	4.48	6.01	8.32	11.03
MnO	XRF	%	0.012	0	0.098	0.095	0.017	0.545	0.024	0.033	0.049	0.077	0.104	0.156	0.222
MgO	XRF	%	0.09	0	1.91	1.52	0.18	5.47	0.23	0.53	0.83	1.39	2.51	4.82	5.44
CaO	XRF	%	0.004	0	2.19	1.20	0.37	4.21	0.49	0.59	1.17	2.20	3.34	3.63	3.90
Na_2O	XRF	%	0.05	0	3.46	1.48	0.77	5.47	0.83	1.15	2.13	3.68	4.62	5.30	5.39
K_2O	XRF	%	0.003	0	2.03	1.35	0.41	5.22	0.50	0.62	1.11	1.54	2.59	4.31	4.75
P_2O_5	XRF	%	0.024	12.9	0.097	0.095	<	0.514	<	<	0.038	0.069	0.105	0.197	0.245
C_{tot}	Leco	%	0.05	90.3	-	-	<	0.40	<	<	<	<	<	<	0.15
$C_{non\text{-}carb}$	Leco	%	0.05	93.5	-	-	<	0.38	<	<	<	<	<	<	0.05
F	Ion	%	0.055	41.9	0.09	0.07	<	0.38	<	<	<	0.06	0.10	0.15	0.22
Al	XRF	ppm	106	0	75769	15140	32375	108445	60332	61787	65728	75647	81731	97336	108207
Al	ICP-AES	ppm partial	1100	0	14950	9707	3100	49300	3525	5140	8850	12600	20075	27780	29495
As	GFAAS	ppm partial	3	96.8	-	-	<	8.1	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	77.4	*0.1*	*0.2*	<	11.7	<	<	<	<	<	5.7	10.2
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	609	332	158	1307	193	236	344	578	826	1144	1250
Ba	ICP-AES	ppm partial	10	0	291	256	13	1170	32	65	110	221	462	594	774
Bi	GFAAS	ppm partial	0.04	83.9	-	-	<	0.12	<	<	<	<	<	0.07	0.10
Ca	XRF	ppm	29	0	15651	8587	2660	30102	3504	4247	8387	15730	23895	25940	27892
Ca	ICP-AES	ppm partial	50	0	2267	1421	300	5600	314	588	1148	1930	3250	4200	4865
Ce	ICP-MS	ppm	0.22	0	58	34	9.4	131	13	21	38	48	71	112	128
Cl	XRF	ppm	45	9.7	278	408	<	1750	<	30	60	110	242	743	1400
Co	ICP-MS	ppm	2	9.7	11	7.7	<	32	<	1.9	4.7	9.2	12	23	28
Co	ICP-AES	ppm partial	0.9	0	10	7.8	1.2	32	1.6	2.3	4.1	8.3	13	21	29
Cr	XRF	ppm	19	48.4	59	60	<	211	<	<	<	20	93	146	206
Cr	ICP-AES	ppm partial	5	32.3	32	44	<	176	<	<	<	9.0	47	89	145
Cu	XRF	ppm	17	61.3	*27*	*56*	<	292	<	<	<	<	23	83	95
Cu	ICP-AES	ppm partial	3	3.2	29	47	<	251	3.3	4.1	6.8	15	26	73	78
Dy	ICP-MS	ppm	0.55	3.2	4.0	2.6	<	11	0.8	1.1	2.2	3.9	5.3	7.1	10.0
Er	ICP-MS	ppm	0.3	3.2	2.7	1.7	<	6.8	0.3	0.5	1.2	2.7	3.8	4.7	6.5
Eu	ICP-MS	ppm	0.09	0	1.1	0.57	0.18	2.6	0.33	0.39	0.70	0.97	1.4	1.8	2.2
Fe	XRF	ppm	78	0	38772	20342	7226	87397	14149	14514	23294	34810	46721	64631	85680
Fe	ICP-AES	ppm partial	2300	0	30134	14836	6800	80900	8787	15060	19100	28700	37725	46340	53445
Ga	XRF	ppm	10	3.2	23	6	<	34	13	15	20	22	27	32	33
Gd	ICP-MS	ppm	0.5	0	4.6	2.9	0.6	13.1	1.2	1.7	2.2	4.0	6.6	7.7	10.8
Hf	ICP-MS	ppm	0.12	0	4.49	2.57	1.21	13.6	2.27	2.42	2.71	3.67	5.61	8.10	8.64
Ho	ICP-MS	ppm	0.09	3.2	0.88	0.56	<	2.3	0.13	0.23	0.41	0.86	1.1	1.6	2.1
K	XRF	ppm	25	0	16874	11197	3411	43326	4175	5163	9172	12782	21497	35790	39408
K	ICP-AES	ppm partial	100	0	9705	7542	1100	36000	1310	1656	4250	8240	11200	19340	21980
La	ICP-MS	ppm	0.55	0	29	18	2.7	67	6.1	9.9	18	24	36	57	66
La	ICP-AES	ppm partial	1.3	3.2	20	14	<	58	3.1	4.9	9.2	17	24	46	51
Li	ICP-AES	ppm partial	3.5	0	12.9	8.3	3.6	36.0	3.6	4.2	6.7	11.3	16.1	26.6	30.1
Lu	ICP-MS	ppm	0.03	0	0.42	0.29	0.03	1.15	0.03	0.07	0.20	0.36	0.56	0.78	1.01
Mg	XRF	ppm	543	0	11505	9172	1085	32984	1381	3172	4993	8382	15153	29065	32779
Mg	ICP-AES	ppm partial	50	0	9038	6906	700	32000	1505	2140	4125	6800	12225	17660	22695
Mn	XRF	ppm	93	0	760	736	132	4224	186	256	380	597	806	1209	1721
Mn	ICP-AES	ppm partial	50	0	287	172	78	723	95	130	157	208	361	564	621
Mo	XRF	ppm	2.6	83.9	-	-	<	7	<	<	<	<	<	3	5
Mo	ICP-AES	ppm partial	2.6	87.1	-	-	<	6	<	<	<	<	<	3	3
Na	XRF	ppm	371	0	25644	10967	5736	40587	6151	8518	15819	27306	34258	39341	39964
Na	ICP-AES	ppm partial	150	0	583	191	295	1120	389	400	428	500	700	856	936
Nb	XRF	ppm	7	51.6	*9*	*12*	<	59	<	<	<	<	11	19	40
Nb	ICP-MS	ppm	0.16	0	9.3	10	0.93	51	1.3	2.5	4.2	6.2	11	18	32
Nd	ICP-MS	ppm	0.2	0	25	15	4.1	62	4.4	7.7	13	20	37	45	51
Ni	XRF	ppm	14	48.4	30	32	<	149	<	<	<	14	37	73	102
Ni	ICP-AES	ppm partial	3.5	16.1	22	31	<	135	<	<	4.2	8.4	24	62	94
P	XRF	ppm	105	0	423	414	<	2241	<	<	166	301	458	859	1068
P	ICP-AES	ppm partial	6	0	335	410	8.0	2070	13	21	58	248	395	774	966
Pb	XRF	ppm	14	12.9	22	8	<	48	<	<	15	22	27	32	34
Pb	ICP-AES	ppm partial	8.7	83.9	-	-	<	22	<	<	<	<	<	11	14
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	6.6	4.0	1.2	16.3	1.3	2.4	3.8	5.5	8.5	12.7	14.3
Rb	XRF	ppm	5.5	3.2	61	54	<	250	6	12	26	43	83	139	153
Rb	ICP-MS	ppm	0.6	0	61	54	4.8	246	5.3	12	29	42	80	140	156
S	XRF	ppm	70	51.6	*545*	*1105*	<	5460	<	<	<	<	568	1652	2450
S	ICP-AES	ppm partial	14.3	3.2	630	1166	<	5730	17	26	50	141	665	1790	2720
Sc	ICP-MS	ppm	2.8	3.2	16	11	<	43	3.2	4.2	6.5	13	25	33	36
Sc	ICP-AES	ppm partial	0.4	3.2	5.1	4.4	<	23	0.71	0.95	2.7	3.8	7.0	9.4	12
Se	GFAAS	ppm partial	0.055	67.7	*0.03*	*0.03*	<	0.88	<	<	<	<	0.09	0.34	0.57
Sm	ICP-MS	ppm	0.5	0	4.5	2.9	0.67	13	0.83	1.5	2.3	3.8	7.2	7.9	9.6
Sr	XRF	ppm	4	0	260	191	41	952	50	79	146	225	316	446	705
Sr	ICP-AES	ppm partial	1.2	0	8.4	4.8	2.0	20	2.3	2.5	5.0	7.6	11	16	19
Ta	ICP-MS	ppm	0.06	6.5	0.53	0.67	<	3.2	<	0.07	0.19	0.37	0.54	0.88	2.5
Tb	ICP-MS	ppm	0.08	3.2	0.70	0.44	<	2.0	0.18	0.24	0.35	0.64	0.97	1.2	1.6
Te	GFAAS	ppb partial	5	45.2	21	38	<	206	<	<	<	6	22	45	63
Th	ICP-MS	ppm	0.13	0	6.2	4.8	0.18	17	0.41	0.85	3.1	4.9	8.7	14	17
Th	ICP-AES	ppm partial	5.6	32.3	9	3	<	18	<	<	<	8	10	14	16
Ti	XRF	ppm	30	0	2982	1794	642	8940	876	1332	1644	2478	3852	4824	7038
Ti	ICP-MS	ppm	10	0	2820	1675	686	7900	962	1290	1663	2290	3660	4492	7233
Ti	ICP-AES	ppm partial	2	0	2181	1713	234	7460	561	606	1047	1830	2473	4970	6369
Tm	ICP-MS	ppm	0.03	3.2	0.40	0.27	<	0.98	0.04	0.08	0.19	0.36	0.54	0.78	0.93
U	ICP-MS	ppm	0.08	0	1.62	2.06	0.15	11.2	0.16	0.28	0.65	1.06	2.01	2.57	5.36
V	XRF	ppm	6	0	82	67	10	306	11	16	31	68	123	148	229
V	ICP-MS	ppm	2	3.2	62	60	<	252	2.7	5.2	16	47	93	130	213
V	ICP-AES	ppm partial	0.6	0	53	55	0.8	229	1.8	3.5	16	41	71	113	202
Y	XRF	ppm	2.8	3.2	28	18	<	74	3	6	13	29	39	51	63
Y	ICP-MS	ppm	0.1	0	27	17	1.7	69	3.8	6.6	13	27	34	51	63
Y	ICP-AES	ppm partial	0.15	0	8.0	9.9	0.90	47	1.0	1.6	3.1	5.5	9.2	12	38
Yb	ICP-MS	ppm	0.22	3.2	2.8	1.8	<	6.8	0.30	0.50	1.2	2.5	3.6	5.4	6.6
Zn	XRF	ppm	4	0	83	51	23	241	26	28	52	68	91	164	177
Zn	ICP-AES	ppm partial	2	0	61	37	12	144	15	19	30	59	74	128	141
Zr	XRF	ppm	6	0	203	132	63	616	80	95	110	162	245	362	566
Zr	ICP-MS	ppm	3	0	178	111	49	568	78	83	97	149	214	338	388

Table 75. Chemical concentration summary statistics for map unit 84.

Map unit	84	Granite (2.6 - 2.5 Ga)
Number of samples	9	
Unit area	288.7	km^2
Percent of bedrock	0.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

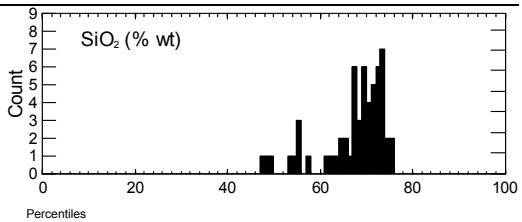


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	70.40	4.88	61.00	76.70	-	-	-	70.80	-	-	-
TiO_2	XRF	%	0.005	0	0.40	0.32	0.06	1.05	-	-	-	0.39	-	-	-
Al_2O_3	XRF	%	0.02	0	14.23	0.67	13.00	15.30	-	-	-	14.10	-	-	-
FeO	XRF	%	0.01	0	2.67	1.73	0.68	5.44	-	-	-	2.51	-	-	-
MnO	XRF	%	0.012	0	0.052	0.032	0.021	0.108	-	-	-	0.040	-	-	-
MgO	XRF	%	0.09	11.1	1.08	1.12	<	3.31	<	<	-	0.77	-	-	-
CaO	XRF	%	0.004	0	2.05	1.19	0.46	4.66	-	-	-	2.01	-	-	-
Na_2O	XRF	%	0.05	0	3.91	0.49	3.28	4.68	-	-	-	3.82	-	-	-
K_2O	XRF	%	0.003	0	4.09	1.23	1.65	5.56	-	-	-	4.14	-	-	-
P_2O_5	XRF	%	0.024	11.1	0.152	0.112	<	0.334	<	<	-	0.145	-	-	-
C_{tot}	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	33.3	0.11	0.06	<	0.25	<	<	<	0.08	-	-	-
Al	XRF	ppm	106	0	75293	3539	68770	80937	-	-	-	74589	-	-	-
Al	ICP-AES	ppm partial	1100	0	9200	5923	1900	18600	-	-	-	7900	-	-	-
As	GFAAS	ppm partial	3	100	-	-	<	<	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	100	-	-	<	<	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	100	-	-	<	<	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	698	268	466	1199	-	-	-	621	-	-	-
Ba	ICP-AES	ppm partial	10	0	50	25	19	94	-	-	-	46	-	-	-
Bi	GFAAS	ppm partial	0.04	44.4	0.06	0.06	<	0.20	<	<	<	0.04	-	-	-
Ca	XRF	ppm	29	0	14650	8501	3268	33319	-	-	-	14372	-	-	-
Ca	ICP-AES	ppm partial	50	0	3811	2860	200	10000	-	-	-	3500	-	-	-
Ce	ICP-MS	ppm	0.22	0	95	51	20	167	-	-	-	116	-	-	-
Cl	XRF	ppm	45	0	136	70	50	280	-	-	-	140	-	-	-
Co	ICP-MS	ppm	2	22.2	7.2	5.6	<	18	<	<	-	5.9	-	-	-
Co	ICP-AES	ppm partial	0.9	0	6.8	5.4	0.9	17	-	-	-	6.0	-	-	-
Cr	XRF	ppm	19	33.3	39	39	<	126	<	<	<	20	-	-	-
Cr	ICP-AES	ppm partial	5	44.4	23	29	<	78	<	<	<	7.7	-	-	-
Cu	XRF	ppm	17	55.6	-	-	<	50	<	<	<	<	21	-	-
Cu	ICP-AES	ppm partial	3	33.3	12	14	<	43	<	<	<	4.9	-	-	-
Dy	ICP-MS	ppm	0.55	0	2.7	1.4	0.9	5.4	-	-	-	2.8	-	-	-
Er	ICP-MS	ppm	0.3	0	1.4	0.8	0.4	2.9	-	-	-	1.6	-	-	-
Eu	ICP-MS	ppm	0.09	0	0.79	0.45	0.20	1.7	-	-	-	0.69	-	-	-
Fe	XRF	ppm	78	0	20746	13465	5284	42269	-	-	-	19503	-	-	-
Fe	ICP-AES	ppm partial	2300	0	21244	12726	4800	47600	-	-	-	18200	-	-	-
Ga	XRF	ppm	10	0	24	4	19	33	-	-	-	24	-	-	-
Gd	ICP-MS	ppm	0.5	0	4.3	2.1	1.2	7.3	-	-	-	4.5	-	-	-
Hf	ICP-MS	ppm	0.12	0	4.90	2.12	1.99	7.56	-	-	-	4.94	-	-	-
Ho	ICP-MS	ppm	0.09	0	0.50	0.27	0.16	0.99	-	-	-	0.56	-	-	-
K	XRF	ppm	25	0	33914	10168	13695	46148	-	-	-	34362	-	-	-
K	ICP-AES	ppm partial	100	0	5411	4547	600	14800	-	-	-	3000	-	-	-
La	ICP-MS	ppm	0.55	0	48	26	9.4	83	-	-	-	55	-	-	-
La	ICP-AES	ppm partial	1.3	0	47	28	2.5	86	-	-	-	51	-	-	-
Li	ICP-AES	ppm partial	3.5	0	30.2	20.4	5.3	68.5	-	-	-	28.7	-	-	-
Lu	ICP-MS	ppm	0.03	0	0.19	0.10	0.07	0.37	-	-	-	0.19	-	-	-
Mg	XRF	ppm	543	11.1	6524	6748	<	19959	<	<	-	4643	-	-	-
Mg	ICP-AES	ppm partial	50	0	6333	5987	300	17200	-	-	-	4700	-	-	-
Mn	XRF	ppm	93	0	403	248	163	837	-	-	-	310	-	-	-
Mn	ICP-AES	ppm partial	50	0	312	205	91	752	-	-	-	282	-	-	-
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	29005	3614	24338	34726	-	-	-	28344	-	-	-
Na	ICP-AES	ppm partial	150	0	522	44	500	600	-	-	-	500	-	-	-
Nb	XRF	ppm	7	11.1	11	4	<	16	<	<	-	8	-	-	-
Nb	ICP-MS	ppm	0.16	0	9.0	3.8	4.8	16	-	-	-	8.0	-	-	-
Nd	ICP-MS	ppm	0.2	0	36	20	6.9	66	-	-	-	42	-	-	-
Ni	XRF	ppm	14	77.8	-	-	<	36	<	<	<	<	<	-	-
Ni	ICP-AES	ppm partial	3.5	11.1	10	9.6	<	29	<	<	-	6.0	-	-	-
P	XRF	ppm	105	0	663	488	<	1456	<	<	-	632	-	-	-
P	ICP-AES	ppm partial	6	11.1	600	426	<	1270	<	<	-	547	-	-	-
Pb	XRF	ppm	14	0	41	17	22	74	-	-	-	40	-	-	-
Pb	ICP-AES	ppm partial	8.7	44.4	13	9	<	34	<	<	<	9	-	-	-
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	10.4	5.6	2.0	19.0	-	-	-	12.9	-	-	-
Rb	XRF	ppm	5.5	0	177	76	58	287	-	-	-	178	-	-	-
Rb	ICP-MS	ppm	0.6	0	169	75	55	297	-	-	-	182	-	-	-
S	XRF	ppm	70	88.9	-	-	<	70	<	<	<	<	<	-	-
S	ICP-AES	ppm partial	14.3	44.4	45	55	<	174	<	<	<	17	-	-	-
Sc	ICP-MS	ppm	2.8	22.2	6.0	4.0	<	13	<	<	-	4.4	-	-	-
Sc	ICP-AES	ppm partial	0.4	0	3.0	2.4	0.40	8.0	-	-	-	2.0	-	-	-
Se	GFAAS	ppm partial	0.055	100	-	-	<	<	<	<	<	<	<	<	<
Sm	ICP-MS	ppm	0.5	0	5.5	2.9	1.2	9.7	-	-	-	4.7	-	-	-
Sr	XRF	ppm	4	0	239	140	39	453	-	-	-	203	-	-	-
Sr	ICP-AES	ppm partial	1.2	0	13	7.9	1.8	25	-	-	-	14	-	-	-
Ta	ICP-MS	ppm	0.06	0	0.62	0.52	0.10	1.8	-	-	-	0.42	-	-	-
Tb	ICP-MS	ppm	0.08	0	0.56	0.29	0.15	1.0	-	-	-	0.60	-	-	-
Te	GFAAS	ppb partial	5	88.9	-	-	<	10	<	<	<	<	<	-	-
Th	ICP-MS	ppm	0.13	0	18	13	1.3	41	-	-	-	15	-	-	-
Th	ICP-AES	ppm partial	5.6	22.2	27	14	<	54	<	<	-	28	-	-	-
Ti	XRF	ppm	30	0	2382	1914	330	6300	-	-	-	2310	-	-	-
Ti	ICP-MS	ppm	10	0	2195	1613	346	5250	-	-	-	2360	-	-	-
Ti	ICP-AES	ppm partial	2	0	1718	1303	68	4140	-	-	-	1780	-	-	-
Tm	ICP-MS	ppm	0.03	0	0.20	0.11	0.07	0.41	-	-	-	0.22	-	-	-
U	ICP-MS	ppm	0.08	0	2.32	1.59	0.21	4.73	-	-	-	2.03	-	-	-
V	XRF	ppm	6	11.1	56	47	<	138	<	<	-	49	-	-	-
V	ICP-MS	ppm	2	0	37	35	2.1	100	-	-	-	32	-	-	-
V	ICP-AES	ppm partial	0.6	0	33	28	1.4	88	-	-	-	26	-	-	-
Y	XRF	ppm	2.8	0	17	8	6	31	-	-	-	16	-	-	-
Y	ICP-MS	ppm	0.1	0	16	8.3	5.5	30	-	-	-	17	-	-	-
Y	ICP-AES	ppm partial	0.15	0	9.7	6.0	1.9	19	-	-	-	7.9	-	-	-
Yb	ICP-MS	ppm	0.22	0	1.3	0.75	0.42	2.6	-	-	-	1.6	-	-	-
Zn	XRF	ppm	4	0	51	22	21	87	-	-	-	56	-	-	-
Zn	ICP-AES	ppm partial	2	0	46	24	18	97	-	-	-	51	-	-	-
Zr	XRF	ppm	6	0	212	108	52	366	-	-	-	199	-	-	-
Zr	ICP-MS	ppm	3	0	190	99	42	311	-	-	-	180	-	-	-

Table 76. Chemical concentration summary statistics for map unit 85.

Map unit	85	Gneisses and migmatites
Number of samples	58	
Unit area	3786.1	km^2
Percent of bedrock	1.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

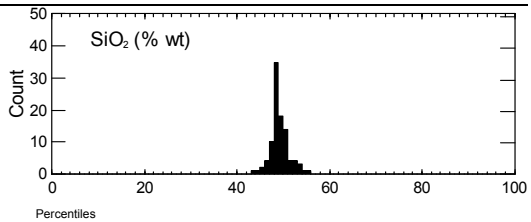


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	67.42	7.09	47.70	75.70	51.32	55.16	65.30	69.75	72.30	73.64	74.68
TiO_2	XRF	%	0.005	0	0.50	0.31	0.10	1.36	0.16	0.20	0.26	0.41	0.70	1.05	1.13
Al_2O_3	XRF	%	0.02	0	15.31	2.20	12.10	24.30	13.10	13.33	14.00	14.90	16.00	17.51	20.68
FeO	XRF	%	0.01	0	3.94	2.64	0.93	12.20	1.13	1.38	1.92	3.00	5.17	7.39	9.64
MnO	XRF	%	0.012	0	0.064	0.040	0.016	0.198	0.019	0.020	0.034	0.054	0.089	0.120	0.152
MgO	XRF	%	0.09	0	1.38	1.39	0.17	7.91	0.26	0.34	0.58	0.94	1.68	2.73	4.54
CaO	XRF	%	0.004	0	3.30	2.07	0.62	11.80	0.88	1.08	1.91	3.01	3.93	5.76	7.57
Na_2O	XRF	%	0.05	0	4.20	0.97	1.07	6.03	2.95	3.13	3.44	4.22	4.80	5.64	5.91
K_2O	XRF	%	0.003	0	2.67	1.55	0.27	6.11	1.00	1.08	1.49	1.96	4.01	5.11	5.40
P_2O_5	XRF	%	0.024	0	0.147	0.099	0.024	0.479	0.034	0.048	0.077	0.122	0.188	0.299	0.340
C_{tot}	Leco	%	0.05	98.3	-	-	<	0.11	<	<	<	<	<	<	<
$C_{non\text{-}carb}$	Leco	%	0.05	98.3	-	-	<	0.09	<	<	<	<	<	<	<
F	Ion	%	0.055	44.8	0.09	0.06	<	0.31	<	<	<	0.06	0.09	0.16	0.22
Al	XRF	ppm	106	0	80963	11659	64009	128547	69299	70516	74060	78821	84640	92628	109397
Al	ICP-AES	ppm partial	1100	0	12218	9327	2640	63100	3880	5148	7700	10300	13200	20430	29900
As	GFAAS	ppm partial	3	98.3	-	-	<	4.4	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	94.8	-	-	<	7.4	<	<	<	<	<	<	1.7
B	ICP-AES	ppm partial	4.5	96.6	-	-	<	6	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	517	358	51	2398	143	218	313	416	664	913	1058
Ba	ICP-AES	ppm partial	10	1.7	107	103	<	537	16	20	45	74	144	232	276
Bi	GFAAS	ppm partial	0.04	67.2	*0.08*	*0.22*	<	1.1	<	<	<	<	0.05	0.15	0.48
Ca	XRF	ppm	29	0	23581	14829	4419	84370	6263	7722	13657	21522	28100	41177	54111
Ca	ICP-AES	ppm partial	50	0	5443	6384	900	46100	1200	1420	2490	3580	6200	11660	12460
Ce	ICP-MS	ppm	0.22	0	75	50	6.8	242	17	35	42	59	99	139	173
Cl	XRF	ppm	45	12.1	113	76	<	450	<	<	61	90	150	208	248
Co	ICP-MS	ppm	2	17.2	9.9	10	<	44	<	<	3.2	6.5	11	23	38
Co	ICP-AES	ppm partial	0.9	0	8.8	6.0	1.5	33	2.0	3.0	4.9	7.7	10	17	21
Cr	XRF	ppm	19	39.7	38	50	<	278	<	<	<	20	26	75	166
Cr	ICP-AES	ppm partial	5	20.7	19	33	<	161	<	<	5.5	7.2	13	39	114
Cu	XRF	ppm	17	62.1	*23*	*30*	<	171	<	<	<	<	28	60	89
Cu	ICP-AES	ppm partial	3	5.2	25	32	<	191	<	3.5	5.4	15	34	64	84
Dy	ICP-MS	ppm	0.55	1.7	3.4	2.7	<	13	0.6	0.9	1.5	2.1	4.9	6.5	9.0
Er	ICP-MS	ppm	0.3	6.9	1.8	1.6	<	8.1	<	0.4	0.7	1.2	3.1	3.7	4.8
Eu	ICP-MS	ppm	0.09	0	0.90	0.42	0.30	2.3	0.35	0.39	0.61	0.75	1.2	1.4	1.6
Fe	XRF	ppm	78	0	30622	20536	7226	94794	8811	10730	14895	23318	40202	57397	74895
Fe	ICP-AES	ppm partial	2300	0	25056	12235	7200	55800	8520	10310	16600	23100	32700	41140	52280
Ga	XRF	ppm	10	0	25	4	13	38	18	21	22	25	27	29	32
Gd	ICP-MS	ppm	0.5	1.7	4.5	2.9	<	12.6	1.1	1.8	2.2	3.7	6.6	8.8	10.6
Hf	ICP-MS	ppm	0.12	0	4.86	2.79	0.34	15.8	1.67	2.09	3.03	3.97	6.26	8.05	9.88
Ho	ICP-MS	ppm	0.09	3.4	0.65	0.54	<	2.6	0.10	0.16	0.26	0.42	1.0	1.3	1.7
K	XRF	ppm	25	0	22128	12824	2274	50713	8267	8931	12367	16268	33283	42380	44837
K	ICP-AES	ppm partial	100	0	6390	4498	282	22200	940	1230	3220	5695	8280	11693	15180
La	ICP-MS	ppm	0.55	0	38	26	3.2	137	9.4	16	20	29	48	69	87
La	ICP-AES	ppm partial	1.3	0	35	28	2.2	146	6.3	9.8	20	26	41	68	94
Li	ICP-AES	ppm partial	3.5	1.7	26.6	18.4	<	99.5	7.4	10.7	12.8	22.5	30.6	46.1	71.0
Lu	ICP-MS	ppm	0.03	3.4	0.24	0.20	<	0.92	0.03	0.05	0.08	0.15	0.38	0.48	0.58
Mg	XRF	ppm	543	0	8333	8358	1025	47697	1592	2026	3497	5692	10130	16474	27352
Mg	ICP-AES	ppm partial	50	0	6191	4482	1200	22600	1490	1930	3090	5290	7200	13310	16180
Mn	XRF	ppm	93	0	496	310	124	1535	147	155	264	419	690	930	1178
Mn	ICP-AES	ppm partial	50	0	298	134	80	686	105	120	200	288	398	485	504
Mo	XRF	ppm	2.6	89.7	-	-	<	8	<	<	<	<	<	2	4
Mo	ICP-AES	ppm partial	2.6	91.4	-	-	<	6	<	<	<	<	<	<	3
Na	XRF	ppm	371	0	31142	7183	7939	44743	21874	23195	25525	31312	35616	41827	43823
Na	ICP-AES	ppm partial	150	0	859	753	300	6100	400	400	500	782	960	1223	1340
Nb	XRF	ppm	7	44.8	10	4	<	30	<	<	<	8	11	16	18
Nb	ICP-MS	ppm	0.16	0	8.3	5.1	1.1	29	2.2	3.4	4.7	6.8	11	14	18
Nd	ICP-MS	ppm	0.2	0	30	18	3.7	91	7.3	12	16	24	40	59	62
Ni	XRF	ppm	14	63.8	*20*	*37*	<	203	<	<	<	<	19	58	81
Ni	ICP-AES	ppm partial	3.5	10.3	16	25	<	149	<	<	6.0	8.6	15	27	81
P	XRF	ppm	105	0	641	432	105	2088	148	209	336	532	820	1304	1482
P	ICP-AES	ppm partial	6	0	585	403	41	1960	84	198	304	492	797	1186	1336
Pb	XRF	ppm	14	0	28	11	15	71	17	18	20	24	37	46	49
Pb	ICP-AES	ppm partial	8.7	86.2	-	-	<	16	<	<	<	<	<	10	12
Pd	GFAAS	ppb partial	5	96.6	-	-	<	10	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	8.4	5.4	0.86	26.3	2.0	3.6	4.6	7.0	11.5	16.2	19.1
Rb	XRF	ppm	5.5	1.7	111	73	<	309	23	32	59	87	176	223	242
Rb	ICP-MS	ppm	0.6	0	110	69	2.0	294	25	37	59	90	166	207	245
S	XRF	ppm	70	63.8	*184*	*368*	<	1820	<	<	<	<	180	431	1010
S	ICP-AES	ppm partial	14.3	12.1	244	426	<	2110	<	<	40	81	221	547	1304
Sc	ICP-MS	ppm	2.8	13.8	10	8.7	<	43	<	<	3.8	6.7	14	24	29
Sc	ICP-AES	ppm partial	0.4	1.7	3.8	2.6	<	11	0.95	1.2	1.8	2.9	5.2	7.8	8.4
Se	GFAAS	ppm partial	0.055	87.9	-	-	<	0.27	<	<	<	<	<	0.09	0.17
Sm	ICP-MS	ppm	0.5	0	5.0	3.0	0.67	14	1.2	2.1	2.7	4.6	6.6	9.7	11
Sr	XRF	ppm	4	0	297	174	99	970	113	131	166	232	433	553	572
Sr	ICP-AES	ppm partial	1.2	0	10	8.9	2.6	65	3.3	4.6	6.6	8.8	12	13	24
Ta	ICP-MS	ppm	0.06	0	0.64	0.66	0.06	4.8	0.13	0.20	0.33	0.48	0.76	1.1	1.5
Tb	ICP-MS	ppm	0.08	1.7	0.63	0.45	<	2.1	0.15	0.19	0.30	0.45	0.93	1.2	1.6
Te	GFAAS	ppb partial	5	79.3	*5*	*16*	<	106	<	<	<	<	<	11	23
Th	ICP-MS	ppm	0.13	0	12	14	0.36	59	0.80	1.7	3.6	7.3	15	36	45
Th	ICP-AES	ppm partial	5.6	19	17	17	<	65	<	<	6	11	17	47	61
Ti	XRF	ppm	30	0	3012	1872	576	8160	936	1194	1548	2472	4170	6294	6804
Ti	ICP-MS	ppm	10	0	2925	1827	585	7370	918	1136	1460	2370	3930	6006	7064
Ti	ICP-AES	ppm partial	2	0	1989	1157	341	5740	537	597	1340	1710	2440	3522	4646
Tm	ICP-MS	ppm	0.03	5.2	0.26	0.23	<	1.20	<	0.04	0.08	0.16	0.43	0.51	0.64
U	ICP-MS	ppm	0.08	0	2.16	3.29	0.18	21.3	0.25	0.31	0.50	1.11	2.01	5.81	7.67
V	XRF	ppm	6	0	76	62	10	255	14	20	33	57	100	162	237
V	ICP-MS	ppm	2	0	57	55	3.2	231	9.2	11	19	39	64	131	200
V	ICP-AES	ppm partial	0.6	0	41	33	2.4	184	4.7	11	17	33	48	77	116
Y	XRF	ppm	2.8	3.4	20	15	<	76	3	6	9	14	29	38	50
Y	ICP-MS	ppm	0.1	0	20	17	1.4	79	3.0	5.3	7.4	13	30	40	52
Y	ICP-AES	ppm partial	0.15	0	9.7	9.3	1.1	56	1.6	2.0	3.3	6.8	14	20	27
Yb	ICP-MS	ppm	0.22	5.2	1.7	1.5	<	7.2	<	0.32	0.56	1.0	2.8	3.4	4.3
Zn	XRF	ppm	4	0	69	28	24	144	29	33	52	65	86	105	115
Zn	ICP-AES	ppm partial	2	0	50	21	9.4	107	19	24	35	47	64	81	88
Zr	XRF	ppm	6	0	214	121	17	651	71	95	125	187	291	381	430
Zr	ICP-MS	ppm	3	0	195	115	13	661	64	79	111	173	267	340	393

Table 77. Chemical concentration summary statistics for map unit 101.

Map unit	**101**	**Diabase (2.50 - 1.97 Ga)**
Number of samples	98	
Unit area	3851.6	km^2
Percent of bedrock	1.1	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

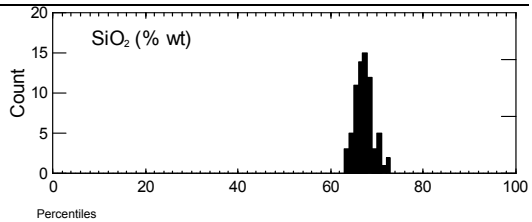


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	**0.02**	0	**49.19**	1.97	43.50	55.60	46.22	47.06	48.20	**48.80**	50.10	51.81	52.96
TiO_2	XRF	%	**0.005**	0	**1.59**	0.62	0.21	3.22	0.53	0.73	1.25	**1.55**	2.06	2.50	2.61
Al_2O_3	XRF	%	**0.02**	0	**13.15**	2.58	3.13	22.00	6.99	10.28	12.60	**13.60**	14.40	15.20	16.24
FeO	XRF	%	**0.01**	0	**13.08**	2.56	5.03	20.20	8.67	10.26	11.43	**13.50**	14.70	15.77	16.61
MnO	XRF	%	**0.012**	0	**0.211**	0.060	0.036	0.551	0.105	0.129	0.192	**0.215**	0.239	0.254	0.282
MgO	XRF	%	**0.09**	0	**6.67**	3.59	1.51	25.80	3.66	4.03	4.79	**5.73**	7.22	10.58	12.02
CaO	XRF	%	**0.004**	0	**9.03**	1.88	0.43	12.70	6.06	6.59	8.40	**9.28**	9.79	11.34	11.96
Na_2O	XRF	%	**0.05**	1	**2.62**	0.82	<	5.77	1.24	1.75	2.28	**2.62**	2.87	3.50	4.31
K_2O	XRF	%	**0.003**	0	**0.68**	0.50	0.03	3.88	0.21	0.26	0.38	**0.58**	0.81	1.19	1.54
P_2O_5	XRF	%	**0.024**	1	**0.181**	0.112	<	0.721	0.052	0.066	0.105	**0.166**	0.216	0.307	0.374
C_{tot}	Leco	%	**0.05**	81.6	**-**	-	<	1.2	<	<	<	**<**	<	0.09	0.19
$C_{non\text{-}carb}$	Leco	%	**0.05**	95.9	**-**	-	<	0.05	<	<	<	**<**	<	<	<
F	Ion	%	**0.055**	90.8	**-**	-	<	0.10	<	<	<	**<**	<	<	0.06
Al	XRF	ppm	**106**	0	**69585**	13638	16558	116380	36998	54381	66654	**71944**	76176	80408	85910
Al	ICP-AES	ppm partial	**1100**	1	**14053**	8224	<	53400	3720	5580	9600	**11800**	17300	25710	29120
As	GFAAS	ppm partial	**3**	96.9	**-**	-	<	9.6	<	<	<	**<**	<	<	<
Au	GFAAS	ppb partial	**2.5**	60.2	***2.9***	*1.8*	<	9.5	<	<	<	**<**	3.8	5.6	6.5
B	ICP-AES	ppm partial	**4.5**	94.9	**-**	-	<	8	<	<	<	**<**	<	<	3
Ba	XRF	ppm	**21**	2	**196**	155	<	807	44	56	101	**153**	239	378	571
Ba	ICP-AES	ppm partial	**10**	5.1	**112**	151	<	787	<	16	26	**59**	122	273	467
Bi	GFAAS	ppm partial	**0.04**	87.8	**-**	-	<	0.30	<	<	<	**<**	<	0.04	0.06
Ca	XRF	ppm	**29**	0	**64536**	13413	3082	90805	43315	47083	60060	**66352**	69999	81081	85514
Ca	ICP-AES	ppm partial	**50**	0	**11336**	5422	1400	45800	4540	6330	8500	**10900**	13500	16000	17520
Ce	ICP-MS	ppm	**0.22**	0	**27**	14	5.2	71	8.1	11	19	**25**	33	47	58
Cl	XRF	ppm	**45**	1	**714**	1028	<	5880	64	90	150	**395**	870	1571	1820
Co	ICP-MS	ppm	**2**	0	**50**	12	3.0	107	38	42	45	**49**	53	62	71
Co	ICP-AES	ppm partial	**0.9**	0	**18**	10	4.9	65	7.2	8.9	12	**15**	21	32	40
Cr	XRF	ppm	**19**	7.1	**202**	450	<	3170	<	23	51	**86**	173	292	449
Cr	ICP-AES	ppm partial	**5**	6.1	**46**	161	<	1520	<	5.7	8.3	**14**	26	60	131
Cu	XRF	ppm	**17**	3.1	**177**	121	<	543	23	41	89	**139**	261	354	392
Cu	ICP-AES	ppm partial	**3**	0	**164**	116	4.0	536	18	35	75	**136**	238	327	351
Dy	ICP-MS	ppm	**0.55**	0	**4.8**	2.0	1.0	10	1.7	2.5	3.5	**4.8**	6.0	7.4	8.6
Er	ICP-MS	ppm	**0.3**	0	**2.8**	1.2	0.3	6.0	0.9	1.5	1.9	**2.8**	3.5	4.4	5.1
Eu	ICP-MS	ppm	**0.09**	0	**1.3**	0.53	0.28	3.2	0.52	0.67	1.1	**1.3**	1.5	2.0	2.4
Fe	XRF	ppm	**78**	0	**101601**	19899	39083	156954	67381	79720	88796	**104895**	114219	122533	129036
Fe	ICP-AES	ppm partial	**2300**	0	**32255**	18015	4600	101000	9560	14150	20900	**28850**	40100	54200	66480
Ga	XRF	ppm	**10**	3.1	**23**	5	<	40	13	16	20	**24**	26	29	32
Gd	ICP-MS	ppm	**0.5**	0	**5.0**	2.1	1.0	11.6	1.9	2.3	3.9	**4.8**	6.0	7.2	8.8
Hf	ICP-MS	ppm	**0.12**	0	**2.83**	1.33	0.24	8.22	0.93	1.30	2.11	**2.74**	3.45	4.26	5.60
Ho	ICP-MS	ppm	**0.09**	0	**0.98**	0.41	0.18	2.1	0.33	0.50	0.70	**0.97**	1.2	1.5	1.8
K	XRF	ppm	**25**	0	**5603**	4175	224	32204	1751	2125	3154	**4839**	6682	9902	12815
K	ICP-AES	ppm partial	**100**	0	**3087**	4413	100	32700	200	430	700	**1610**	3300	7810	10500
La	ICP-MS	ppm	**0.55**	0	**12**	6.9	2.2	33	4.3	4.7	7.5	**11**	15	21	29
La	ICP-AES	ppm partial	**1.3**	7.1	**8.3**	5.7	<	30	<	1.6	3.8	**7.7**	11	16	18
Li	ICP-AES	ppm partial	**3.5**	30.6	**8.6**	7.8	<	34.3	<	<	<	**5.2**	9.4	19.1	31.5
Lu	ICP-MS	ppm	**0.03**	0	**0.38**	0.16	0.05	0.82	0.12	0.19	0.25	**0.38**	0.47	0.60	0.69
Mg	XRF	ppm	**543**	0	**40226**	21648	9105	155574	22046	24277	28884	**34522**	43537	63797	72481
Mg	ICP-AES	ppm partial	**50**	0	**9009**	10116	1400	69300	1900	2060	3700	**6725**	9500	17170	26400
Mn	XRF	ppm	**93**	0	**1635**	465	279	4270	814	1000	1488	**1666**	1852	1969	2186
Mn	ICP-AES	ppm partial	**50**	0	**292**	147	72	997	97	120	192	**284**	364	429	526
Mo	XRF	ppm	**2.6**	100	**-**	-	<	<	<	<	<	**<**	<	<	<
Mo	ICP-AES	ppm partial	**2.6**	96.9	**-**	-	<	5	<	<	<	**<**	<	<	<
Na	XRF	ppm	**371**	1	**19426**	6107	<	42813	9186	12992	16918	**19440**	21295	25933	31995
Na	ICP-AES	ppm partial	**150**	0	**1626**	960	200	5800	300	430	1100	**1500**	2000	3080	3400
Nb	XRF	ppm	**7**	35.7	**10**	4	<	29	<	<	<	**8**	11	14	19
Nb	ICP-MS	ppm	**0.16**	0	**7.4**	4.6	0.20	24	1.7	2.5	4.4	**6.8**	9.4	12	16
Nd	ICP-MS	ppm	**0.2**	0	**16**	7.6	3.3	43	5.3	7.4	12	**16**	20	26	32
Ni	XRF	ppm	**14**	3.1	**114**	152	<	1039	20	34	55	**74**	108	187	275
Ni	ICP-AES	ppm partial	**3.5**	0	**44**	89	4.3	629	9.3	12	17	**25**	36	63	101
P	XRF	ppm	**105**	0	**789**	488	<	3144	227	288	458	**724**	942	1339	1631
P	ICP-AES	ppm partial	**6**	0	**725**	452	28	2980	187	257	441	**654**	872	1230	1516
Pb	XRF	ppm	**14**	17.3	**19**	13	<	134	<	<	14	**17**	20	23	32
Pb	ICP-AES	ppm partial	**8.7**	91.8	**-**	-	<	62	<	<	<	**<**	<	<	9
Pd	GFAAS	ppb partial	**5**	46.9	**10**	7	<	43	<	<	<	**6**	13	21	25
Pr	ICP-MS	ppm	**0.74**	0	**3.7**	1.8	0.76	9.5	1.1	1.6	2.6	**3.5**	4.6	6.0	7.6
Rb	XRF	ppm	**5.5**	10.2	**22**	19	<	108	<	<	10	**18**	25	42	65
Rb	ICP-MS	ppm	**0.6**	0	**20**	18	0.7	95	2.9	4.1	7.8	**15**	24	43	63
S	XRF	ppm	**70**	8.2	**759**	904	<	6620	<	138	274	**515**	960	1555	2028
S	ICP-AES	ppm partial	**14.3**	0	**841**	1058	16	7550	38	130	274	**536**	1050	1645	2332
Sc	ICP-MS	ppm	**2.8**	1	**38**	9.7	<	61	17	24	34	**40**	44	47	52
Sc	ICP-AES	ppm partial	**0.4**	0	**4.4**	2.6	0.50	16	1.1	1.6	2.3	**4.0**	6.4	7.6	8.0
Se	GFAAS	ppm partial	**0.055**	9.2	**0.28**	0.24	<	1.8	<	0.07	0.13	**0.23**	0.36	0.45	0.55
Sm	ICP-MS	ppm	**0.5**	0	**4.2**	1.8	0.67	10	1.5	2.0	3.1	**4.1**	5.0	6.5	7.8
Sr	XRF	ppm	**4**	0	**201**	108	14	894	80	100	149	**190**	226	324	353
Sr	ICP-AES	ppm partial	**1.2**	1	**18**	12	<	63	4.7	6.3	8.1	**14**	24	34	44
Ta	ICP-MS	ppm	**0.06**	4.1	**0.46**	0.28	<	1.5	0.10	0.16	0.28	**0.41**	0.56	0.76	0.99
Tb	ICP-MS	ppm	**0.08**	0	**0.81**	0.33	0.15	1.7	0.28	0.39	0.60	**0.78**	1.0	1.2	1.5
Te	GFAAS	ppb partial	**5**	25.5	**11**	14	<	136	<	<	<	**8**	12	21	25
Th	ICP-MS	ppm	**0.13**	1	**1.9**	1.5	<	8.6	0.35	0.47	0.92	**1.6**	2.6	3.6	4.7
Th	ICP-AES	ppm partial	**5.6**	81.6	**-**	-	<	18	<	<	<	**<**	<	7	10
Ti	XRF	ppm	**30**	0	**9558**	3696	1278	19320	3180	4356	7500	**9300**	12360	14982	15660
Ti	ICP-MS	ppm	**10**	0	**9084**	3663	1050	19000	2308	4313	7090	**9220**	11200	13580	15440
Ti	ICP-AES	ppm partial	**2**	0	**1905**	955	336	5490	576	761	1240	**1785**	2470	3085	3476
Tm	ICP-MS	ppm	**0.03**	0	**0.40**	0.17	0.05	0.88	0.13	0.21	0.28	**0.39**	0.51	0.60	0.73
U	ICP-MS	ppm	**0.08**	5.1	**0.44**	0.39	<	2.12	<	0.10	0.22	**0.34**	0.52	0.76	1.23
V	XRF	ppm	**6**	0	**352**	110	114	883	152	235	283	**353**	409	467	520
V	ICP-MS	ppm	**2**	0	**310**	108	15	874	121	209	246	**313**	354	413	476
V	ICP-AES	ppm partial	**0.6**	0	**104**	63	9.2	331	23	40	64	**86**	130	195	227
Y	XRF	ppm	**2.8**	0	**27**	11	4	56	10	13	19	**27**	33	42	47
Y	ICP-MS	ppm	**0.1**	0	**29**	12	4.2	60	9.3	15	20	**29**	37	44	53
Y	ICP-AES	ppm partial	**0.15**	0	**7.9**	4.5	0.30	24	1.4	2.3	4.8	**7.3**	11	13	15
Yb	ICP-MS	ppm	**0.22**	0	**2.6**	1.1	0.35	5.7	0.78	1.3	1.8	**2.6**	3.3	3.9	4.6
Zn	XRF	ppm	**4**	0	**128**	65	19	622	46	67	97	**128**	151	167	195
Zn	ICP-AES	ppm partial	**2**	0	**34**	30	2.9	275	7.0	11	21	**29**	39	57	68
Zr	XRF	ppm	**6**	0	**127**	61	9	296	37	50	90	**120**	162	203	259
Zr	ICP-MS	ppm	**3**	0	**108**	55	7.1	368	33	44	77	**103**	131	164	219

Table 78. Chemical concentration summary statistics for map unit 281.

Map unit	281	Granite
Number of samples	71	
Unit area	4500.0	km^2
Percent of bedrock	1.3	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations

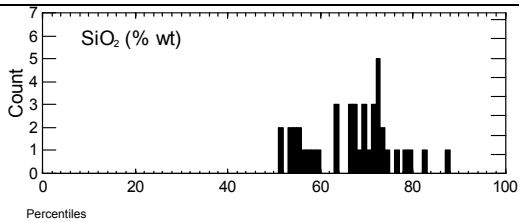


Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	67.28	1.94	63.40	72.30	64.22	64.66	65.90	67.20	68.60	70.00	70.39
TiO_2	XRF	%	0.005	0	0.67	0.16	0.28	1.14	0.41	0.44	0.54	0.67	0.77	0.86	0.93
Al_2O_3	XRF	%	0.02	0	14.92	0.62	13.40	16.60	14.10	14.30	14.50	14.80	15.18	15.78	16.39
FeO	XRF	%	0.01	0	4.43	0.91	2.31	6.74	2.69	3.11	3.88	4.54	4.89	5.51	5.79
MnO	XRF	%	0.012	0	0.054	0.015	0.022	0.099	0.031	0.035	0.045	0.052	0.064	0.075	0.084
MgO	XRF	%	0.09	0	1.84	0.45	0.94	3.24	1.09	1.23	1.52	1.83	2.15	2.37	2.60
CaO	XRF	%	0.004	0	2.24	0.55	1.19	3.74	1.48	1.51	1.83	2.13	2.58	3.00	3.31
Na_2O	XRF	%	0.05	0	3.09	0.41	2.41	4.30	2.63	2.67	2.82	2.99	3.25	3.68	4.05
K_2O	XRF	%	0.003	0	3.61	0.61	2.11	4.90	2.39	2.67	3.38	3.76	3.95	4.33	4.57
P_2O_5	XRF	%	0.024	0	0.163	0.070	0.041	0.376	0.069	0.080	0.104	0.160	0.211	0.254	0.285
C_{tot}	Leco	%	0.05	64.8	*0.07*	*0.07*	<	0.29	<	<	<	<	0.09	0.17	0.24
$C_{non\text{-}carb}$	Leco	%	0.05	53.5	*0.06*	*0.06*	<	0.26	<	<	<	<	0.08	0.16	0.21
F	Ion	%	0.055	9.9	0.10	0.04	<	0.24	<	0.04	0.07	0.09	0.11	0.15	0.18
Al	XRF	ppm	106	0	78900	3280	70886	87814	74589	75647	76705	78292	80276	83476	86677
Al	ICP-AES	ppm partial	1100	0	23023	4858	12200	32300	13820	14820	19900	23500	26650	29200	29680
As	GFAAS	ppm partial	3	70.4	*2.4*	*1.9*	<	11	<	<	<	<	3.1	4.5	6.4
Au	GFAAS	ppb partial	2.5	97.2	-	-	<	5.7	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	97.2	-	-	<	5	<	<	<	<	<	<	<
Ba	XRF	ppm	21	0	617	213	106	1352	255	352	507	622	734	830	951
Ba	ICP-AES	ppm partial	10	0	146	101	33	534	46	63	79	115	169	272	295
Bi	GFAAS	ppm partial	0.04	12.7	0.11	0.08	<	0.40	<	<	0.05	0.08	0.13	0.24	0.29
Ca	XRF	ppm	29	0	15980	3954	8509	26741	10582	10768	13106	15230	18411	21479	23652
Ca	ICP-AES	ppm partial	50	0	2210	916	900	4600	1000	1100	1500	2100	2975	3340	3795
Ce	ICP-MS	ppm	0.22	0	83	32	23	177	37	44	63	80	98	124	140
Cl	XRF	ppm	45	2.8	118	82	<	460	50	50	70	90	140	220	289
Co	ICP-MS	ppm	2	0	12	3.9	4.9	22	6.0	7.0	9.5	12	14	18	19
Co	ICP-AES	ppm partial	0.9	0	13	3.1	6.0	19	7.5	8.3	10	13	15	17	17
Cr	XRF	ppm	19	0	74	26	24	156	33	40	57	77	92	102	111
Cr	ICP-AES	ppm partial	5	0	62	24	16	134	22	30	45	65	78	89	96
Cu	XRF	ppm	17	25.4	27	10	<	73	<	<	<	26	32	38	40
Cu	ICP-AES	ppm partial	3	1.4	24	12	<	79	6.1	8.0	18	24	31	37	41
Dy	ICP-MS	ppm	0.55	0	3.8	1.5	1.2	9.9	1.7	2.0	2.6	4.0	4.8	5.6	6.0
Er	ICP-MS	ppm	0.3	0	1.8	0.9	0.4	5.7	0.6	0.7	1.3	1.7	2.3	2.9	3.6
Eu	ICP-MS	ppm	0.09	0	1.0	0.22	0.58	1.6	0.67	0.77	0.88	1.0	1.2	1.3	1.4
Fe	XRF	ppm	78	0	34382	7055	17949	52370	20909	24180	30148	35276	37995	42828	45004
Fe	ICP-AES	ppm partial	2300	0	39093	7865	20500	57100	24065	28120	34325	39800	44675	49200	51480
Ga	XRF	ppm	10	0	26	3	20	35	21	22	24	25	28	30	31
Gd	ICP-MS	ppm	0.5	0	6.0	2.0	2.0	12.1	2.9	3.4	4.8	6.2	7.2	8.0	9.2
Hf	ICP-MS	ppm	0.12	0	4.85	1.22	2.38	8.79	3.07	3.45	3.89	4.88	5.57	6.33	6.73
Ho	ICP-MS	ppm	0.09	0	0.69	0.32	0.21	2.1	0.26	0.30	0.44	0.71	0.85	1.0	1.2
K	XRF	ppm	25	0	29955	5030	17513	40670	19862	22178	28071	31208	32785	35972	37931
K	ICP-AES	ppm partial	100	0	15238	3361	7300	22500	8520	10640	13125	16000	17475	19340	20190
La	ICP-MS	ppm	0.55	0	40	16	11	90	18	23	30	39	49	61	68
La	ICP-AES	ppm partial	1.3	0	25	14	8.9	101	12	13	19	23	28	40	46
Li	ICP-AES	ppm partial	3.5	0	33.6	9.8	17.4	58.5	18.5	20.5	27.4	32.5	39.9	46.2	52.2
Lu	ICP-MS	ppm	0.03	0	0.24	0.13	0.03	0.64	0.06	0.10	0.15	0.23	0.28	0.41	0.47
Mg	XRF	ppm	543	0	11065	2738	5668	19537	6579	7393	9184	11035	12952	14315	15648
Mg	ICP-AES	ppm partial	50	0	12275	3041	5900	21400	7400	8040	10025	12400	14200	15940	16770
Mn	XRF	ppm	93	0	419	116	171	767	240	271	349	403	496	581	651
Mn	ICP-AES	ppm partial	50	0	337	106	157	687	201	209	239	341	387	474	511
Mo	XRF	ppm	2.6	100	-	-	<	<	<	<	<	<	<	<	<
Mo	ICP-AES	ppm partial	2.6	95.8	-	-	<	5	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	22898	3020	17882	31906	19522	19797	20939	22186	24115	27276	30014
Na	ICP-AES	ppm partial	150	0	652	178	400	1700	500	500	600	600	700	800	900
Nb	XRF	ppm	7	2.8	16	4	<	28	8	10	13	17	19	22	23
Nb	ICP-MS	ppm	0.16	0	14	4.1	4.3	28	6.3	8.3	12	14	16	19	20
Nd	ICP-MS	ppm	0.2	0	36	13	11	80	16	21	28	35	43	53	62
Ni	XRF	ppm	14	9.9	35	32	<	286	<	9	22	32	40	45	52
Ni	ICP-AES	ppm partial	3.5	0	29	11	4.8	48	8.6	15	22	31	37	44	45
P	XRF	ppm	105	0	711	305	179	1639	301	349	453	698	920	1107	1243
P	ICP-AES	ppm partial	6	0	540	319	79	1400	120	146	243	536	779	988	1115
Pb	XRF	ppm	14	0	35	9	18	94	26	27	30	34	38	41	43
Pb	ICP-AES	ppm partial	8.7	83.1	-	-	<	54	<	<	<	<	<	10	12
Pd	GFAAS	ppb partial	5	100	-	-	<	<	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	0	9.6	3.6	2.7	21.2	4.3	5.3	7.3	9.3	11.5	14.4	16.1
Rb	XRF	ppm	5.5	0	165	35	53	251	106	130	146	166	187	205	226
Rb	ICP-MS	ppm	0.6	0	152	32	47	221	102	115	132	152	170	195	199
S	XRF	ppm	70	9.9	995	610	<	2550	<	60	500	940	1418	1752	2057
S	ICP-AES	ppm partial	14.3	0	1080	733	16	2950	21	85	443	1050	1638	2012	2369
Sc	ICP-MS	ppm	2.8	0	13	3.7	5.4	22	8.0	8.7	11	13	16	18	20
Sc	ICP-AES	ppm partial	0.4	0	9.8	3.2	3.2	20	4.9	5.5	8.0	9.8	11	14	16
Se	GFAAS	ppm partial	0.055	19.7	0.18	0.13	<	0.61	<	<	0.08	0.14	0.23	0.39	0.49
Sm	ICP-MS	ppm	0.5	0	6.6	2.2	2.1	14	3.2	3.9	5.3	6.5	7.8	9.1	9.8
Sr	XRF	ppm	4	0	218	53	123	476	146	164	189	217	230	270	308
Sr	ICP-AES	ppm partial	1.2	0	7.3	2.7	4.3	23	4.5	5.0	5.7	6.9	8.1	9.7	11
Ta	ICP-MS	ppm	0.06	0	1.0	0.39	0.37	2.0	0.46	0.51	0.73	1.0	1.2	1.5	1.9
Tb	ICP-MS	ppm	0.08	0	0.81	0.26	0.34	1.7	0.36	0.49	0.62	0.83	0.98	1.1	1.3
Te	GFAAS	ppb partial	5	16.9	13	7	<	36	<	<	6	10	18	22	25
Th	ICP-MS	ppm	0.13	0	14	6.3	2.4	33	5.0	6.1	10.0	13	17	22	25
Th	ICP-AES	ppm partial	5.6	0	15	5	6	32	8	9	12	14	17	24	26
Ti	XRF	ppm	30	0	3996	984	1674	6840	2466	2634	3234	4014	4602	5130	5586
Ti	ICP-MS	ppm	10	0	3882	1010	1870	6740	2352	2746	3113	3890	4550	5192	5659
Ti	ICP-AES	ppm partial	2	0	3507	916	1220	6110	1885	2350	2880	3550	4100	4694	4997
Tm	ICP-MS	ppm	0.03	0	0.26	0.13	0.05	0.69	0.07	0.11	0.16	0.25	0.31	0.43	0.51
U	ICP-MS	ppm	0.08	0	2.51	1.09	0.62	5.74	1.02	1.19	1.64	2.48	3.11	3.87	4.82
V	XRF	ppm	6	0	94	29	41	190	46	55	77	94	113	132	138
V	ICP-MS	ppm	2	0	67	23	29	151	30	35	50	68	79	94	99
V	ICP-AES	ppm partial	0.6	0	73	25	27	159	32	41	54	75	88	102	111
Y	XRF	ppm	2.8	0	22	9	5	52	9	10	14	22	28	34	38
Y	ICP-MS	ppm	0.1	0	21	9.6	6.4	61	6.9	8.5	14	21	26	32	37
Y	ICP-AES	ppm partial	0.15	0	8.6	3.6	1.6	17	4.4	4.7	5.6	7.9	11	14	16
Yb	ICP-MS	ppm	0.22	0	1.6	0.88	0.31	4.4	0.43	0.65	1.0	1.5	2.0	2.8	3.4
Zn	XRF	ppm	4	0	98	25	53	232	61	73	85	94	112	119	122
Zn	ICP-AES	ppm partial	2	0	90	24	46	225	53	65	79	90	102	110	119
Zr	XRF	ppm	6	0	204	44	101	309	127	157	177	202	228	269	286
Zr	ICP-MS	ppm	3	0	191	49	95	339	121	133	153	195	213	252	287

Table 79. Chemical concentration summary statistics for map unit 391.

Map unit	391	Mica gneiss, hornblende gneiss
Number of samples	42	
Unit area	2000.0	km^2
Percent of bedrock	0.6	%

LRC : Lowest reliable concentration
%<LRC : Percentage of sample concentrations below LRC
Mean and sd in italics : 50-80% of sample concentrations below LRC
< : Value below the lowest reliable concentration (LRC)
- : Not calculated due to small number of valid concentrations



Element	Method	Unit	LRC	%<LRC	Mean	Sd	Min	Max	Percentiles 5	10	25	50	75	90	95
SiO_2	XRF	%	0.02	0	66.79	8.87	51.70	87.50	52.58	54.25	58.50	67.80	72.70	76.69	80.96
TiO_2	XRF	%	0.005	0	0.71	0.47	0.03	2.36	0.13	0.21	0.36	0.63	0.98	1.36	1.48
Al_2O_3	XRF	%	0.02	0	14.22	3.18	6.49	22.90	8.80	10.95	13.10	13.85	15.60	17.34	21.84
FeO	XRF	%	0.01	0	5.10	3.38	0.59	16.10	0.87	1.73	2.72	4.15	7.23	10.12	10.90
MnO	XRF	%	0.012	2.4	0.081	0.062	<	0.259	0.014	0.016	0.044	0.070	0.098	0.177	0.233
MgO	XRF	%	0.09	2.4	2.44	2.31	<	9.39	0.28	0.36	0.70	1.69	3.19	5.82	7.74
CaO	XRF	%	0.004	0	2.80	3.05	0.03	16.30	0.07	0.40	0.91	1.99	3.01	6.68	8.26
Na_2O	XRF	%	0.05	0	3.31	1.27	0.15	5.26	0.72	1.47	2.47	3.46	4.18	4.76	5.06
K_2O	XRF	%	0.003	0	3.27	1.68	0.21	7.16	0.50	1.16	2.35	3.20	4.02	5.66	6.81
P_2O_5	XRF	%	0.024	9.5	0.169	0.172	<	0.910	<	0.017	0.067	0.110	0.235	0.394	0.472
C_{tot}	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
$C_{non\text{-}carb}$	Leco	%	0.05	100	-	-	<	<	<	<	<	<	<	<	<
F	Ion	%	0.055	50	*0.07*	*0.06*	<	0.25	<	<	<	<	0.09	0.15	0.21
Al	XRF	ppm	106	0	75213	16796	34332	121141	46541	57926	69299	73267	82524	91729	115534
Al	ICP-AES	ppm partial	1100	0	14564	11928	1300	65100	2320	3740	6100	12050	19900	27440	34160
As	GFAAS	ppm partial	3	97.6	-	-	<	3.2	<	<	<	<	<	<	<
Au	GFAAS	ppb partial	2.5	95.2	-	-	<	5.8	<	<	<	<	<	<	<
B	ICP-AES	ppm partial	4.5	85.7	-	-	<	7	<	<	<	<	<	5	6
Ba	XRF	ppm	21	2.4	632	338	<	1572	119	240	363	553	842	1128	1222
Ba	ICP-AES	ppm partial	10	2.4	187	207	<	818	15	19	46	110	237	504	676
Bi	GFAAS	ppm partial	0.04	78.6	*0.02*	*0.03*	<	0.12	<	<	<	<	<	0.05	0.10
Ca	XRF	ppm	29	0	20041	21786	229	116545	515	2824	6528	14193	21522	47769	59030
Ca	ICP-AES	ppm partial	50	0	2998	3027	100	11700	160	270	900	2000	3500	7670	10520
Ce	ICP-MS	ppm	0.22	0	87	53	3.4	201	8.9	23	38	86	130	151	162
Cl	XRF	ppm	45	0	307	320	50	1260	50	58	90	170	370	759	1062
Co	ICP-MS	ppm	2	4.8	15	13	<	52	1.4	2.5	5.1	9.5	21	35	38
Co	ICP-AES	ppm partial	0.9	2.4	12	9.8	<	41	1.5	2.7	5.3	8.0	20	28	31
Cr	XRF	ppm	19	26.2	94	124	<	709	<	<	<	53	104	229	290
Cr	ICP-AES	ppm partial	5	14.3	63	86	<	373	<	<	7.7	23	82	185	268
Cu	XRF	ppm	17	59.5	*34*	*55*	<	296	<	<	<	<	41	83	140
Cu	ICP-AES	ppm partial	3	14.3	28	41	<	197	<	<	4.3	11	36	72	118
Dy	ICP-MS	ppm	0.55	7.1	5.4	3.7	<	15	<	1.0	2.2	4.3	8.2	11	11
Er	ICP-MS	ppm	0.3	7.1	3.2	2.2	<	8.0	<	0.5	1.1	2.5	4.8	6.3	7.1
Eu	ICP-MS	ppm	0.09	0	1.2	0.72	0.22	3.7	0.32	0.40	0.72	1.1	1.6	2.1	2.6
Fe	XRF	ppm	78	0	39635	26263	4584	125097	6744	13419	21134	32207	56177	78632	84693
Fe	ICP-AES	ppm partial	2300	0	37507	25864	2600	129000	5700	11190	22700	31700	47900	81390	84660
Ga	XRF	ppm	10	0	25	6	14	46	16	18	21	25	28	32	35
Gd	ICP-MS	ppm	0.5	4.8	6.4	4.1	<	17.4	0.4	1.3	2.7	6.2	10.0	11.7	12.2
Hf	ICP-MS	ppm	0.12	0	6.11	3.47	1.96	17.3	2.01	2.18	3.01	5.30	8.73	10.1	12.4
Ho	ICP-MS	ppm	0.09	7.1	1.1	0.76	<	2.9	<	0.20	0.41	0.88	1.7	2.2	2.4
K	XRF	ppm	25	0	27174	13911	1702	59428	4175	9636	19505	26560	33366	46953	56540
K	ICP-AES	ppm partial	100	0	10105	7083	200	26100	720	1640	4600	9600	16600	19950	23180
La	ICP-MS	ppm	0.55	0	44	26	2.0	93	6.2	11	19	42	67	79	86
La	ICP-AES	ppm partial	1.3	0	37	28	1.3	92	2.4	7.4	14	31	61	80	87
Li	ICP-AES	ppm partial	3.5	4.8	28.4	24.0	<	143	2.8	6.4	15.2	24.0	37.6	51.4	64.1
Lu	ICP-MS	ppm	0.03	2.4	0.44	0.30	<	1.06	0.04	0.09	0.18	0.39	0.66	0.94	1.02
Mg	XRF	ppm	543	2.4	14737	13929	<	56622	1700	2189	4221	10161	19236	35070	46684
Mg	ICP-AES	ppm partial	50	0	10336	7887	500	31700	1840	2490	4400	8900	13300	22970	27160
Mn	XRF	ppm	93	2.4	628	481	<	2007	109	124	341	543	760	1372	1806
Mn	ICP-AES	ppm partial	50	2.4	384	229	<	939	62	107	189	352	587	691	766
Mo	XRF	ppm	2.6	92.9	-	-	<	32	<	<	<	<	<	<	4
Mo	ICP-AES	ppm partial	2.6	97.6	-	-	<	3	<	<	<	<	<	<	<
Na	XRF	ppm	371	0	24575	9386	1106	39029	5313	10885	18327	25673	31016	35297	37575
Na	ICP-AES	ppm partial	150	0	535	225	200	1400	300	300	400	500	600	730	1000
Nb	XRF	ppm	7	21.4	19	14	<	54	<	<	7	15	27	42	49
Nb	ICP-MS	ppm	0.16	0	17	13	1.9	46	3.1	4.2	5.8	14	26	35	45
Nd	ICP-MS	ppm	0.2	0	35	20	1.3	76	2.3	8.9	16	36	51	58	68
Ni	XRF	ppm	14	42.9	40	45	<	226	<	<	<	16	45	98	121
Ni	ICP-AES	ppm partial	3.5	9.5	28	34	<	140	<	2.5	6.2	17	30	83	106
P	XRF	ppm	105	0	737	750	<	3968	<	74	292	480	1025	1718	2058
P	ICP-AES	ppm partial	6	0	638	728	8.0	3830	18	47	166	423	907	1512	1908
Pb	XRF	ppm	14	9.5	28	11	<	61	<	10	20	27	34	39	49
Pb	ICP-AES	ppm partial	8.7	81	-	-	<	14	<	<	<	<	<	9	13
Pd	GFAAS	ppb partial	5	95.2	-	-	<	20	<	<	<	<	<	<	<
Pr	ICP-MS	ppm	0.74	4.8	9.7	5.6	<	20.5	0.53	2.8	4.3	9.8	14.7	16.6	17.6
Rb	XRF	ppm	5.5	0	149	74	15	313	18	37	97	156	199	254	264
Rb	ICP-MS	ppm	0.6	0	140	69	15	281	18	35	92	146	187	243	249
S	XRF	ppm	70	54.8	*351*	*1074*	<	6780	<	<	<	<	170	623	1428
S	ICP-AES	ppm partial	14.3	16.7	408	1185	<	7450	<	<	22	72	242	813	1580
Sc	ICP-MS	ppm	2.8	7.1	15	13	<	62	<	3.2	5.5	11	20	31	39
Sc	ICP-AES	ppm partial	0.4	2.4	7.2	5.3	<	26	0.64	1.3	3.8	6.0	9.3	13	17
Se	GFAAS	ppm partial	0.055	73.8	*0.09*	*0.20*	<	1.1	<	<	<	<	0.07	0.28	0.46
Sm	ICP-MS	ppm	0.5	7.1	6.5	3.8	<	16	<	1.5	3.2	6.6	9.1	12	12
Sr	XRF	ppm	4	0	180	134	11	504	20	30	77	136	272	386	431
Sr	ICP-AES	ppm partial	1.2	2.4	6.5	5.0	<	24	1.6	1.9	3.1	4.9	8.6	14	16
Ta	ICP-MS	ppm	0.06	0	1.2	0.96	0.17	3.6	0.21	0.24	0.39	0.81	1.9	2.7	3.2
Tb	ICP-MS	ppm	0.08	4.8	0.97	0.64	<	2.6	0.07	0.14	0.43	0.86	1.5	1.9	1.9
Te	GFAAS	ppb partial	5	78.6	*8*	*16*	<	67	<	<	<	<	<	19	56
Th	ICP-MS	ppm	0.13	0	16	13	0.34	55	0.82	2.4	5.8	12	27	33	43
Th	ICP-AES	ppm partial	5.6	14.3	21	16	<	73	<	<	10	18	28	43	52
Ti	XRF	ppm	30	0	4248	2808	186	14160	798	1242	2166	3774	5856	8154	8880
Ti	ICP-MS	ppm	10	0	3968	2704	173	14000	746	1230	2100	3415	5520	7817	8612
Ti	ICP-AES	ppm partial	2	0	2700	1307	16	5030	658	971	1560	2770	3730	4321	4932
Tm	ICP-MS	ppm	0.03	7.1	0.46	0.32	<	1.17	<	0.08	0.18	0.37	0.69	0.98	1.09
U	ICP-MS	ppm	0.08	0	3.45	2.70	0.15	11.8	0.23	0.52	1.11	3.13	5.27	7.36	8.06
V	XRF	ppm	6	2.4	107	83	<	335	19	24	45	74	192	225	249
V	ICP-MS	ppm	2	2.4	81	75	<	297	6.7	9.4	21	50	141	181	220
V	ICP-AES	ppm partial	0.6	0	64	53	1.2	208	7.4	9.6	21	51	81	160	168
Y	XRF	ppm	2.8	4.8	32	22	<	79	2	7	14	27	50	68	74
Y	ICP-MS	ppm	0.1	0	33	23	0.58	86	1.6	6.2	13	25	49	66	74
Y	ICP-AES	ppm partial	0.15	0	18	19	0.20	79	0.86	1.9	4.1	12	25	46	61
Yb	ICP-MS	ppm	0.22	4.8	3.0	2.1	<	7.4	0.16	0.48	1.2	2.5	4.6	6.3	7.0
Zn	XRF	ppm	4	0	63	41	4	154	9	13	28	58	91	123	136
Zn	ICP-AES	ppm partial	2	4.8	48	31	<	127	3.4	6.2	15	45	70	88	94
Zr	XRF	ppm	6	0	266	149	67	718	82	92	153	229	381	456	518
Zr	ICP-MS	ppm	3	0	243	146	67	696	72	76	114	222	330	408	512

Table 80. Chemical concentration summaries for the whole Finland and for the Karelian and Svecofennian Domains, the Lapland-Inari combination and the rapakivi association.

Map unit combination				Units 1 - 391 Whole Finland				Units 15K, 24K, 39 - 76, 101, 391 Karelian Domain				Units 14 - 38, 281 Svecofennian Domain				Units 77 - 85 Lapland Granulite Belt + Inari Complex				Units 8 - 11 Rapakivi granites			
Number of units				98				42				29				9				4			
Area covered				336222.5 km^2				158748.0 km^2				138639.3 km^2				22406.9 km^2				12741.6 km^2			
Percent of bedrock				99.7 %				47.1 %				41.1 %				6.6 %				3.8 %			
				Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians	
Element	Method	Unit	LRC	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean
SiO_2	XRF	%	0.02	0	66.73	0	67.24	0	67.49	0	68.18	0	65.22	0	65.59	0	67.32	0	67.90	0	70.09	0	69.59
TiO_2	XRF	%	0.005	0	0.56	0	0.52	0	0.51	0	0.46	0	0.62	0	0.58	0	0.61	0	0.58	0	0.47	0	0.48
Al_2O_3	XRF	%	0.02	0	14.50	0	14.48	0	13.91	0	13.89	0	15.28	0	15.26	0	15.25	0	15.27	0	13.30	0	13.34
FeO	XRF	%	0.01	0	4.46	0	4.23	0	4.27	0	3.92	0	4.71	0	4.55	0	5.13	0	5.06	0	3.43	0	3.52
MnO	XRF	%	0.012	1	0.073	2	0.067	0	0.069	0	0.062	0	0.079	3.4	0.075	0	0.071	0	0.068	0	0.055	0	0.057
MgO	XRF	%	0.09	1	2.19	2	1.95	0	2.46	0	2.13	0	2.08	3.4	1.91	0	2.10	0	1.96	0	0.31	0	0.29
CaO	XRF	%	0.004	0	3.07	0	2.83	0	3.12	0	2.87	0	3.20	0	2.96	0	2.79	0	2.50	0	1.75	0	1.81
Na_2O	XRF	%	0.05	4.1	3.31	6.1	3.27	4.8	3.54	7.1	3.49	0	3.22	3.4	3.19	0	2.80	0	2.68	0	2.88	0	2.89
K_2O	XRF	%	0.003	0	2.99	0	2.90	0	2.65	0	2.52	0	3.22	0	3.17	0	2.58	0	2.46	0	5.34	0	5.38
P_2O_5	XRF	%	0.024	6.1	0.145	8.2	0.122	9.5	0.124	9.5	0.103	0	0.177	3.4	0.150	11.1	0.108	11.1	0.088	0	0.121	0	0.127
C_{tot}	Leco	%	0.05	63.3	*0.08*	85.7	-	57.1	*0.12*	81	-	48.3	0.05	89.7	-	100	-	100	-	100	-	100	-
$C_{non\text{-}carb}$	Leco	%	0.05	84.7	-	93.9	-	88.1	-	92.9	-	75.9	*0.03*	100	-	100	-	100	-	75	-	75	-
F	Ion	%	0.055	38.8	0.06	63.3	*0.04*	57.1	*0.04*	83.3	-	13.8	0.08	37.9	0.06	11.1	0.06	44.4	0.03	25	0.24	25	0.20
Al	XRF	ppm	106	0	76700	0	76615	0	73584	0	73468	0	80836	0	80704	0	80667	0	80778	0	70336	0	70558
Al	ICP-AES	ppm partial	1100	2	14612	2	13316	2.4	12671	2.4	11052	0	18171	0	17152	0	11769	0	10172	0	7119	0	6905
As	GFAAS	ppm partial	3	79.6	*0.74*	96.9	-	85.7	-	97.6	-	62.1	*1.4*	96.6	-	88.9	-	100	-	75	-	100	-
Au	GFAAS	ppb partial	2.5	91.8	-	100	-	85.7	-	100	-	96.6	-	100	-	88.9	-	100	-	100	-	100	-
B	ICP-AES	ppm partial	4.5	89.8	-	98	-	92.9	-	97.6	-	82.8	-	100	-	100	-	100	-	75	-	75	-
Ba	XRF	ppm	21	1	674	4.1	616	0	654	2.4	575	0	664	3.4	614	0	718	0	692	0	993	0	1040
Ba	ICP-AES	ppm partial	10	3.1	153	7.1	112	2.4	142	9.5	97	3.4	182	6.9	142	0	127	0	80	0	67	0	63
Bi	GFAAS	ppm partial	0.04	52	*0.08*	74.5	*0.04*	57.1	*0.03*	83.3	-	17.2	0.14	48.3	0.06	66.7	-	88.9	-	50	*0.27*	50	*0.15*
Ca	XRF	ppm	29	0	21929	0	20235	0	22322	0	20485	0	22866	0	21164	0	19927	0	17896	0	12484	0	12949
Ca	ICP-AES	ppm partial	50	0	4924	0	3366	0	5190	0	3115	0	4732	0	3499	0	3961	0	2995	0	5374	0	5305
Ce	ICP-MS	ppm	0.22	0	69	0	61	0	58	0	48	0	71	0	64	0	73	0	64	0	194	0	173
Cl	XRF	ppm	45	4.1	185	6.1	131	0	202	0	124	6.9	150	10.3	118	0	194	0	138	25	372	25	371
Co	ICP-MS	ppm	2	2	14	7.1	12	2.4	15	7.1	13	0	14	6.9	13	0	13	0	12	0	4.2	0	3.3
Co	ICP-AES	ppm partial	0.9	2	10	4.1	9.2	2.4	10	4.8	8.6	0	11	0	11	0	8.4	0	7.4	0	3.0	0	3.0
Cr	XRF	ppm	19	6.1	89	16.3	67	7.1	109	11.9	77	3.4	74	10.3	60	11.1	90	22.2	77	0	18	50	-
Cr	ICP-AES	ppm partial	5	6.1	45	10.2	34	4.8	51	4.8	33	3.4	46	6.9	39	11.1	28	11.1	20	0	4.3	25	2.0
Cu	XRF	ppm	17	38.8	26	55.1	*10*	38.1	29	52.4	*15*	20.7	26	41.4	15	33.3	25	66.7	-	100	-	100	-
Cu	ICP-AES	ppm partial	3	2	27	6.1	19	4.8	29	7.1	20	0	26	0	19	0	24	0	16	0	8.0	0	7.7
Dy	ICP-MS	ppm	0.55	1	3.6	4.1	3.2	0	2.6	2.4	2.1	0	4.0	3.4	3.6	11.1	4.1	11.1	3.8	0	12	0	12
Er	ICP-MS	ppm	0.3	1	2.0	4.1	1.8	0	1.5	2.4	1.1	0	2.2	3.4	2.0	11.1	2.4	11.1	2.2	0	7.1	0	6.8
Eu	ICP-MS	ppm	0.09	0	1.0	1	0.92	0	0.84	2.4	0.73	0	1.1	0	1.0	0	1.2	0	1.1	0	1.9	0	2.0
Fe	XRF	ppm	78	0	34678	0	32836	0	33209	0	30458	0	36573	0	35322	0	39852	0	39277	0	26643	0	27374
Fe	ICP-AES	ppm partial	2300	0	28003	0	25931	0	25447	0	22264	0	32737	0	31752	0	19100	0	16982	0	25865	0	25546
Ga	XRF	ppm	10	2	25	5.1	25	2.4	23	7.1	23	0	26	0	26	0	24	0	24	0	32	0	32
Gd	ICP-MS	ppm	0.5	1	4.7	3.1	4.3	0	3.6	2.4	3.0	0	5.2	0	4.9	11.1	5.0	11.1	4.7	0	14.2	0	13.5
Hf	ICP-MS	ppm	0.12	0	4.61	0	4.19	0	3.82	0	3.36	0	4.83	0	4.38	0	4.86	0	4.54	0	11.8	0	11.8
Ho	ICP-MS	ppm	0.09	2	0.71	4.1	0.62	0	0.51	0	0.40	0	0.77	3.4	0.70	11.1	0.83	11.1	0.79	0	2.4	0	2.3
K	XRF	ppm	25	0	24809	0	24078	0	22028	0	20949	0	26693	0	26294	0	21447	0	20385	0	44355	0	44646
K	ICP-AES	ppm partial	100	1	8087	2	7511	0	6993	0	6109	0	10454	3.4	10233	0	4514	0	3509	0	3920	0	3989
La	ICP-MS	ppm	0.55	0	35	0	31	0	31	0	25	0	35	0	32	0	37	0	33	0	96	0	86
La	ICP-AES	ppm partial	1.3	4.1	30	7.1	25	4.8	27	9.5	22	3.4	29	3.4	26	11.1	21	11.1	18	0	86	0	74
Li	ICP-AES	ppm partial	3.5	9.2	23.9	18.4	20.1	7.1	18.2	21.4	14.8	0	32.5	3.4	27.9	11.1	10.4	11.1	8.5	0	30.4	0	26.9
Lu	ICP-MS	ppm	0.03	0	0.29	2	0.25	0	0.20	0	0.16	0	0.31	3.4	0.28	0	0.35	0	0.32	0	1.02	0	0.95
Mg	XRF	ppm	543	1	13182	2	11734	0	14816	0	12820	0	12567	3.4	11517	0	12651	0	11807	0	1881	0	1719
Mg	ICP-AES	ppm partial	50	1	8991	2	7851	0	9392	0	7603	0	9814	3.4	9310	0	5847	0	4659	0	1569	0	1409
Mn	XRF	ppm	93	1	566	2	519	0	535	0	481	0	612	3.4	581	0	550	0	527	0	426	0	442
Mn	ICP-AES	ppm partial	50	0	311	0	289	0	295	0	259	0	355	0	348	0	170	0	152	0	283	0	282
Mo	XRF	ppm	2.6	98	-	99	-	100	-	100	-	96.6	-	100	-	100	-	100	-	100	-	100	-
Mo	ICP-AES	ppm partial	2.6	92.9	-	99	-	97.6	-	100	-	89.7	-	100	-	100	-	100	-	50	2	100	-
Na	XRF	ppm	371	4.1	24590	6.1	24249	4.8	26252	7.1	25874	0	23885	3.4	23648	0	20754	0	19856	0	21340	0	21436
Na	ICP-AES	ppm partial	150	2	790	3.1	690	2.4	674	2.4	595	0	889	3.4	755	0	890	0	768	0	918	0	920
Nb	XRF	ppm	7	21.4	11	41.8	8	28.6	8	59.5	*3*	6.9	14	6.9	12	11.1	10	66.7	-	25	30	25	29
Nb	ICP-MS	ppm	0.16	0	9.4	1	8.1	0	6.7	0	5.2	0	11	0	10	0	8.3	0	7.4	0	26	0	25
Nd	ICP-MS	ppm	0.2	0	29	0	26	0	23	0	19	0	31	0	28	0	30	0	27	0	83	0	75
Ni	XRF	ppm	14	25.5	40	39.8	28	21.4	53	31	34	17.2	29	37.9	24	11.1	34	33.3	26	50	-	50	-
Ni	ICP-AES	ppm partial	3.5	4.1	27	6.1	20	2.4	33	4.8	22	3.4	23	3.4	20	0	26	0	20	0	3.4	25	1.3
P	XRF	ppm	105	6.1	632	8.2	532	9.5	541	9.5	449	0	772	3.4	654	11.1	471	11.1	384	0	528	0	554
P	ICP-AES	ppm partial	6	0	536	0	453	0	476	0	400	0	643	0	539	0	330	0	254	0	487	0	509
Pb	XRF	ppm	14	2	32	7.1	29	2.4	31	11.9	25	3.4	32	3.4	31	0	29	0	28	0	53	0	52
Pb	ICP-AES	ppm partial	8.7	72.4	*5*	88.8	-	71.4	7	95.2	-	82.8	-	100	-	66.7	-	77.8	-	50	*16*	50	*14*
Pd	GFAAS	ppb partial	5	80.6	-	91.8	-	71.4	*1*	85.7	-	89.7	-	96.6	-	88.9	-	100	-	100	-	100	-
Pr	ICP-MS	ppm	0.74	2	8.0	5.1	7.0	2.4	6.5	7.1	5.4	0	8.3	0	7.6	11.1	8.4	11.1	7.5	0	22.6	0	20.4
Rb	XRF	ppm	5.5	7.1	108	11.2	101	9.5	88	11.9	80	3.4	124	10.3	119	11.1	73	11.1	67	0	250	0	233
Rb	ICP-MS	ppm	0.6	2	103	5.1	96	4.8	82	9.5	74	0	119	0	113	0	74	0	69	0	241	0	223
S	XRF	ppm	70	20.4	512	45.9	155	23.8	541	45.2	130	10.3	543	37.9	216	22.2	413	77.8	-	0	87	50	-
S	ICP-AES	ppm partial	14.3	4.1	568	11.2	186	2.4	600	14.3	144	3.4	599	6.9	254	0	442	0	109	0	118	0	78
Sc	ICP-MS	ppm	2.8	8.2	13	9.2	12	9.5	12	9.5	10	3.4	14	3.4	14	0	17	0	16	0	8.6	0	8.8
Sc	ICP-AES	ppm partial	0.4	4.1	5.0	8.2	4.3	0	4.1	4.8	3.3	0	6.5	3.4	6.0	0	3.1	0	2.6	0	4.4	0	4.1
Se	GFAAS	ppm partial	0.055	43.9	0.09	71.4	*0.03*	47.6	0.10	66.7	*0.03*	17.2	0.11	62.1	*0.04*	44.4	0.06	88.9	-	100	-	100	-
Sm	ICP-MS	ppm	0.5	0	5.2	3.1	4.7	0	4.0	4.8	3.3	0	5.7	0	5.3	0	5.2	0	4.8	0	15	0	14
Sr	XRF	ppm	4	0	299	0	261	0	284	0	251	0	335	0	286	0	307	0	264	0	137	0	139
Sr	ICP-AES	ppm partial	1.2	0	16	1	11	0	13	2.4	9.0	0	18	0	12	0	15	0	11	0	9.3	0	8.8
Ta	ICP-MS	ppm	0.06	3.1	0.65	8.2	0.54	4.8	0.49	11.9	0.34	0	0.77	3.4	0.70	0	0.47	0	0.35	0	1.8	0	1.6
Tb	ICP-MS	ppm	0.08	1	0.68	3.1	0.61	0	0.50	2.4	0.42	0	0.75	0	0.69	11.1	0.73	11.1	0.68	0	2.2	0	2.1
Te	GFAAS	ppb partial	5	39.8	9	71.4	*4*	40.5	7	69	3	20.7	10	62.1	*5*	22.2	17	66.7	-	75	-	100	-
Th	ICP-MS	ppm	0.13	1	10	3.1	8.9	2.4	9.9	4.8	8.0	0	10.0	0	9.1	0	9.2	0	6.4	0	24	0	21
Th	ICP-AES	ppm partial	5.6	21.4	14	42.9	12	21.4	14	45.2	10	10.3	13	37.9	12	11.1	10	33.3	7	50	37	50	*33*
Ti	XRF	ppm	30	0	3372	0	3120	0	3066	0	2760	0	3732	0	3498	0	3660	0	3456	0	2802	0	2892
Ti	ICP-MS	ppm	10	1	3190	1	2923	2.4	2869	2.4	2577	0	3558	0	3299	0	3525	0	3245	0	2609	0	2643
Ti	ICP-AES	ppm partial	2	1	3190	1	2923	2.4	2869	2.4	2577	0	3558	0	3299	0	3525	0	3245	0	2609	0	2643
Tm	ICP-MS	ppm	0.03	0	0.29	2	0.25	0	0.21	0	0.16	0	0.32	3.4	0.28	0	0.35	0	0.31	0	1.06	0	0.99
U	ICP-MS	ppm	0.08	4.1	2.21	6.1	1.77	7.1	1.69	9.5	1.17	0	2.68	0	2.29	0	1.02	0	0.74	0	5.51	0	5.24
V	XRF	ppm	6	0	96	1	88	0	96	0	85	0	102	3.4	95	0	110	0	106	0	24	0	22
V	ICP-MS	ppm	2	1	78	2	70	0	78	2.4	68	0	82	0	76	0	91	0	85	0	8.3	0	7.0
V	ICP-AES	ppm partial	0.6	0	52	0	46	0	47	0	38	0	65	0	62	0	44	0	38	0	6.2	0	5.4
Y	XRF	ppm	2.8	1	22	3.1	19	0	16	0	13	0	24	3.4	22	0	26	0	24	25	74	25	68
Y	ICP-MS	ppm	0.1	0	22	0	19	0	16	0	12	0	23	0	21	0	25	0	23	0	73	0	71
Y	ICP-AES	ppm partial	0.15	0	9.7	1	8.0	0	6.8	0	4.9	0	10	0	8.7	0	5.7	0	4.7	0	48	0	45
Yb	ICP-MS	ppm	0.22	0	1.9	2	1.7	0	1.4	0	1.1	0	2.1	3.4	1.9	0	2.3	0	2.2	0	7.1	0	6.6
Zn	XRF	ppm	4	0	80	1	73	0	67	0	56	0	91	3.4	87	0	85	0	82	0	107	0	107
Zn	ICP-AES	ppm partial	2	1	56	5.1	49	0	47	4.8	37	0	67	3.4	63	0	39	0	33	0	79	0	75
Zr	XRF	ppm	6	0	195	2	176	0	166	2.4	147	0	200	0	177	0	206	0	194	0	491	0	508
Zr	ICP-MS	ppm	3	0	176	0	158	0	148	0	130	0	182	0	162	0	188	0	176	0	436	0	444

LRC : Lowest reliable concentration
%<LRC : Percentage of unit mean or median concentrations below LRC
Wt mean in italics : 50-80% of unit mean or median concentrations below LRC
- : Not calculated (Over 80% of unit mean or median concentrations below LRC)

The average composition is estimated by area-weighted arithmetic means (Wt mean) of both mean and median concentrations of elements in individual units

Table 81. Chemical concentration summaries for the arc complexes of the Svceofennian Domain.

Map unit combination				Units 14-38, 281 Svecofennian Domain				Units 14, 15SA, 16SA, 17-21 Svecofennian Domain A				Units 15SB, 16SB, 22, 23, 24SB, 25-31, 281 Svecofennian Domain B				Units 15SC, 16SC, 24SC, 32-38 Svecofennian Domain C			
Number of units				29				8				11				10			
Area covered				138639.3 km^2				45629.1 km^2				79084.9 km^2				13925.3 km^2			
Percent of bedrock				41.1 %				13.5 %				23.4 %				4.1 %			
				Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians	
Element	Method	Unit	LRC	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean
SiO_2	XRF	%	0.02	0	65.22	0	65.59	0	65.51	0	65.67	0	65.41	0	65.90	0	63.15	0	63.55
TiO_2	XRF	%	0.005	0	0.62	0	0.58	0	0.58	0	0.53	0	0.62	0	0.59	0	0.77	0	0.71
Al_2O_3	XRF	%	0.02	0	15.28	0	15.26	0	15.26	0	15.38	0	15.24	0	15.15	0	15.57	0	15.49
FeO	XRF	%	0.01	0	4.71	0	4.55	0	4.31	0	4.17	0	4.72	0	4.57	0	5.92	0	5.67
MnO	XRF	%	0.012	0	0.079	3.4	0.075	0	0.069	12.5	0.062	0	0.082	0	0.079	0	0.100	0	0.093
MgO	XRF	%	0.09	0	2.08	3.4	1.91	0	2.14	12.5	1.96	0	1.98	0	1.81	0	2.53	0	2.36
CaO	XRF	%	0.004	0	3.20	0	2.96	0	2.93	0	2.55	0	3.24	0	3.11	0	3.86	0	3.46
Na_2O	XRF	%	0.05	0	3.22	3.4	3.19	0	3.02	12.5	3.01	0	3.31	0	3.27	0	3.36	0	3.30
K_2O	XRF	%	0.003	0	3.22	0	3.17	0	3.27	0	3.27	0	3.25	0	3.18	0	2.87	0	2.79
P_2O_5	XRF	%	0.024	0	0.177	3.4	0.150	0	0.158	12.5	0.122	0	0.178	0	0.159	0	0.239	0	0.188
C_{tot}	Leco	%	0.05	48.3	0.05	89.7	-	37.5	0.06	87.5	-	45.5	0.05	100	-	60	*0.04*	80	0.00
$C_{non\text{-}carb}$	Leco	%	0.05	75.9	*0.03*	100	-	75	-	100	-	63.6	*0.03*	100	-	90	-	100	-
F	Ion	%	0.055	13.8	0.08	37.9	0.06	25	0.09	37.5	0.06	0	0.08	27.3	0.06	20	0.08	50	*0.06*
Al	XRF	ppm	106	0	80836	0	80704	0	80741	0	81334	0	80620	0	80122	0	82381	0	81932
Al	ICP-AES	ppm partial	1100	0	18171	0	17152	0	18157	0	16775	0	17870	0	17021	0	19930	0	19132
As	GFAAS	ppm partial	3	62.1	*1.4*	96.6	-	75	-	87.5	-	27.3	2.1	100	-	90	-	100	-
Au	GFAAS	ppb partial	2.5	96.6	-	100	-	100	-	100	-	90.9	-	100	-	100	-	100	-
B	ICP-AES	ppm partial	4.5	82.8	-	100	-	37.5	3	100	-	100	-	100	-	100	-	100	-
Ba	XRF	ppm	21	0	664	3.4	614	0	518	12.5	480	0	731	0	675	0	766	0	709
Ba	ICP-AES	ppm partial	10	3.4	182	6.9	142	12.5	141	25	103	0	187	0	151	0	282	0	230
Bi	GFAAS	ppm partial	0.04	17.2	0.14	48.3	0.06	0	0.17	37.5	0.05	0	0.13	27.3	0.06	50	*0.07*	80	*0.03*
Ca	XRF	ppm	29	0	22866	0	21164	0	20950	0	18211	0	23137	0	22244	0	27578	0	24739
Ca	ICP-AES	ppm partial	50	0	4732	0	3499	0	4868	0	3146	0	4512	0	3608	0	5541	0	4037
Ce	ICP-MS	ppm	0.22	0	71	0	64	0	70	0	63	0	70	0	64	0	73	0	68
Cl	XRF	ppm	45	6.9	150	10.3	118	12.5	126	12.5	87	0	156	9.1	132	10	199	10	141
Co	ICP-MS	ppm	2	0	14	6.9	13	0	13	25	12	0	13	0	12	0	17	0	16
Co	ICP-AES	ppm partial	0.9	0	11	0	11	0	10	0	9.5	0	11	0	11	0	14	0	13
Cr	XRF	ppm	19	3.4	74	10.3	60	0	85	0	72	0	67	9.1	53	10	74	20	63
Cr	ICP-AES	ppm partial	5	3.4	46	6.9	39	0	49	12.5	42	0	43	0	37	10	49	10	45
Cu	XRF	ppm	17	20.7	26	41.4	15	25	29	50	*15*	18.2	23	36.4	13	20	37	40	26
Cu	ICP-AES	ppm partial	3	0	26	0	19	0	27	0	19	0	23	0	19	0	33	0	24
Dy	ICP-MS	ppm	0.55	0	4.0	3.4	3.6	0	4.0	12.5	3.5	0	3.9	0	3.6	0	4.1	0	3.9
Er	ICP-MS	ppm	0.3	0	2.2	3.4	2.0	0	2.2	12.5	1.8	0	2.2	0	2.0	0	2.3	0	2.2
Eu	ICP-MS	ppm	0.09	0	1.1	0	1.0	0	1.0	0	0.95	0	1.1	0	1.0	0	1.3	0	1.2
Fe	XRF	ppm	78	0	36573	0	35322	0	33520	0	32362	0	36667	0	35493	0	46022	0	44040
Fe	ICP-AES	ppm partial	2300	0	32737	0	31752	0	28899	0	27357	0	34039	0	33171	0	37919	0	38090
Ga	XRF	ppm	10	0	26	0	26	0	27	0	27	0	25	0	25	0	25	0	24
Gd	ICP-MS	ppm	0.5	0	5.2	0	4.9	0	5.3	0	4.8	0	5.2	0	4.8	0	5.5	0	5.2
Hf	ICP-MS	ppm	0.12	0	4.83	0	4.38	0	4.42	0	4.12	0	5.05	0	4.51	0	4.95	0	4.57
Ho	ICP-MS	ppm	0.09	0	0.77	3.4	0.70	0	0.77	12.5	0.65	0	0.77	0	0.71	0	0.81	0	0.77
K	XRF	ppm	25	0	26693	0	26294	0	27158	0	27158	0	26934	0	26361	0	23821	0	23132
K	ICP-AES	ppm partial	100	0	10454	3.4	10233	0	8780	12.5	8249	0	11101	0	11010	0	12262	0	12321
La	ICP-MS	ppm	0.55	0	35	0	32	0	35	0	32	0	35	0	32	0	37	0	34
La	ICP-AES	ppm partial	1.3	3.4	29	3.4	26	12.5	27	12.5	24	0	30	0	27	0	31	0	28
Li	ICP-AES	ppm partial	3.5	0	32.5	3.4	27.9	0	33.2	12.5	26.0	0	32.8	0	29.3	0	28.7	0	25.8
Lu	ICP-MS	ppm	0.03	0	0.31	3.4	0.28	0	0.30	12.5	0.25	0	0.31	0	0.29	0	0.32	0	0.30
Mg	XRF	ppm	543	0	12567	3.4	11517	0	12886	12.5	11819	0	11909	0	10902	0	15256	0	14201
Mg	ICP-AES	ppm partial	50	0	9814	3.4	9310	0	9041	12.5	8321	0	9936	0	9559	0	11658	0	11179
Mn	XRF	ppm	93	0	612	3.4	581	0	535	12.5	481	0	636	0	612	0	775	0	721
Mn	ICP-AES	ppm partial	50	0	355	0	348	0	252	0	226	0	401	0	407	0	431	0	416
Mo	XRF	ppm	2.6	96.6	-	100	-	100	-	100	-	90.9	-	100	-	100	-	100	-
Mo	ICP-AES	ppm partial	2.6	89.7	-	100	-	100	-	100	-	81.8	-	100	-	90	-	100	-
Na	XRF	ppm	371	0	23885	3.4	23648	0	22423	12.5	22349	0	24545	0	24256	0	24924	0	24471
Na	ICP-AES	ppm partial	150	0	889	3.4	755	0	890	12.5	707	0	870	0	767	0	994	0	846
Nb	XRF	ppm	7	6.9	14	6.9	12	12.5	15	12.5	13	0	13	0	12	10	14	10	11
Nb	ICP-MS	ppm	0.16	0	11	0	10	0	11	0	10	0	11	0	10	0	12	0	10
Nd	ICP-MS	ppm	0.2	0	31	0	28	0	31	0	28	0	31	0	28	0	33	0	30
Ni	XRF	ppm	14	17.2	29	37.9	24	25	34	37.5	30	9.1	27	27.3	21	20	33	50	*26*
Ni	ICP-AES	ppm partial	3.5	3.4	23	3.4	20	0	26	0	22	0	21	0	18	10	26	10	22
P	XRF	ppm	105	0	772	3.4	654	0	689	12.5	532	0	776	0	693	0	1042	0	820
P	ICP-AES	ppm partial	6	0	643	0	539	0	514	0	380	0	668	0	598	0	931	0	724
Pb	XRF	ppm	14	3.4	32	3.4	31	12.5	35	12.5	34	0	30	0	29	0	28	0	27
Pb	ICP-AES	ppm partial	8.7	82.8	-	100	-	87.5	-	100	-	81.8	-	100	-	80	*5*	100	-
Pd	GFAAS	ppb partial	5	89.7	-	96.6	-	87.5	-	87.5	-	100	-	100	-	80	*3*	100	-
Pr	ICP-MS	ppm	0.74	0	8.3	0	7.6	0	8.3	0	7.5	0	8.2	0	7.5	0	8.6	0	8.0
Rb	XRF	ppm	5.5	3.4	124	10.3	119	12.5	143	25	140	0	117	0	112	0	98	10	93
Rb	ICP-MS	ppm	0.6	0	119	0	113	0	137	0	131	0	113	0	108	0	93	0	88
S	XRF	ppm	70	10.3	543	37.9	216	25	475	50	*163*	0	540	36.4	224	10	786	30	340
S	ICP-AES	ppm partial	14.3	3.4	599	6.9	254	12.5	535	25	213	0	590	0	255	0	858	0	383
Sc	ICP-MS	ppm	2.8	3.4	14	3.4	14	12.5	14	12.5	13	0	14	0	13	0	17	0	16
Sc	ICP-AES	ppm partial	0.4	0	6.5	3.4	6.0	0	6.1	12.5	5.5	0	6.6	0	6.1	0	7.6	0	7.2
Se	GFAAS	ppm partial	0.055	17.2	0.11	62.1	*0.04*	12.5	0.12	50	*0.06*	9.1	0.10	63.6	*0.02*	30	0.13	70	*0.06*
Sm	ICP-MS	ppm	0.5	0	5.7	0	5.3	0	5.8	0	5.3	0	5.7	0	5.3	0	5.9	0	5.6
Sr	XRF	ppm	4	0	335	0	286	0	275	0	220	0	354	0	313	0	424	0	352
Sr	ICP-AES	ppm partial	1.2	0	18	0	12	0	19	0	11	0	17	0	12	0	23	0	13
Ta	ICP-MS	ppm	0.06	0	0.77	3.4	0.70	0	0.75	12.5	0.64	0	0.79	0	0.74	0	0.73	0	0.66
Tb	ICP-MS	ppm	0.08	0	0.75	0	0.69	0	0.76	0	0.69	0	0.74	0	0.68	0	0.77	0	0.73
Te	GFAAS	ppb partial	5	20.7	10	62.1	*5*	37.5	11	75	-	9.1	9	63.6	*4*	20	12	50	*5*
Th	ICP-MS	ppm	0.13	0	10.0	0	9.1	0	12	0	10	0	9.4	0	8.5	0	8.0	0	8.1
Th	ICP-AES	ppm partial	5.6	10.3	13	37.9	12	12.5	15	50	*14*	0	13	27.3	11	20	12	40	11
Ti	XRF	ppm	30	0	3732	0	3498	0	3492	0	3198	0	3714	0	3534	0	4638	0	4284
Ti	ICP-MS	ppm	10	0	3558	0	3299	0	3317	0	3024	0	3544	0	3335	0	4425	0	3992
Ti	ICP-AES	ppm partial	2	0	3558	0	3299	0	3317	0	3024	0	3544	0	3335	0	4425	0	3992
Tm	ICP-MS	ppm	0.03	0	0.32	3.4	0.28	0	0.31	12.5	0.26	0	0.31	0	0.29	0	0.33	0	0.31
U	ICP-MS	ppm	0.08	0	2.68	0	2.29	0	3.21	0	2.65	0	2.51	0	2.19	0	1.94	0	1.69
V	XRF	ppm	6	0	102	3.4	95	0	97	12.5	89	0	99	0	94	0	132	0	122
V	ICP-MS	ppm	2	0	82	0	76	0	81	0	75	0	79	0	74	0	106	0	96
V	ICP-AES	ppm partial	0.6	0	65	0	62	0	61	0	56	0	64	0	62	0	82	0	78
Y	XRF	ppm	2.8	0	24	3.4	22	0	23	12.5	20	0	24	0	23	0	24	0	23
Y	ICP-MS	ppm	0.1	0	23	0	21	0	23	0	20	0	23	0	22	0	24	0	23
Y	ICP-AES	ppm partial	0.15	0	10	0	8.7	0	8.6	0	6.8	0	11	0	9.7	0	11	0	9.5
Yb	ICP-MS	ppm	0.22	0	2.1	3.4	1.9	0	2.0	12.5	1.7	0	2.1	0	2.0	0	2.2	0	2.0
Zn	XRF	ppm	4	0	91	3.4	87	0	90	12.5	86	0	91	0	87	0	98	0	94
Zn	ICP-AES	ppm partial	2	0	67	3.4	63	0	62	12.5	57	0	70	0	66	0	69	0	65
Zr	XRF	ppm	6	0	200	0	177	0	175	0	161	0	212	0	183	0	218	0	197
Zr	ICP-MS	ppm	3	0	182	0	162	0	162	0	148	0	192	0	167	0	196	0	179

LRC : Lowest reliable concentration
%<LRC : Percentage of unit mean or median concentrations below LRC
Wt mean in italics : 50-80% of unit mean or median concentrations below LRC
- : Not calculated (Over 80% of unit mean or median concentrations below LRC)

The average composition is estimated by area-weighted arithmetic means (Wt mean) of both mean and median concentrations of elements in individual units

Table 82. Chemical concentration summaries for the Archean and Paleoproterozoic parts of the Karelian Domain, with and without the Paleoproterozoic diabases.

Map unit combination				Units 15K, 24K, 39 - 76, 101, 391 Karelian Domain				Units 66 - 76 Karelian Domain Archean rocks				Units 66 - 76, 101 Karelian Domain Archean + diabases				Units 15K, 24K, 39-65, 391 Karelian Domain Proterozoic rocks				Units 15K, 24K, 39-65, 101, 391 Karelian Domain Proterozoic + diabases			
Number of units				42				11				12				30				31			
Area covered				158748.0 km^2				73179.9 km^2				77031.5 km^2				81716.4 km^2				85568.0 km^2			
Percent of bedrock				47.1 %				21.7 %				22.8 %				24.2 %				25.4 %			
				Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians	
Element	Method	Unit	LRC	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean
SiO_2	XRF	%	0.02	0	67.49	0	68.18	0	68.22	0	68.83	0	67.27	0	67.83	0	67.69	0	68.51	0	66.86	0	67.63
TiO_2	XRF	%	0.005	0	0.51	0	0.46	0	0.41	0	0.38	0	0.47	0	0.44	0	0.55	0	0.48	0	0.59	0	0.53
Al_2O_3	XRF	%	0.02	0	13.91	0	13.89	0	15.15	0	15.23	0	15.05	0	15.15	0	12.84	0	12.70	0	12.85	0	12.74
FeO	XRF	%	0.01	0	4.27	0	3.92	0	3.32	0	2.96	0	3.81	0	3.49	0	4.71	0	4.33	0	5.09	0	4.74
MnO	XRF	%	0.012	0	0.069	0	0.062	0	0.058	0	0.051	0	0.065	0	0.059	0	0.073	0	0.064	0	0.079	0	0.071
MgO	XRF	%	0.09	0	2.46	0	2.13	0	1.66	0	1.37	0	1.91	0	1.59	0	2.97	0	2.63	0	3.14	0	2.77
CaO	XRF	%	0.004	0	3.12	0	2.87	0	2.95	0	2.82	0	3.26	0	3.15	0	3.00	0	2.60	0	3.27	0	2.90
Na_2O	XRF	%	0.05	4.8	3.54	7.1	3.49	9.1	4.35	18.2	4.37	8.3	4.26	16.7	4.29	3.3	2.86	3.3	2.74	3.2	2.85	3.2	2.73
K_2O	XRF	%	0.003	0	2.65	0	2.52	0	2.59	0	2.36	0	2.50	0	2.27	0	2.80	0	2.76	0	2.71	0	2.66
P_2O_5	XRF	%	0.024	9.5	0.124	9.5	0.103	18.2	0.133	18.2	0.111	16.7	0.135	16.7	0.114	6.7	0.113	6.7	0.093	6.5	0.116	6.5	0.096
C_{tot}	Leco	%	0.05	57.1	*0.12*	81	-	63.6	*0.01*	81.8	-	66.7	*0.02*	83.3	-	53.3	*0.23*	80	0.01	54.8	*0.22*	80.6	-
$C_{non\text{-}carb}$	Leco	%	0.05	88.1	-	92.9	-	90.9	-	100	-	91.7	-	100	-	86.7	-	90	-	87.1	-	90.3	-
F	Ion	%	0.055	57.1	*0.04*	83.3	-	54.5	*0.04*	90.9	-	58.3	*0.04*	91.7	-	56.7	*0.04*	80	0.01	58.1	*0.04*	80.6	-
Al	XRF	ppm	106	0	73584	0	73468	0	80138	0	80577	0	79609	0	80149	0	67908	0	67172	0	67987	0	67384
Al	ICP-AES	ppm partial	1100	2.4	12671	2.4	11052	0	11226	0	10193	0	11368	0	10273	3.3	13901	3.3	11787	3.2	13908	3.2	11788
As	GFAAS	ppm partial	3	85.7	-	97.6	-	81.8	-	100	-	83.3	-	100	-	86.7	-	96.7	-	87.1	-	96.8	-
Au	GFAAS	ppb partial	2.5	85.7	-	100	-	81.8	-	100	-	75	0.1	100	-	90	-	100	-	87.1	-	100	-
B	ICP-AES	ppm partial	4.5	92.9	-	97.6	-	90.9	-	100	-	91.7	-	100	-	93.3	-	96.7	-	93.5	-	96.8	-
Ba	XRF	ppm	21	0	654	2.4	575	0	775	9.1	674	0	746	8.3	648	0	568	0	506	0	551	0	491
Ba	ICP-AES	ppm partial	10	2.4	142	9.5	97	9.1	156	18.2	98	8.3	154	16.7	96	0	130	6.7	97	0	130	6.5	96
Bi	GFAAS	ppm partial	0.04	57.1	*0.03*	83.3	-	36.4	0.03	63.6	*0.01*	41.7	0.02	66.7	*0.01*	63.3	*0.04*	90	-	64.5	*0.04*	90.3	-
Ca	XRF	ppm	29	0	22322	0	20485	0	21100	0	20184	0	23273	0	22494	0	21429	0	18583	0	23366	0	20735
Ca	ICP-AES	ppm partial	50	0	5190	0	3115	0	3503	0	2869	0	3895	0	3271	0	6412	0	2969	0	6633	0	3326
Ce	ICP-MS	ppm	0.22	0	58	0	48	0	64	0	49	0	62	0	48	0	54	0	48	0	53	0	47
Cl	XRF	ppm	45	0	202	0	124	0	148	0	110	0	176	0	124	0	227	0	125	0	249	0	137
Co	ICP-MS	ppm	2	2.4	15	7.1	13	0	11	0	9.2	0	13	0	11	3.3	17	10	15	3.2	18	9.7	16
Co	ICP-AES	ppm partial	0.9	2.4	10	4.8	8.6	0	8.5	0	7.5	0	9.0	0	7.9	3.3	11	6.7	9.3	3.2	12	6.5	9.6
Cr	XRF	ppm	19	7.1	109	11.9	77	0	66	9.1	45	0	72	8.3	47	10	143	13.3	105	9.7	146	12.9	104
Cr	ICP-AES	ppm partial	5	4.8	51	4.8	33	0	31	0	19	0	32	0	19	6.7	68	6.7	47	6.5	67	6.5	46
Cu	XRF	ppm	17	38.1	29	52.4	*15*	27.3	17	54.5	*5*	25	25	50	5	43.3	33	53.3	*23*	41.9	40	51.6	29
Cu	ICP-AES	ppm partial	3	4.8	29	7.1	20	0	17	0	11	0	25	0	17	6.7	34	10	24	6.5	40	9.7	29
Dy	ICP-MS	ppm	0.55	0	2.6	2.4	2.1	0	2.3	0	1.6	0	2.4	0	1.8	0	2.8	3.3	2.4	0	2.9	3.2	2.5
Er	ICP-MS	ppm	0.3	0	1.5	2.4	1.1	0	1.2	0	0.8	0	1.3	0	0.9	0	1.6	3.3	1.3	0	1.7	3.2	1.4
Eu	ICP-MS	ppm	0.09	0	0.84	2.4	0.73	0	0.84	0	0.70	0	0.87	0	0.74	0	0.81	3.3	0.73	0	0.83	3.2	0.76
Fe	XRF	ppm	78	0	33209	0	30458	0	25804	0	22984	0	29596	0	27078	0	36620	0	33644	0	39542	0	36853
Fe	ICP-AES	ppm partial	2300	0	25447	0	22264	0	21556	0	19952	0	22091	0	20397	0	28611	0	24023	0	28775	0	24241
Ga	XRF	ppm	10	2.4	23	7.1	23	0	25	9.1	25	0	25	8.3	25	3.3	22	6.7	22	3.2	22	6.5	22
Gd	ICP-MS	ppm	0.5	0	3.6	2.4	3.0	0	3.4	0	2.8	0	3.5	0	2.9	0	3.6	3.3	3.1	0	3.7	3.2	3.2
Hf	ICP-MS	ppm	0.12	0	3.82	0	3.36	0	3.95	0	3.36	0	3.90	0	3.32	0	3.75	0	3.40	0	3.71	0	3.37
Ho	ICP-MS	ppm	0.09	0	0.51	0	0.40	0	0.43	0	0.30	0	0.46	0	0.33	0	0.56	0	0.47	0	0.58	0	0.49
K	XRF	ppm	25	0	22028	0	20949	0	21522	0	19613	0	20725	0	18874	0	23257	0	22916	0	22460	0	22103
K	ICP-AES	ppm partial	100	0	6993	0	6109	0	7253	0	6592	0	7044	0	6343	0	6944	0	5889	0	6771	0	5696
La	ICP-MS	ppm	0.55	0	31	0	25	0	34	0	26	0	33	0	25	0	29	0	25	0	28	0	24
La	ICP-AES	ppm partial	1.3	4.8	27	9.5	22	9.1	30	18.2	23	8.3	29	16.7	22	3.3	25	6.7	22	3.2	24	6.5	21
Li	ICP-AES	ppm partial	3.5	7.1	18.2	21.4	14.8	9.1	18.6	18.2	15.8	8.3	18.1	16.7	15.3	6.7	18.3	23.3	14.4	6.5	17.8	22.6	14.0
Lu	ICP-MS	ppm	0.03	0	0.20	0	0.16	0	0.17	0	0.11	0	0.18	0	0.12	0	0.23	0	0.19	0	0.23	0	0.20
Mg	XRF	ppm	543	0	14816	0	12820	0	10034	0	8261	0	11541	0	9576	0	17903	0	15877	0	18910	0	16715
Mg	ICP-AES	ppm partial	50	0	9392	0	7603	0	7619	0	6492	0	7688	0	6503	0	10999	0	8640	0	10909	0	8554
Mn	XRF	ppm	93	0	535	0	481	0	450	0	395	0	504	0	457	0	566	0	496	0	612	0	550
Mn	ICP-AES	ppm partial	50	0	295	0	259	0	294	0	270	0	294	0	271	0	297	0	247	0	297	0	248
Mo	XRF	ppm	2.6	100	-	100	-	100	-	100	-	100	-	100	-	100	-	100	-	100	-	100	-
Mo	ICP-AES	ppm partial	2.6	97.6	-	100	-	100	-	100	-	100	-	100	-	96.7	-	100	-	96.8	-	100	-
Na	XRF	ppm	371	4.8	26252	7.1	25874	9.1	32247	18.2	32455	8.3	31609	16.7	31802	3.3	21206	3.3	20294	3.2	21125	3.2	20257
Na	ICP-AES	ppm partial	150	2.4	674	2.4	595	0	668	0	620	0	716	0	664	3.3	635	3.3	530	3.2	680	3.2	574
Nb	XRF	ppm	7	28.6	8	59.5	*3*	36.4	6	81.8	-	33.3	6	75	2	26.7	10	53.3	*6*	25.8	10	51.6	*6*
Nb	ICP-MS	ppm	0.16	0	6.7	0	5.2	0	5.4	0	4.1	0	5.5	0	4.2	0	7.8	0	6.2	0	7.8	0	6.2
Nd	ICP-MS	ppm	0.2	0	23	0	19	0	25	0	20	0	25	0	20	0	22	0	19	0	21	0	19
Ni	XRF	ppm	14	21.4	53	31	34	9.1	30	18.2	15	8.3	34	16.7	18	26.7	70	36.7	49	25.8	72	35.5	50
Ni	ICP-AES	ppm partial	3.5	2.4	33	4.8	22	0	20	0	13	0	21	0	14	3.3	44	6.7	29	3.2	44	6.5	29
P	XRF	ppm	105	9.5	541	9.5	449	18.2	580	18.2	484	16.7	589	16.7	497	6.7	493	6.7	405	6.5	506	6.5	419
P	ICP-AES	ppm partial	6	0	476	0	400	0	519	0	433	0	529	0	444	0	426	0	359	0	440	0	372
Pb	XRF	ppm	14	2.4	31	11.9	25	0	35	9.1	27	0	34	8.3	27	3.3	27	13.3	24	3.2	27	12.9	24
Pb	ICP-AES	ppm partial	8.7	71.4	*7*	95.2	-	45.5	10	100	-	50	*10*	100	-	80	4	93.3	-	80.6	-	93.5	-
Pd	GFAAS	ppb partial	5	71.4	*1*	85.7	-	81.8	-	90.9	-	75	*0.3*	83.3	-	70	1	86.7	-	67.7	*1*	83.9	-
Pr	ICP-MS	ppm	0.74	2.4	6.5	7.1	5.4	0	7.1	9.1	5.6	0	6.9	8.3	5.5	3.3	6.1	6.7	5.2	3.2	6.0	6.5	5.1
Rb	XRF	ppm	5.5	9.5	88	11.9	80	18.2	80	18.2	70	16.7	77	16.7	68	6.7	98	10	91	6.5	94	9.7	88
Rb	ICP-MS	ppm	0.6	4.8	82	9.5	74	0	75	9.1	66	0	73	8.3	63	6.7	92	10	85	6.5	88	9.7	82
S	XRF	ppm	70	23.8	541	45.2	130	18.2	268	36.4	49	16.7	293	33.3	74	26.7	775	50	180	25.8	774	48.4	199
S	ICP-AES	ppm partial	14.3	2.4	600	14.3	144	0	304	0	73	0	331	0	97	3.3	853	20	189	3.2	853	19.4	205
Sc	ICP-MS	ppm	2.8	9.5	12	9.5	10	0	8.3	0	6.5	0	9.8	0	8.2	13.3	14	13.3	12	12.9	15	12.9	14
Sc	ICP-AES	ppm partial	0.4	0	4.1	4.8	3.3	0	2.8	0	2.0	0	2.9	0	2.1	0	5.1	6.7	4.3	0	5.1	6.5	4.3
Se	GFAAS	ppm partial	0.055	47.6	0.10	66.7	*0.03*	45.5	0.02	54.5	*0.01*	41.7	0.04	50	*0.01*	50	0.16	73.3	*0.04*	48.4	0.17	71	0.05
Sm	ICP-MS	ppm	0.5	0	4.0	4.8	3.3	0	4.1	9.1	3.2	0	4.1	8.3	3.3	0	3.9	3.3	3.4	0	3.9	3.2	3.4
Sr	XRF	ppm	4	0	284	0	251	0	395	0	362	0	385	0	353	0	188	0	154	0	189	0	155
Sr	ICP-AES	ppm partial	1.2	0	13	2.4	9.0	0	15	0	11	0	15	0	12	0	12	3.3	6.6	0	12	3.2	7.0
Ta	ICP-MS	ppm	0.06	4.8	0.49	11.9	0.34	9.1	0.37	18.2	0.24	8.3	0.37	16.7	0.24	3.3	0.60	10	0.44	3.2	0.59	9.7	0.43
Tb	ICP-MS	ppm	0.08	0	0.50	2.4	0.42	0	0.46	0	0.36	0	0.48	0	0.38	0	0.52	3.3	0.45	0	0.53	3.2	0.47
Te	GFAAS	ppb partial	5	40.5	7	69	3	45.5	3	63.6	2	41.7	4	58.3	2	40	10	73.3	*4*	38.7	10	71	5
Th	ICP-MS	ppm	0.13	2.4	9.9	4.8	8.0	0	9.4	0	6.7	0	9.0	0	6.4	3.3	11	6.7	9.6	3.2	10	6.5	9.2
Th	ICP-AES	ppm partial	5.6	21.4	14	45.2	10	27.3	13	45.5	10	33.3	13	50	*9*	16.7	14	43.3	11	19.4	14	45.2	11
Ti	XRF	ppm	30	0	3066	0	2760	0	2484	0	2304	0	2838	0	2658	0	3282	0	2862	0	3564	0	3150
Ti	ICP-MS	ppm	10	2.4	2869	2.4	2577	0	2346	0	2173	0	2683	0	2525	3.3	3045	3.3	2626	3.2	3317	3.2	2923
Ti	ICP-AES	ppm partial	2	2.4	2869	2.4	2577	0	2346	0	2173	0	2683	0	2525	3.3	3045	3.3	2626	3.2	3317	3.2	2923
Tm	ICP-MS	ppm	0.03	0	0.21	0	0.16	0	0.17	0	0.11	0	0.18	0	0.12	0	0.23	0	0.20	0	0.24	0	0.21
U	ICP-MS	ppm	0.08	7.1	1.69	9.5	1.17	18.2	1.38	18.2	0.81	16.7	1.33	16.7	0.79	3.3	2.03	6.7	1.53	3.2	1.96	6.5	1.47
V	XRF	ppm	6	0	96	0	85	0	67	0	57	0	81	0	72	0	110	0	97	0	121	0	109
V	ICP-MS	ppm	2	0	78	2.4	68	0	52	0	42	0	64	0	56	0	92	3.3	79	0	101	3.2	90
V	ICP-AES	ppm partial	0.6	0	47	0	38	0	34	0	28	0	38	0	31	0	55	0	44	0	57	0	46
Y	XRF	ppm	2.8	0	16	0	13	0	13	0	9	0	14	0	10	0	17	0	15	0	18	0	15
Y	ICP-MS	ppm	0.1	0	16	0	12	0	13	0	9.1	0	14	0	10	0	17	0	15	0	18	0	15
Y	ICP-AES	ppm partial	0.15	0	6.8	0	4.9	0	6.1	0	3.8	0	6.2	0	3.9	0	7.4	0	5.9	0	7.4	0	5.9
Yb	ICP-MS	ppm	0.22	0	1.4	0	1.1	0	1.1	0	0.73	0	1.2	0	0.82	0	1.5	0	1.3	0	1.6	0	1.3
Zn	XRF	ppm	4	0	67	0	56	0	67	0	57	0	70	0	60	0	64	0	52	0	67	0	55
Zn	ICP-AES	ppm partial	2	0	47	4.8	37	0	51	0	43	0	50	0	43	0	44	6.7	31	0	44	6.5	31
Zr	XRF	ppm	6	0	166	2.4	147	0	175	0	150	0	172	0	149	0	161	3.3	145	0	159	3.2	144
Zr	ICP-MS	ppm	3	0	148	0	130	0	155	0	132	0	153	0	130	0	144	0	131	0	142	0	130

LRC : Lowest reliable concentration
%<LRC : Percentage of unit mean or median concentrations below LRC
Wt mean in italics : 50-80% of unit mean or median concentrations below LRC
- : Not calculated (Over 80% of unit mean or median concentrations below LRC)

The average composition is estimated by area-weighted arithmetic means (Wt mean) of both mean and median concentrations of elements in individual units

Table 83. Chemical concentration summaries for the Lapland Granulite Belt and the Inari Complex.

Map unit combination				Units 77 - 85 Lapland Granulite Belt + Inari Complex				Units 77 - 79 Lapland Granulite Belt				Units 80 - 85 Inari Complex			
Number of units				9				3				6			
Area covered				22406.9 km^2				13273.6 km^2				9133.3 km^2			
Percent of bedrock				6.6 %				3.9 %				2.7 %			
				Unit means		Unit medians		Unit means		Unit medians		Unit means		Unit medians	
Element	Method	Unit	LRC	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean	%<LRC	Wt mean
SiO_2	XRF	%	**0.02**	0	**67.32**	0	67.90	0	**68.04**	0	68.29	0	**66.28**	0	67.34
TiO_2	XRF	%	**0.005**	0	**0.61**	0	0.58	0	**0.67**	0	0.67	0	**0.53**	0	0.44
Al_2O_3	XRF	%	**0.02**	0	**15.25**	0	15.27	0	**15.50**	0	15.57	0	**14.89**	0	14.84
FeO	XRF	%	**0.01**	0	**5.13**	0	5.06	0	**5.42**	0	5.65	0	**4.71**	0	4.19
MnO	XRF	%	**0.012**	0	**0.071**	0	0.068	0	**0.063**	0	0.062	0	**0.084**	0	0.075
MgO	XRF	%	**0.09**	0	**2.10**	0	1.96	0	**2.07**	0	2.06	0	**2.14**	0	1.81
CaO	XRF	%	**0.004**	0	**2.79**	0	2.50	0	**2.01**	0	1.54	0	**3.91**	0	3.90
Na_2O	XRF	%	**0.05**	0	**2.80**	0	2.68	0	**2.07**	0	1.83	0	**3.85**	0	3.91
K_2O	XRF	%	**0.003**	0	**2.58**	0	2.46	0	**2.91**	0	2.99	0	**2.11**	0	1.68
P_2O_5	XRF	%	**0.024**	11.1	**0.108**	11.1	0.088	33.3	**0.100**	33.3	0.088	0	**0.144**	0	0.114
C_{tot}	Leco	%	**0.05**	100	**-**	100	-	100	**-**	100	-	100	**-**	100	-
$C_{non\text{-}carb}$	Leco	%	**0.05**	100	**-**	100	-	100	**-**	100	-	100	**-**	100	-
F	Ion	%	**0.055**	11.1	**0.06**	44.4	0.03	33.3	**0.05**	100	-	0	**0.08**	16.7	0.05
Al	XRF	ppm	**106**	0	**80667**	0	80778	0	**81979**	0	82349	0	**78763**	0	78493
Al	ICP-AES	ppm partial	**1100**	0	**11769**	0	10172	0	**11281**	0	10281	0	**12479**	0	10013
As	GFAAS	ppm partial	**3**	88.9	**-**	100	-	100	**-**	100	-	83.3	**-**	100	-
Au	GFAAS	ppb partial	**2.5**	88.9	**-**	100	-	100	**-**	100	-	83.3	**-**	100	-
B	ICP-AES	ppm partial	**4.5**	100	**-**	100	-	100	**-**	100	-	100	**-**	100	-
Ba	XRF	ppm	**21**	0	**718**	0	692	0	**860**	0	856	0	**513**	0	453
Ba	ICP-AES	ppm partial	**10**	0	**127**	0	80	0	**114**	0	67	0	**147**	0	100
Bi	GFAAS	ppm partial	**0.04**	66.7	**-**	88.9	-	100	**-**	100	-	50	***0.05***	83.3	-
Ca	XRF	ppm	**29**	0	**19927**	0	17896	0	**14386**	0	11032	0	**27978**	0	27878
Ca	ICP-AES	ppm partial	**50**	0	**3961**	0	2995	0	**2731**	0	2131	0	**5747**	0	4252
Ce	ICP-MS	ppm	**0.22**	0	**73**	0	64	0	**81**	0	75	0	**60**	0	49
Cl	XRF	ppm	**45**	0	**194**	0	138	0	**206**	0	142	0	**176**	0	133
Co	ICP-MS	ppm	**2**	0	**13**	0	12	0	**13**	0	13	0	**13**	0	11
Co	ICP-AES	ppm partial	**0.9**	0	**8.4**	0	7.4	0	**8.0**	0	7.2	0	**8.8**	0	7.8
Cr	XRF	ppm	**19**	11.1	**90**	22.2	77	33.3	**118**	33.3	115	0	**63**	16.7	30
Cr	ICP-AES	ppm partial	**5**	11.1	**28**	11.1	20	33.3	**34**	33.3	29	0	**23**	0	12
Cu	XRF	ppm	**17**	33.3	**25**	66.7	-	33.3	**22**	66.7	-	33.3	**30**	66.7	-
Cu	ICP-AES	ppm partial	**3**	0	**24**	0	16	0	**23**	0	17	0	**27**	0	15
Dy	ICP-MS	ppm	**0.55**	11.1	**4.1**	11.1	3.8	33.3	**4.8**	33.3	4.7	0	**3.2**	0	2.6
Er	ICP-MS	ppm	**0.3**	11.1	**2.4**	11.1	2.2	33.3	**2.9**	33.3	2.8	0	**1.9**	0	1.5
Eu	ICP-MS	ppm	**0.09**	0	**1.2**	0	1.1	0	**1.4**	0	1.3	0	**0.96**	0	0.83
Fe	XRF	ppm	**78**	0	**39852**	0	39277	0	**42106**	0	43885	0	**36589**	0	32587
Fe	ICP-AES	ppm partial	**2300**	0	**19100**	0	16982	0	**15768**	0	13612	0	**23942**	0	21878
Ga	XRF	ppm	**10**	0	**24**	0	24	0	**25**	0	25	0	**23**	0	23
Gd	ICP-MS	ppm	**0.5**	11.1	**5.0**	11.1	4.7	33.3	**5.9**	33.3	5.7	0	**4.1**	0	3.6
Hf	ICP-MS	ppm	**0.12**	0	**4.86**	0	4.54	0	**5.43**	0	5.44	0	**4.03**	0	3.23
Ho	ICP-MS	ppm	**0.09**	11.1	**0.83**	11.1	0.79	33.3	**0.99**	33.3	1.00	0	**0.65**	0	0.53
K	XRF	ppm	**25**	0	**21447**	0	20385	0	**24136**	0	24842	0	**17538**	0	13903
K	ICP-AES	ppm partial	**100**	0	**4514**	0	3509	0	**3566**	0	2563	0	**5892**	0	4885
La	ICP-MS	ppm	**0.55**	0	**37**	0	33	0	**43**	0	40	0	**30**	0	23
La	ICP-AES	ppm partial	**1.3**	11.1	**21**	11.1	18	33.3	**19**	33.3	17	0	**25**	0	19
Li	ICP-AES	ppm partial	**3.5**	11.1	**10.4**	11.1	8.5	33.3	**5.8**	33.3	4.7	0	**17.1**	0	14.3
Lu	ICP-MS	ppm	**0.03**	0	**0.35**	0	0.32	0	**0.40**	0	0.39	0	**0.27**	0	0.21
Mg	XRF	ppm	**543**	0	**12651**	0	11807	0	**12458**	0	12428	0	**12928**	0	10902
Mg	ICP-AES	ppm partial	**50**	0	**5847**	0	4659	0	**5149**	0	4133	0	**6862**	0	5425
Mn	XRF	ppm	**93**	0	**550**	0	527	0	**488**	0	481	0	**651**	0	581
Mn	ICP-AES	ppm partial	**50**	0	**170**	0	152	0	**100**	0	91	0	**271**	0	241
Mo	XRF	ppm	**2.6**	100	**-**	100	-	100	**-**	100	-	100	**-**	100	-
Mo	ICP-AES	ppm partial	**2.6**	100	**-**	100	-	100	**-**	100	-	100	**-**	100	-
Na	XRF	ppm	**371**	0	**20754**	0	19856	0	**15367**	0	13542	0	**28589**	0	29027
Na	ICP-AES	ppm partial	**150**	0	**890**	0	768	0	**867**	0	790	0	**924**	0	737
Nb	XRF	ppm	**7**	11.1	**10**	66.7	-	33.3	**11**	66.7	-	0	**8**	66.7	-
Nb	ICP-MS	ppm	**0.16**	0	**8.3**	0	7.4	0	**8.9**	0	8.7	0	**7.3**	0	5.5
Nd	ICP-MS	ppm	**0.2**	0	**30**	0	27	0	**34**	0	31	0	**25**	0	21
Ni	XRF	ppm	**14**	11.1	**34**	33.3	26	0	**38**	0	34	16.7	**32**	50	*15*
Ni	ICP-AES	ppm partial	**3.5**	0	**26**	0	20	0	**32**	0	28	0	**17**	0	9.2
P	XRF	ppm	**105**	11.1	**471**	11.1	384	33.3	**436**	33.3	384	0	**628**	0	497
P	ICP-AES	ppm partial	**6**	0	**330**	0	254	0	**174**	0	123	0	**557**	0	444
Pb	XRF	ppm	**14**	0	**29**	0	28	0	**32**	0	32	0	**25**	0	23
Pb	ICP-AES	ppm partial	**8.7**	66.7	**-**	77.8	-	66.7	**-**	66.7	-	66.7	**-**	83.3	-
Pd	GFAAS	ppb partial	**5**	88.9	**-**	100	-	100	**-**	100	-	83.3	**-**	100	-
Pr	ICP-MS	ppm	**0.74**	11.1	**8.4**	11.1	7.5	33.3	**9.8**	33.3	9.0	0	**6.9**	0	5.8
Rb	XRF	ppm	**5.5**	11.1	**73**	11.1	67	33.3	**72**	33.3	75	0	**77**	0	59
Rb	ICP-MS	ppm	**0.6**	0	**74**	0	69	0	**73**	0	76	0	**75**	0	60
S	XRF	ppm	**70**	22.2	**413**	77.8	-	33.3	**548**	66.7	-	16.7	**258**	83.3	-
S	ICP-AES	ppm partial	**14.3**	0	**442**	0	109	0	**551**	0	124	0	**284**	0	88
Sc	ICP-MS	ppm	**2.8**	0	**17**	0	16	0	**18**	0	18	0	**14**	0	12
Sc	ICP-AES	ppm partial	**0.4**	0	**3.1**	0	2.6	0	**2.5**	0	2.3	0	**3.9**	0	3.0
Se	GFAAS	ppm partial	**0.055**	44.4	**0.06**	88.9	-	33.3	**0.08**	100	-	50	***0.03***	83.3	-
Sm	ICP-MS	ppm	**0.5**	0	**5.2**	0	4.8	0	**5.8**	0	5.4	0	**4.5**	0	3.9
Sr	XRF	ppm	**4**	0	**307**	0	264	0	**291**	0	257	0	**330**	0	275
Sr	ICP-AES	ppm partial	**1.2**	0	**15**	0	11	0	**15**	0	12	0	**16**	0	10
Ta	ICP-MS	ppm	**0.06**	0	**0.47**	0	0.35	0	**0.45**	0	0.36	0	**0.50**	0	0.34
Tb	ICP-MS	ppm	**0.08**	11.1	**0.73**	11.1	0.68	33.3	**0.86**	33.3	0.85	0	**0.59**	0	0.48
Te	GFAAS	ppb partial	**5**	22.2	**17**	66.7	-	33.3	**23**	66.7	-	16.7	**9**	66.7	-
Th	ICP-MS	ppm	**0.13**	0	**9.2**	0	6.4	0	**9.9**	0	7.4	0	**8.2**	0	5.0
Th	ICP-AES	ppm partial	**5.6**	11.1	**10**	33.3	7	33.3	**9**	33.3	7	0	**12**	33.3	8
Ti	XRF	ppm	**30**	0	**3660**	0	3456	0	**4008**	0	4020	0	**3156**	0	2628
Ti	ICP-MS	ppm	**10**	0	**3525**	0	3245	0	**3874**	0	3771	0	**3017**	0	2481
Ti	ICP-AES	ppm partial	**2**	0	**3525**	0	3245	0	**3874**	0	3771	0	**3017**	0	2481
Tm	ICP-MS	ppm	**0.03**	0	**0.35**	0	0.31	0	**0.41**	0	0.39	0	**0.27**	0	0.21
U	ICP-MS	ppm	**0.08**	0	**1.02**	0	0.74	0	**0.63**	0	0.60	0	**1.59**	0	0.95
V	XRF	ppm	**6**	0	**110**	0	106	0	**120**	0	120	0	**97**	0	84
V	ICP-MS	ppm	**2**	0	**91**	0	85	0	**99**	0	98	0	**78**	0	68
V	ICP-AES	ppm partial	**0.6**	0	**44**	0	38	0	**44**	0	38	0	**44**	0	38
Y	XRF	ppm	**2.8**	0	**26**	0	24	0	**30**	0	30	0	**20**	0	17
Y	ICP-MS	ppm	**0.1**	0	**25**	0	23	0	**28**	0	28	0	**20**	0	16
Y	ICP-AES	ppm partial	**0.15**	0	**5.7**	0	4.7	0	**4.5**	0	4.1	0	**7.5**	0	5.4
Yb	ICP-MS	ppm	**0.22**	0	**2.3**	0	2.2	0	**2.7**	0	2.7	0	**1.8**	0	1.4
Zn	XRF	ppm	**4**	0	**85**	0	82	0	**94**	0	92	0	**72**	0	67
Zn	ICP-AES	ppm partial	**2**	0	**39**	0	33	0	**36**	0	29	0	**44**	0	40
Zr	XRF	ppm	**6**	0	**206**	0	194	0	**226**	0	226	0	**176**	0	147
Zr	ICP-MS	ppm	**3**	0	**188**	0	176	0	**207**	0	206	0	**159**	0	132

LRC : Lowest reliable concentration
%<LRC : Percentage of unit mean or median concentrations below LRC
Wt mean in italics : 50-80% of unit mean or median concentrations below LRC
- : Not calculated (Over 80% of unit mean or median concentrations below LRC)

The average composition is estimated by area-weighted arithmetic means (Wt mean) of both mean and median concentrations of elements in individual units

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The Rock Geochemical Database of Finland contains analytically consistent whole-rock geochemical data representing the diversity of rock types from throughout Finland. This Report of Investigation provides average chemical compositions of map units and their regional combinations as presented on the 1:1,000,000 Bedrock Map of Finland. These summary data provide useful background and reference values for a wide variety of research topics such as crustal evolution, metallogeny and the environment.

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