

# **TILL GEOCHEMISTRY OF NORTHEAST NEWFOUNDLAND**

**(NTS MAP AREAS 2C/13, 2D/15, 2D/16,  
2E/01, 2E/08, 2F/04 AND 2F/05)**



**D. Brushett**

**Open File NFLD/3174**

**St. John's, Newfoundland  
October, 2012**



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*Cover: View looking east from Indian Bay.*





Mines

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## ABSTRACT

*This report provides the geochemical data from a multi-year (commenced in 2009) till geochemistry and surficial mapping program conducted in northeastern Newfoundland, in the Weir's Pond (NTS 2E/01), Carmanville (NTS 2E/08), Wesleyville (NTS 2F/04), Musgrave Harbour (NTS 2F/05), Gander (NTS 2D/15), Gambo (NTS 2D/16), and St. Brendan's (NTS 2C/13) areas. Regional till sampling was conducted at a spacing of 1 sample per 1 km<sup>2</sup> in areas of good access, and 1 sample per 4 km<sup>2</sup> where helicopter support was required; a total of 1651 till samples were collected. Geochemical data of 53 elements, from BC- or C-horizon till samples, are presented and includes the results of analyses by ICP-ES for aluminum, arsenic, barium, beryllium, cadmium, calcium, cerium, chromium, cobalt, copper, dysprosium, iron, lanthanum, lead, lithium, magnesium, manganese, molybdenum, nickel, niobium, phosphorus, potassium, scandium, sodium, strontium, titanium, vanadium, yttrium, zinc and zirconium; by INAA for antimony, arsenic, barium, bromine, calcium, cerium, cesium, chromium, cobalt, europium, gold, iron, hafnium, iridium, lanthanum, lutetium, mercury, molybdenum, nickel, neodymium, rubidium, scandium, samarium, selenium, silver, sodium, strontium, tantalum, tin, terbium, thorium, tungsten, uranium, ytterbium, zinc and zirconium. A complete data listing, field duplicate data, and individual element distribution maps, on a bedrock geology base map, are also provided.*

*Anomalous concentrations of gold, arsenic, beryllium, chromium, copper, nickel, lead and zinc are present throughout the study area, particularly in tills overlying the metasedimentary rocks of Jonathans Pond Formation and the Gander River Complex.*



## INTRODUCTION

This report provides the geochemical data from a multi-year (commenced in 2009) till geochemistry and surficial mapping program conducted in northeastern Newfoundland, and supplements the Current Research reports of Brushett (2010a, 2011a, and 2012). It also includes data previously released in Open File 3134 (Brushett, 2011b), and Open File 0398 (Batterson *et al.*, 2001). Mapping of the surficial geology and associated sampling for till geochemistry were completed in the Weir's Pond (NTS 2E/01), Carmanville (NTS 2E/08), Wesleyville (NTS 2F/04), Musgrave Harbour (NTS 2F/05), Gander (NTS 2D/15), Gambo (NTS 2D/16), and St. Brendan's (NTS 2C/13) areas.

Mineral exploration in this area has focused on gold and base metals in rocks of the Gander River Complex, with mineral potential being identified in areas underlain by quartz-rich sandstone and quartz breccias of the Gander Group. Only limited Quaternary investigations had previously been completed in the field area; this combined with the presence of mineralization provided a field program objective to further our understanding of the region's Quaternary history as it relates to mineral exploration, and to identify suitable sampling media for further geochemical exploration. Determination of ice-flow directions will aid in the analysis of geochemical anomalies and provide a better understanding of the regional ice-flow history. These results will supplement that collected from similar projects in surrounding areas, including the Bonavista Peninsula (Batterson and Taylor, 2001), Grand Falls–Mount Peyton area (Batterson and Taylor, 1998), and the Hodges Hill area (Taylor and Liverman, 2000).

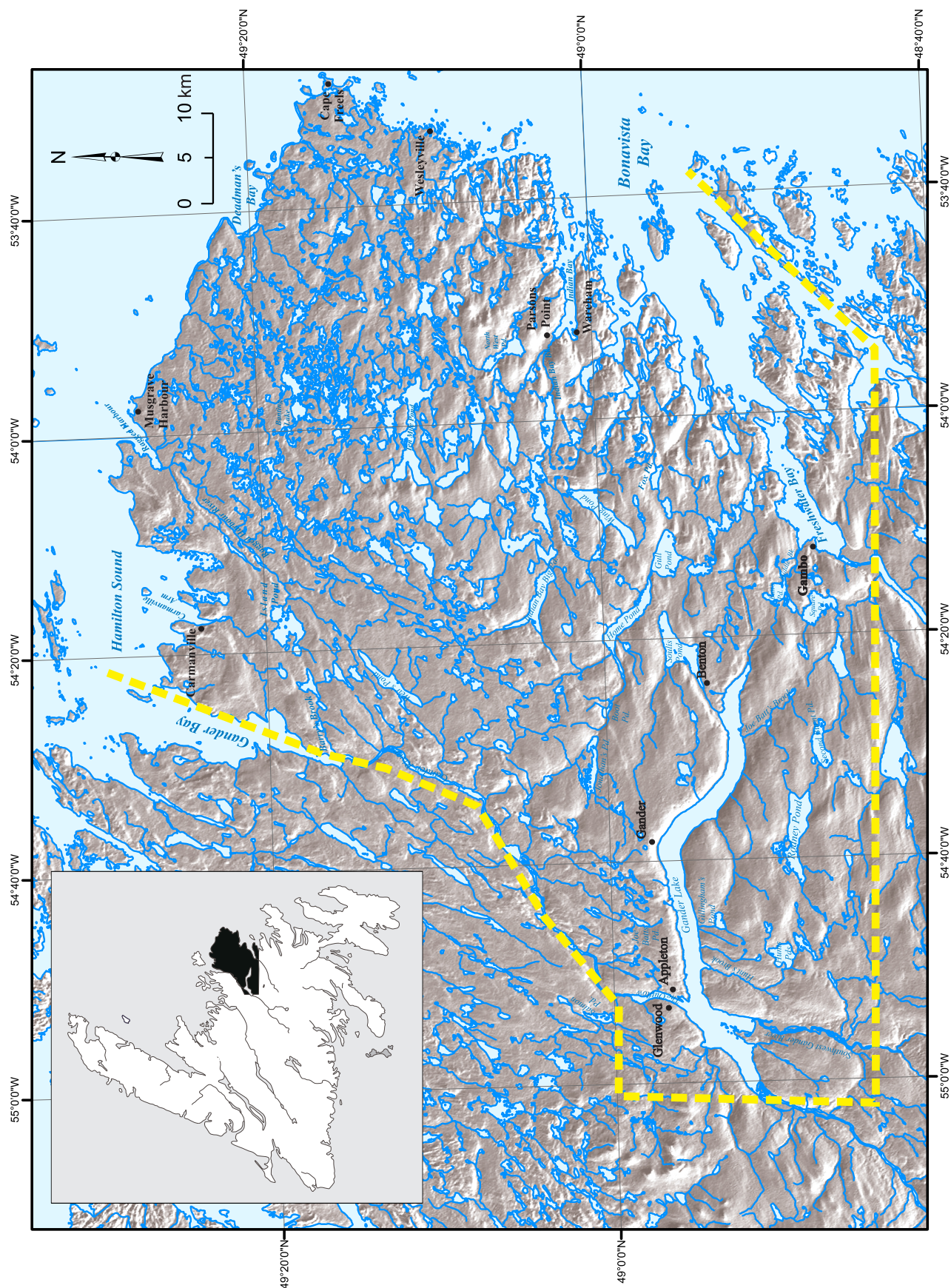
## LOCATION, ACCESS AND PHYSIOGRAPHY

Fieldwork was conducted over seven 1:50 000-scale NTS map areas in northeastern Newfoundland: St. Brendan's (NTS 2C/13), Gander (NTS 2D/15), Gambo (NTS 2D/16), Weir's Pond (NTS 2E/01), Carmanville (NTS 2E/08), Wesleyville (NTS 2F/04), and Musgrave Harbour (NTS 2F/05), covering an area of approximately 4456 km<sup>2</sup> (Figure 1). Access to most of the field area was *via* paved roads (*e.g.*, the Trans Canada Highway (TCH), Route 330 (Gander Bay Road), and Route 320 (Gambo to Wesleyville)) or unpaved logging roads. All terrain vehicles were used along smaller trails and remote areas were accessed by helicopter.

Much of the study area is characterized by low- to moderate-relief, except in the southeast where numerous hills (maximum elevation of 225 m asl) and narrow, steep-sided valleys produce a rugged terrain. These hills and valleys, and low-lying ridges extend across the area with a southwest–northeast trend, reflecting the structure of the underlying bedrock. Gander Lake, a dominant feature in the area, is a long, narrow (40 km by up to ~3 km wide) lake reaching a maximum depth of at least 288 m (O'Connell and Dempson, 2002). Hills to the south of the lake rise to 215 m asl, giving a maximum relief of 503 m for the trough. The steep sides, shape of the basin, and alignment with known ice-flow directions, are consistent with the description of fjords of glacial origin (Jenness, 1960).

The area has varying thicknesses of glacial cover, generally thinning toward the coast where barren rock exposures and low shrub/alder beds dominate the landscape. Ponds and bogs are com-





**Figure 1.** SRTM image of study area showing physiography and places mentioned in the text.



mon. Hummocky terrain and boulder fields composed of erratics of megacrystic granites are common in the eastern part of the area and south of Gander Lake.

## BEDROCK GEOLOGY

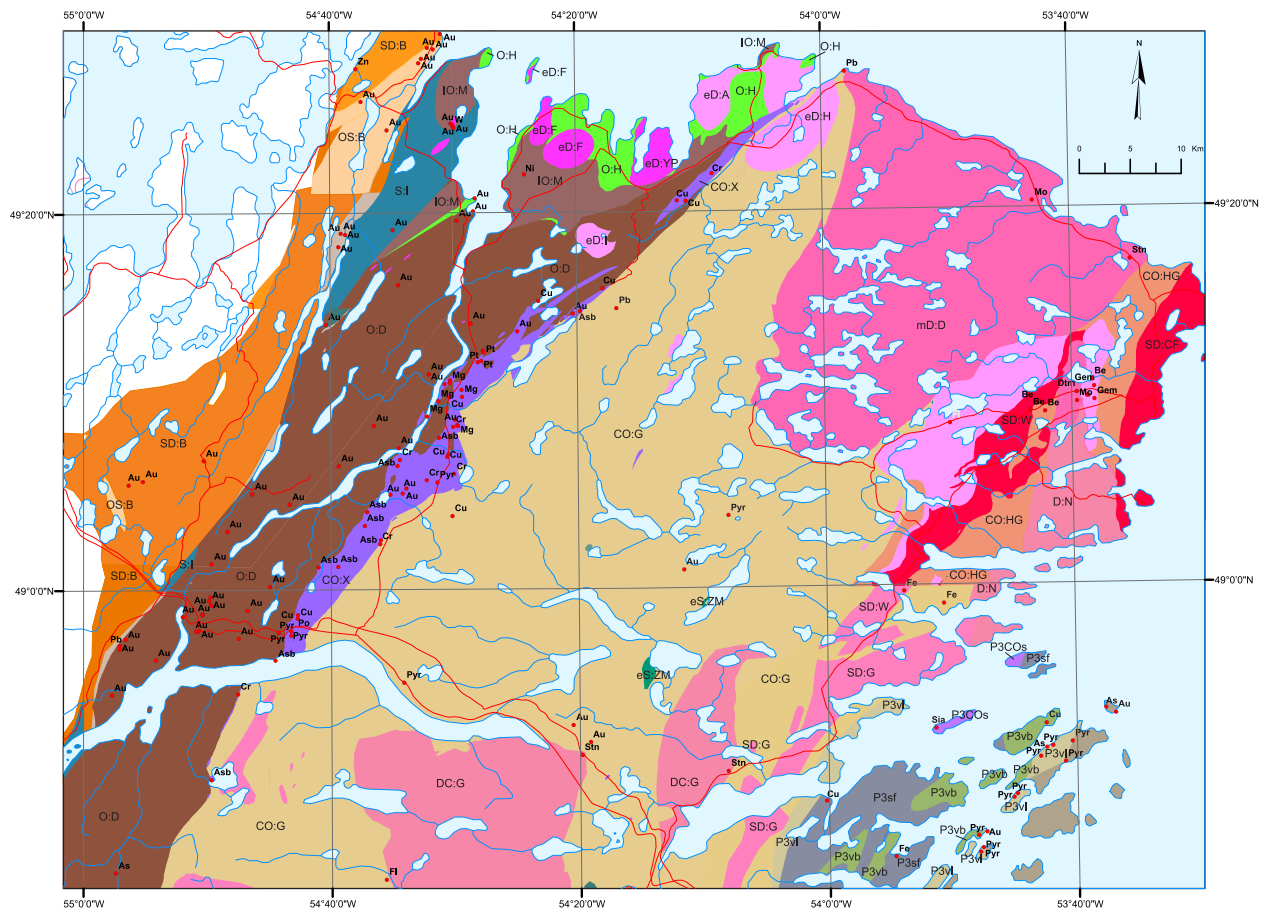
The bedrock geology of the study area encompasses three tectonostratigraphic zones of the Newfoundland Appalachians, the Dunnage, Gander and Avalon zones. Rocks of the northwestern Avalon Zone outcrop in the easternmost part of the study area and include Neoproterozoic rocks of the Love Cove and Musgravetown groups. The Love Cove Group consists of sericite and chloritic schist, associated acidic and intermediate volcanic lava, strongly foliated pyroclastic rocks, and minor sedimentary rocks. Most of the area west of Bloody Reach is underlain by the Neoproterozoic Musgravetown Group, which comprise red and green conglomerate, sandstone, siltstone, red, buff and grey flow-banded rhyolite, and minor rhyolite breccia and tuff (O'Brien and Knight, 1988).

The Dunnage and Gander zones are separated by a boundary defined by the Gander River Complex, which may represent remnants of the Iapetus ocean crust (O'Brien and Knight, 1988; Williams *et al.*, 1988; Figure 2). The Davidsville and Botwood groups of the Dunnage Zone comprise Middle Ordovician quartz-poor sandstone, siltstone and conglomerates that are non-conformable over the Gander Group. Conglomerates have not been identified in the Gander Group and are thus considered here to be a potential useful indicator of glacial transport. The Gander River Complex is restricted to a thin north-northeast to south-southwest belt composed mainly of locally serpentinized pyroxenite, but also includes local exposures of carbonate, talc, and gabbro (O'Neill, 1990); the distribution of these clasts may also provide details on ice-flow history in the area.

The Gander Group comprises a north-northeast-trending belt of Ordovician metasedimentary rocks of the Indian Bay Big Pond and Jonathans Pond formations (Blackwood, 1982; O'Neill, 1990). The Indian Bay Big Pond Formation consists of grey to purple, pebble and cobble conglomerate interbedded with grey quartz-rich sandstone, maroon siltstone, and greyish-green pelite. The Jonathans Pond Formation consists of interbedded psammite, semipelite and greyish-green pelite predominantly metamorphosed to greenschist or amphibolite facies. Exposures of gabbro and biotite or hornblende granite in the Wing Pond, Gull Pond, and Square Pond areas and of ultramafic rock near Square Pond and Butts Pond are associated with the Wing Pond Shear Zone (O'Neill, 1991). Prior to the 1980s, rocks of the Gander River Complex were the main focus of mineral exploration in the area. More recently, exploration activity has centred on areas underlain by quartz-rich sandstones and quartz breccias of the Indian Bay Big Pond and Jonathans Pond formations, where gold is the main target of exploration (Evans, 1993). Gravity-magnetic data (Miller, 1988), and lake-sediment survey data (Davenport *et al.*, 1988) which indicates a correlation of arsenic, antimony and gold along a gravity-magnetic boundary, combined with gold occurrences at the Little Wing Pond showing (O'Neill and Knight, 1988) and the Stallion/Star Track project area east of Benton, suggest further mineral potential.

Late Silurian to Devonian igneous rocks intrude all older rocks throughout the study area. In the western area, coarse-grained grey tonalitic-granodioritic rocks of the Frederickton, Rocky





## LEGEND

### AVALON ZONE

#### Neoproterozoic

- P3s** *Musgravetown Group*: bimodal, mainly subaerial volcanic rocks, including unseparated siliciclastic sedimentary rocks
- P3v** *Love Cove Group*: bimodal, submarine to subaerial volcanic rocks, including minor siliciclastic sedimentary rocks

### DUNNAGE ZONE

#### Early Silurian to Early Devonian

- SD:B** *Botwood Group*: Subaerial mafic and felsic flows and pyroclastic rocks, shallow marine to subaerial red, green and grey sandstone, siltstone, shale, and minor conglomerate

#### Early to Late Silurian

- S:I** *Indian Islands Group*: Grey calcareous siltstone with local fossiliferous limestone, overlain by grey to black shale containing thin beds of siltstone; discontinuous basal unit of coral-bearing limestone and limestone breccia

#### Late Ordovician to Early Silurian

- OS:B** *Badger Group*: Grey, well-bedded greywacke, including conglomerate layers, overlain by grey and minor red conglomerate

#### Middle to Late Ordovician

- O:M** *Main Point Formation*: graptolitic, black shale containing bedded chert and chert lenses

#### Early to Late Ordovician

- O:D** *Davidsville Group*: shale and thinly bedded siltstone and sandstone, probably distal turbidites; thickly bedded sandstone and minor shale and conglomerate, likely representing more proximal turbidites; minor limestone and felsic and mafic volcanic rocks
- O:H** *Hamilton Sound Group*: Siltstone, shale and minor sandstone; melange of siltstone, sandstone and mafic volcanic blocks in black shale matrix; volcanoclastic rocks, pillowed and massive basalt, and mafic dykes

### Late Cambrian to Middle Ordovician

- CO:X** *Gander River Complex*: Ophiolite complex that includes pyroxenite, serpentinite, magnesite, gabbro, talc/tremolite zones, mafic flows and volcanoclastic rocks, trondhjemite and quartz porphyry

### GANDER ZONE

#### Early Cambrian to Middle Ordovician

- CO:G** *Indian Bay Big Pond Formation*: medium- to thick-bedded, buff, grey and maroon sandstone; thinly bedded, maroon and green siltstone and black pelite; brown-weathering, possibly tuffaceous semipelite
- CO:G** *Jonathans Pond Formation*: quartzite, psammite, semipelite and pelite, including minor black slate, conglomerate, limestone, mafic and felsic volcanic rocks, and unseparated migmatitic rocks

- CO:HG** *Hare Bay Gneiss*: migmatite, gneiss and schist

- eS:ZM** *Wing Pond Shear Zone*: locally foliated, medium- to coarse-grained hornblende gabbro

### Silurian to Devonian

- eD** *Frederickton (F), Rocky Bay (YP), and Aspen Cove (A) plutons*: coarse-grained grey tonalite granodiorite
- eD** *Island Pond (I), Ocean Pond (E) and Ragged Harbour (H) plutons*: massive, medium-grained biotite-muscovite granite and aplite
- SD** *North Pond Granite (NR), Business Cove Granite (BU)*: medium- to coarse-grained garnetiferous K-feldspar biotite granite
- SD** *Wareham Granite (W), Cape Freels Granite (CF)*: medium- to coarse-grained garnetiferous K-feldspar biotite granite
- mD:D** *Deadmans Bay Granite*: massive, medium- to coarse-grained biotite granite
- D:N** *Newport Granite*: massive, medium- to coarse-grained biotite granite

**Figure 2.** Bedrock geology of the study area (taken from Colman-Sadd and Crisby-Whittle, 2005). Red dots show location of mineral occurrences (taken from the Geological Survey's Mineral Occurrence Data System (MODS) (<http://gis.geosurv.gov.nl.ca/mods/mods.asp>)).



Bay, Tim's Pond, and Aspen Cove plutons intrude the Davidsville Group. Also intruding the Davidsville Group are massive, medium-grained biotite–muscovite granite and aplite of the Island Pond and Ragged Harbour plutons (Currie, 1995). The Gander Lake Granite, a predominantly massive, K-feldspar megacrystic biotite granite, underlies much of the area south of Gander Lake. Other plutons in this area include a fine-grained, equigranular, pink- to red-weathering granite and gabbroic intrusions of the Mount Peyton intrusive suite to the west (Blackwood, 1982) and a medium- to coarse-grained, white- to pink-weathering, muscovite granite in the Gillingham's Pond area, which may be correlative with the Middle Ridge granite to the southwest (O'Neill, 1990).

The northeasternmost part of the Gander Zone is underlain by gneisses and migmatites of the Hare Bay gneissic complex. Silurian and Devonian megacrystic granites intrude the migmatites and gneisses (Jayasinghe, 1978). The Silurian granites include: Wareham granite, North Pond granite, Business Cove granite, Cape Freels granite and unnamed intrusions, all of which exhibit a regional northeast-trending foliation paralleling the Dover Fault, which separates the Gander Zone from the Avalon Zone. These Silurian granites are primarily medium- to coarse-grained, locally garnetiferous, K-feldspar biotite granites. Numerous beryl and chrysoberyl occurrences have been discovered, mostly within pegmatite veins (Hill, 1984). The Devonian granites include the Newport granite and Deadman's Bay granite which are massive, medium- to coarse-grained biotite granite (Jayasinghe, 1978).

## QUATERNARY HISTORY

### OVERVIEW

Previous work on the glaciation of Newfoundland suggested that during the last glacial maximum (LGM; ~21 ka BP), Newfoundland was covered with multiple local ice caps producing almost complete glacial cover extending out to the continental shelf edge (Grant, 1989; Shaw *et al.*, 2006). The sequence of deglacial events following the LGM are based mostly on striation and landform data which depict a first order ice divide extending south and southeast across Newfoundland along the axis of the Long Range Mountains, east through central Newfoundland and across the Avalon Peninsula. Early ice retreat was facilitated by calving along deep (>600 m) channels, particularly off northeast Newfoundland – this created a second-order ice divide along the axis of the Cape Freels peninsula that separated ice flow in Notre Dame and Trinity basins (Shaw, 2003). Ice retreat continued *via* calving embayments until ~13 ka when ice margins reached coastal areas and the configuration of ice divides shifted as deglaciation became land-based; retreat of isolated ice caps continued by ablation, predominantly through melting (Shaw *et al.*, 2006). At least fifteen of these remnant ice caps were present, five of which had the potential to influence ice flow in northeastern Newfoundland. These ice caps were located near Red Indian Lake, Meelpaeg Lake, Middle Ridge, north of Grand Falls (in the Twin Ponds area) and in the Gander area (Grant, 1974; Figure 3).

A radiocarbon date of ~12.0 ka (marine barnacles) was obtained from silty clay at Parsons Point (GSC-4182). This sample was at 2 m asl, indicating that Bonavista Bay was ice-free at this time and that sea level was above present level (Shaw and Forbes, 1990). The Gander area was





**Figure 3.** *Glacial extent at ~13 ka. Also shown are last glacial maximum (dotted black line), major ice divides (thick blue dashed lines) and generalized ice-flow lines (thin blue lines; modified from Shaw et al., 2006).*

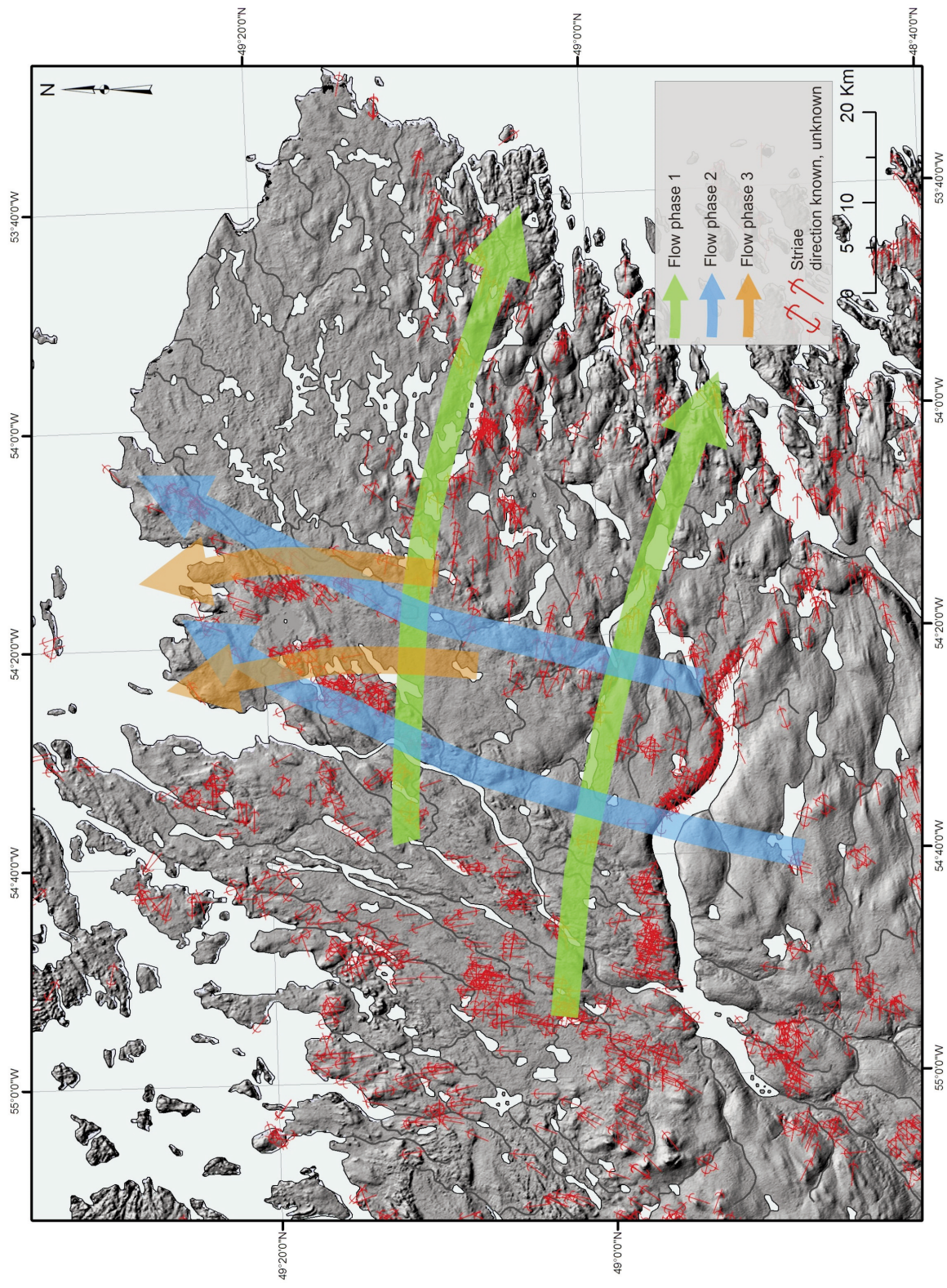
likely ice-free by ~11.4 ka (marine macro-fauna radiocarbon dates from the lower Gander River valley and Exploits River valley) (Blake, 1983).

### ICE-FLOW PATTERNS

Regional ice-flow directions determined from glacial erosional evidence, mostly striations, indicate the existence of three separate ice-flow events in northeastern Newfoundland during the last, late Wisconsinan glaciation (Figure 4; St. Croix and Taylor, 1990, 1991; Brushett, 2010a, 2011a, 2012). The earliest ice flow was east-southeastward. Evidence for this flow is widespread throughout the area and has been identified in the Gander River and Gander Bay areas, around Gander Lake and eastward into the Bonavista Bay area (Jenness, 1960; Butler *et al.*, 1984; Vanderveer and Taylor, 1987; Batterson and Vatcher, 1991; St. Croix and Taylor, 1991; Brushett, 2010a, 2011a, 2012). The probable source of this ice-flow event was from north of Red Indian Lake, based on the presence of eastward striations in the northwest Gander River area (Proudfoot *et al.*, 1988), the Grand Falls–Glenwood area (Batterson and Taylor, 1998) and the Red Indian Lake area (Rogerson, 1982; Vanderveer and Sparkes, 1982; Smith, 2010, 2012; Smith *et al.*, 2009).

The eastward ice-flow event was followed by north-northeast ice-flow. Evidence for this northward ice-flow is present throughout most of northeastern Newfoundland (Vanderveer and Taylor, 1987; St. Croix and Taylor, 1990, 1991; Batterson and Vatcher, 1991; Scott, 1994; Batterson and Taylor, 1998; Brushett, 2010a, 2011a, 2012). This event crossed Gander Lake and





**Figure 4.** Ice-flow patterns overlain on SRTM image. Three ice-flow phases affected the study area. The first (Flow Phase 1) was a regionally extensive eastward flow likely sourced from Red Indian Lake. The second (Flow Phase 2) was north-northeastward from an ice divide between Middle Ridge and Meelpaeg Lake, and the third (Flow Phase 3) was a north-northwestward flow likely sourced from the Middle Ridge area.



flowed northward into Hamilton Sound; evidence for this flow is sparse east of Gander Lake. The source of this ice flow is likely an ice divide situated between Middle Ridge and Meelpaeg Lake (Proudfoot *et al.*, 1988; St. Croix and Taylor, 1990, 1991).

The third ice-flow event was northwestward and consistently crosscuts the earlier northeastward ice-flow when observed on the same outcrop (Vanderveer and Taylor, 1987; Taylor and St. Croix, 1989; St. Croix and Taylor, 1991; Brushett, 2010a, 2011a, 2012). This ice-flow is likely related to a Middle Ridge ice centre (Grant, 1974; St. Croix and Taylor, 1991).

## SURFICIAL GEOLOGY

The surficial geology and geomorphology of the area has a marked contrast between the coastal areas and the hinterland. The coast is mostly bedrock or bedrock concealed by a thin veneer of sediment and vegetation. Along the coastal margin, extending up to 6 km inland, the topography is rugged, mostly exposed or vegetated bedrock interspersed with areas of bog and fen (up to 10 km long) and only small patches of thin diamicton. Inland of the coastal margin most of the study area is covered by diamicton, mostly as veneers, eroded veneers, and large areas of hummocks as well as till blankets.

Only a single stratigraphic unit of diamicton has been identified. Diamicton texture and colour varies and reflects the underlying bedrock. Diamicton underlain by the Gander Group is generally light brownish-grey to grey. The matrix is predominantly silty sand, poorly sorted and slightly to moderately compacted. Diamicton underlain by granite is typically pinkish-grey with a coarser, sandier matrix. Sedimentary structures were rarely observed, but this may be due to poor exposure. Clasts are granule to boulder size (up to 3 m diameter) and are generally sub-rounded to angular. Clasts are commonly striated and have thin silt coatings on their upper surfaces.

Clast lithology and shape is generally controlled by the underlying bedrock. Fragile (*e.g.*, well-bedded, soft, shale) clasts are common in areas underlain by bedrock of the Gander Group, whereas granite clasts are generally sub-rounded. Clast content varies between 30 to 70 percent and averages about 50 percent. Ultramafic and associated volcanic rocks of the Gander River Complex are restricted to a thin belt through the western part of the area, making them useful indicators of glacial transport directions and distances. Clasts derived from the Gander River Complex were located in diamictons in the Carmanville area and east of Island Pond, indicate northwestward transport. Granitic clasts derived from the Gander Lake Granite found in the Island Pond area suggest northward transport.

Strong clast fabrics ( $S1 > 0.6$ ,  $K > 1.0$ ) providing data on potential ice-flow directions were only determined at 3 sites. These fabrics indicate northwestward ice-flow in the Boot Pond area, and northeastward ice-flow in Jonathan's Pond and Home Pond areas. The characteristics described above (sub-rounded clasts, striated and fragile clasts, well-oriented clast fabrics, and silt coatings) are interpreted to represent deposition as subglacial melt-out till (Dreimanis, 1988).

Hummocky terrain and eroded till, common in the northeast, likely reflect ice stagnation during deglaciation. Hummocks are predominantly till and have a surface cover of boulders, likely derived from a supraglacial source. Areas north of Ten Mile Pond and south of Gander Lake, in



particular, are extensively covered with large boulders, many exceeding 3 m diameter. Areas of eroded till are commonly associated with many minor meltwater channels.

Glaciofluvial and fluvial deposits are common in the valleys emptying into Bonavista Bay and Hamilton Sound. The largest deposits are in the Gambo area where thick deposits of ice-contact and ice-proximal sediments were produced by meltwater from receding ice at the eastern end of Gander Lake and eastward through Butts Pond and Gambo into Freshwater Bay (Butler *et al.*, 1984; McCuaig, 2006). Glaciofluvial sand and gravels are also present in Wareham and west of Musgrave Harbour in areas that are being exploited for aggregate. Smaller deposits of poorly sorted sands and gravels occur in Indian Bay Brook, Northwest Brook, Ragged Harbour River, and Barry's Brook.

The coastline bordering Hamilton Sound is mostly low-lying and rocky with numerous small gravel beaches. The coastline character changes from Musgrave Harbour to Cape Freels where it is mostly sand-dominated, with barrier beaches, beach-ridge formation, tombolos and coastal dunes. Organic deposits are commonly associated with coastal sediment systems along the northeast coast, most notably at Cape Freels, Man Point, and Deadman's Bay. Peat, both freshwater and salt-marsh, is commonly found overlying gravel beach-ridges and reaches thicknesses up to approximately 1 m. The maximum marine limit for the western area is 67 m asl, based on marine terraces observed in the Gander Bay area (Munro and Catto, 1993). Marine terraces up to 34 m asl were observed in the Indian Bay area.

## **REGIONAL SURFICIAL SEDIMENT SAMPLING**

### **SAMPLING AND SAMPLE PREPARATION METHODS**

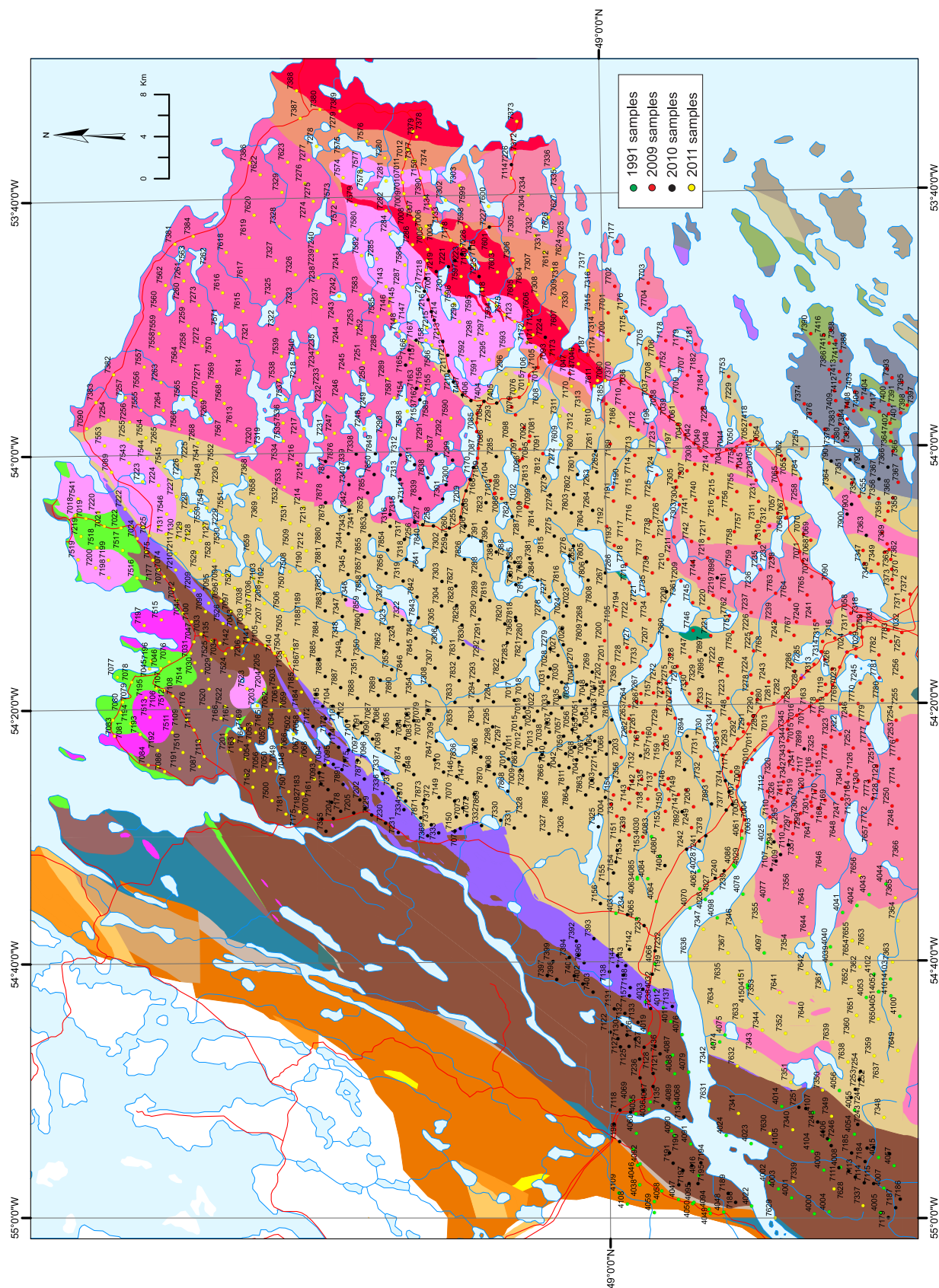
Till sampling resulted in 1651 samples (including duplicates) being collected from the C- and BC-horizons; most were from test pits (40 to 70 cm depth) and roadcuts (50 to 100 cm depth). Mudboils were sampled at shallower depths (average 25 cm). In rare instances, where there was a lack of surface sediment, samples were collected from bedrock detritus. Marine and fluvial or glaciofluvial sediments were avoided during sampling, because of the possibility of reworking and the difficulty in defining distances and directions of transport. Sample spacing was controlled by access as well as surficial geology, but was generally about 1 sample every 1 km<sup>2</sup> in road accessible areas, and 1 sample every 4 km<sup>2</sup> in more remote areas where helicopter support was required. Duplicate samples were taken at 79 sites and were used to test for field reproducibility.

In the field, samples were placed in kraft-paper sample bags, and sent to the Geological Survey's Geochemical Laboratory in St. John's, where they were air-dried in ovens at 60°C and dry-sieved through 180 µm stainless steel sieves.

### **GEOCHEMICAL ANALYSES**

Analytical work was carried out at the Geological Survey's Geochemical Laboratory, and additional analyses from a commercial laboratory. Data from 1572 samples are presented (Figure 5), excluding field duplicates. The appended data listings contain all the field and analytical data







from the sediment survey. To distinguish the different analytical methods/laboratories, the trace-element variables are labelled with a combination of the element name, a numeric code and the unit of measurement. A complete list of variables is given in Table 1, and a full listing of field and geochemical data is contained in Appendix A.

## **ANALYTICAL METHODS**

### **Gravimetric Analysis (LOI)**

Organic carbon content was estimated from the weight loss-on-ignition (LOI) during a controlled combustion in which 1g aliquots of sample were gradually heated to 500°C in air over a 3 hour period. Accuracy can be judged from the results for reference materials (Table 2).

### **Inductively Coupled Plasma-Emission Spectrometry (ICP-ES)**

For these analyses, the procedures outlined by Finch (1998) are followed. One gram of sample is weighed into a 125 ml Teflon beaker, and 15 ml HF (~48%), 5 ml of concentrated HCl and 5 ml of 1:1 HClO<sub>4</sub> is added to each sample. The samples are placed on a hotplate at 200°C and evaporated to dryness, after which is added 5 ml concentrated HCl and 45 ml deionized water and returned to the hotplate at 100°C. When the residue is completely dissolved the samples are removed, cooled and transferred to 50 ml volumetric flasks. One ml of 50 g/l boric acid is added to each sample to remove any residual hydrofluoric acid. The samples are made to volume and analyzed by ICP-ES (Licthe *et al.*, 1987). For most elements dissolution is total; exceptions are chromite, barite and zircon. Accuracy can be judged from the results for reference materials (Table 3). Values for the following elements were determined: aluminum, barium, beryllium, calcium, cerium, cobalt, chromium, copper, dysprosium, iron, gallium, potassium, lanthanum, lithium, magnesium, manganese, molybdenum, sodium, niobium, nickel, phosphorus, lead, rubidium, scandium, strontium, titanium, vanadium, yttrium, zinc and zirconium (Al<sub>2</sub>, Ba<sub>2</sub>, Be<sub>2</sub>, Ca<sub>2</sub>, Ce<sub>2</sub>, Co<sub>2</sub>, Cr<sub>2</sub>, Cu<sub>2</sub>, Dy<sub>2</sub>, Fe<sub>2</sub>, Ga<sub>2</sub>, K<sub>2</sub>, La<sub>2</sub>, Li<sub>2</sub>, Mg<sub>2</sub>, Mn<sub>2</sub>, Mo<sub>2</sub>, Na<sub>2</sub>, Nb<sub>2</sub>, Ni<sub>2</sub>, P<sub>2</sub>, Pb<sub>2</sub>, Rb<sub>2</sub>, Sc<sub>2</sub>, Sr<sub>2</sub>, Ti<sub>2</sub>, V<sub>2</sub>, Y<sub>2</sub>, Zn<sub>2</sub> and Zr<sub>2</sub>, respectively).

### **Instrumental Neutron Activation Analysis (INAA)**

These analyses were carried out at Becquerel Laboratories, Mississauga, Ontario. On average, 24 g of sample was used for analysis and the samples (with duplicates and control reference materials included incognito) were weighed and encapsulated in the Geochemical Laboratory of the Department of Natural Resources in St. John's. Samples were irradiated with flux wires and an internal standard (1 for 11 samples) at a thermal neutron flux of  $7 \times 10^{11}$  n/cm<sup>2</sup>s. After 7 days (to allow Na<sup>24</sup> to decay), samples are counted on a high purity Ge detector with a resolution of better than 1.7 KeV. Using the flux wires, the decay-corrected activities are compared to a calibration developed from multiple certified international reference materials. The standard present is only a check on accuracy of the analysis and is not used for calibration purposes. Ten to 30 percent of the samples are checked by re-measurement. Accuracy can be judged from the results for reference materials (Table 2).



**Table 1.** Variable list and description of data

Variable	Description	Variable	Description
Sample	Unique sample ID. First number represents geologist id, <i>e.g.</i> , 7 = Brushett; 4 = Batterson	La2 ppm	Lanthanum, ppm, by ICP
NTS_Map	NTS sheet (1:50 000)	Li2 ppm	Lithium, ppm, by ICP
UTMEast	UTM map coordinate NAD 27	LOI	Loss on ignition
UTMNorth	UTM map coordinate NAD 27	Lu1 ppm	Lutetium, ppm, by INAA
Elev	Elevation of sample site (m)	Mg2 pct	Magnesium, %, by ICP
UTMZone	UTM zone	Mn2 ppm	Manganese, ppm, by ICP
Horizon	Soil horizon sampled	Mo1 ppm	Molybdenum, ppm, by INAA
Depth	Sample depth (cm)	Mo2 ppm	Molybdenum, ppm, by ICP
Ag1 ppm	Silver, ppm, by INAA	Na1 pct	Sodium, %, by INAA
Ag6 ppm	Silver, ppm, by AAS	Na2 pct	Sodium, %, by ICP
Al2 pct	Aluminum, %, by ICP	Nb2 ppm	Niobium, ppm, by ICP
As1 ppm	Arsenic, ppm, by INAA	Nd1 ppm	Neodymium, ppm, by INAA
As2 ppm	Arsenic, ppm, by ICP	Ni1 ppm	Nickel, ppm, by INAA
Au1 ppb	Gold, ppb, by INAA	Ni2 ppm	Nickel, ppm, by ICP
Ba1 ppm	Barium, ppm, by INAA	P2 ppm	Phosphorus, ppm, by ICP
Ba2 ppm	Barium, ppm, by ICP	Pb2 ppm	Lead, ppm, by ICP
Be2 ppm	Beryllium, ppm, by ICP	Rb1 ppm	Rubidium, ppm, by INAA
Br1 ppm	Bromine, ppm, by INAA	Rb2 ppm	Rubidium, ppm, by ICP
Ca1 pct	Calcium, %, by INAA	Rb6 ppm	Rubidium, ppm, by AAS
Ca2 pct	Calcium, %, by ICP	Sb1 ppm	Antimony, ppm, by INAA
Cd2 ppm	Cadmium, ppm, by ICP	Sc1 ppm	Scandium, ppm, by INAA
Ce1 ppm	Cerium, ppm, by INAA	Sc2 ppm	Scandium, ppm, by ICP
Ce2 ppm	Cerium, ppm, by ICP	Se1 ppm	Selenium, ppm, by INAA
Co1 ppm	Cobalt, ppm, by INAA	Sm1 ppm	Samarium, ppm, by INAA
Co2 ppm	Cobalt, ppm, by ICP	Sn1 ppm	Tin, ppm, by INAA
Cr1 ppm	Chromium, ppm, by INAA	Sr1 ppm	Strontium, ppm, by INAA
Cr2 ppm	Chromium, ppm, by ICP	Sr2 ppm	Strontium, ppm, by ICP
Cs1 ppm	Cesium, ppm, by INAA	Ta1 ppm	Tantalum, ppm, by INAA
Cu2 ppm	Copper, ppm, by ICP	Tb1 ppm	Terbium, ppm, by INAA
Dy2 ppm	Dysprosium, ppm, by ICP	Th1 ppm	Thorium, ppm, by INAA
Eu1 ppm	Europium, ppm, by INAA	Ti2 ppm	Titanium, ppm, by ICP
Fe1 pct	Iron, %, by INAA	U1 ppm	Uranium, ppm, by INAA
Fe2 pct	Iron, %, by ICP	V2 ppm	Vanadium, ppm, by ICP
Hf1 ppm	Hafnium, ppm, by INAA	W1 ppm	Tungsten, ppm, by INAA
Hg1 ppm	Mercury, ppm, by INAA	Y2 ppm	Yttrium, ppm, by ICP
Ir1 ppm	Iridium, ppb, by INAA	Yb1 ppm	Ytterbium, ppm, by INAA
K2 pct	Potassium, %, by ICP	Zn1 ppm	Zinc, ppm, by INAA
La1 ppm	Lanthanum, ppm, by INAA	Zn2 ppm	Zinc, ppm, by ICP
		Zr1 ppm	Zirconium, ppm, by INAA
		Zr2 ppm	Zirconium, ppm, by ICP

**Note:** ppm = parts per million; ppb = parts per billion; pct = %



**Table 2.** Accuracy of till geochemical data by INAA and gravimetry. Results of analyses of CAN-MET reference samples TILL-1 to -4. Observed values (Obs) are compared against recommended values (Rec). Recommended values are from Lynch (1996). Negative values indicate below detection limit

		Till-1	N=7	Till-2	N=6	Till-3	N=7	Till-4	N=7
		Obs	Rec	Obs	Rec	Obs	Rec	Obs	Rec
As1	ppm	17.71	18	25.71	26	88.66	87	109.33	111
Au1	ppb	12.71	13	1.00	2	7.14	6	4.00	5
Ba1	ppm	710.00	702	528.57	540	498.57	489	383.33	395
Br1	ppm	6.57	6.4	12.86	12.2	5.0	4.5	8.33	8.6
Ce1	ppm	74.14	71	104.57	98	40.29	42	82.83	78
Co1	ppm	17.29	18	13.14	15	14.14	15	6.83	8
Cr1	ppm	67.00	65	77.57	74	127.14	123	50.17	53
Cs1	ppm	1.00	1.0	11.43	12.0	1.84	1.7	12.33	12.0
Eu1	ppm	1.51	1.3	0.97	1.0	0.67	0.5	1.13	0.5
Fe1	%	4.99	4.8	5.87	3.8	2.80	2.8	3.87	4.0
Hf1	ppm	13.86	13.0	10.57	11.0	6.29	8.0	8.00	10.0
La1	ppm	28.57	28	47.14	44	19.71	21	41.67	41
Lu1	ppm	0.59	0.6	0.57	0.6	0.22	<0.5	0.44	0.5
Mo1	ppm	-0.71	<5	13.14	14	-0.71	<5	15.33	16
Na1	%	2.13	2.01	1.70	1.62	2.00	1.96	1.80	1.82
Rb1	ppm	42.43	44	141.43	143	56.14	55	160.00	161
Sb1	ppm	7.76	7.8	0.80	0.8	0.86	0.9	0.92	1.0
Sc1	ppm	15.24	13	13.46	12	10.39	10	11.18	10
Se1	ppm	-1.00		-1.00		-1.00		-1.00	
Sm1	ppm	6.26	5.9	7.89	7.4	3.64	3.3	6.50	6.1
Ta1	ppm	0.76	0.7	1.83	1.9	0.39	<0.5	1.40	1.6
Tb1	ppm	0.99	1.1	1.11	1.2	-0.36	<0.5	0.93	1.1
Th1	ppm	5.56	5.6	17.99	18.4	4.77	4.6	16.63	17.4
U1	ppm	2.06	2.2	5.57	5.7	2.03	2.1	4.78	5.0
W1	ppm	-1.00	<4	5.00	<2	-1.00	<4	190.00	204
Yb1	ppm	3.36	3.9	2.39	3.7	1.10	1.5	1.90	3.4
Zr1	%	377.14		324.29		154.29		381.67	
LOI	%	6.5	6.3	6.9	6.8	3.7	3.6	4.7	4.4

**Note:** ppm = parts per million; ppb = parts per billion; % = percentage



Total contents of the following elements were determined quantitatively: silver, arsenic, gold, barium, bromine, calcium, cerium, cobalt, chromium, cesium, europium, iron, hafnium, mercury, iridium, lanthanum, lutetium, molybdenum, sodium, neodymium, nickel, rubidium, antimony, scandium, selenium, samarium, tin, strontium, tantalum, terbium, thorium, uranium, tungsten, ytterbium, zinc and zirconium. (Ag1, As1, Au1, Ba1, Br1, Ca1, Ce1, Co1, Cr1, Cs1, Eu1, Fe1, Hf1, Hg1, Ir1, La1, Lu1, Mo1, Na1, Nd1, Ni1, Rb1, Sb1, Sc1, Se1, Sm1, Sn1, Sr1, Ta1, Tb1, Th1, U1, W1 Yb1, Zn1, and Zr1 respectively).

## QUALITY CONTROL

Data quality was monitored using laboratory duplicates (analytical precision only). These data are verified at the laboratory and are not included in this report, although they are available upon request. Accuracy estimates are provided by the results from standard reference materials analysed with them (Tables 2 and 3). These data show that for almost all elements, with Zr2 as an exception, all data is of high quality.

Data from field duplicate samples taken from the same site are presented in Table 4. The extent of correlation (Pearson) of these data provided a measure of data reproducibility which was used to estimate data quality. Identical results of duplicate samples show a correlation coefficient of 1.000. For some elements, the analysis of duplicates yields poor correlations, commonly because samples contain levels that are close to the detection limit for that element. Most samples yielded results below detection limit for Ag1, Ag6, As1, Au1, Br1, Cs1, Lu1, Mo1, Mo2, Rb1, Se1, Ta1, Tb1, U1, W1, and Zr1, and for this reason it is difficult to evaluate data quality for these elements.

It should be emphasized that for mineral exploration, the relative variation of an element is of primary concern. Of the 50 elements determined, 16 were determined by both ICP-ES and INAA (As, Ba, Ca, Ce, Co, Cr, Fe, La, Mo, Na, Ni, Rb, Sc, Sr, Zn, Zr). To reduce the size of the data for presentation and statistical analysis, for these 16, the data from the method with the best quality determined from comparison with laboratory and field duplicates have been used (*i.e.*, As2, Ba2, Ca2, Ce2, Co2, Cr1, Fe2, La2, Mo1, Na2, Ni2, Rb2, Sc2, Sr2, Zn2, Zr2), although all are presented in the data listing (Appendix A). A summary of field duplicate and control data is included in this report, and detailed data are available on request.

## STATISTICAL ANALYSIS—FREQUENCY DISTRIBUTIONS

The frequency distributions of the geochemical data were examined using the Jenks optimization method, also known as the goodness of variance fit (Jenks, 1967) found within the ArcMap GIS application. The method identifies natural breaks in the dataset, and has replaced the selection of breaks using cumulative frequency plots (Batterson and Taylor, 2001). Comparison of the two methods produced similar subdivisions of the data. Breaks in slope of the curves were used to subdivide the element values into 4–6 natural population groups. These groups are represented by symbols that increase in size with increasing element levels, and are shown in Figures 6 to 15. Correlation coefficients for laboratory and field duplicate data are provided in Table 4. Statistics (maximum, minimum, median, mean, standard deviation) were generated from the Excel computer application, and are presented in Table 5.



**Table 3.** Accuracy of till geochemical data by ICP. Results of analyses of CANMET reference samples TILL-1 to -4. Observed values (Obs) are compared against recommended values (Rec). Recommended values are from Lynch (1996). Negative values indicate below detection limit

		Till-1	N=7	Till-2	N=6	Till-3	N=7	Till-4	N=7
		Obs	Rec	Obs	Rec	Obs	Rec	Obs	Rec
Al2	%	6.18	7.3	7.23	8.5	5.78	6.5	6.62	7.6
As2	ppm	18.05		25.97		79.87		100.55	
Ba2	ppm	707.05	702.0	536.09	540.0	489.61	489.0	385.85	396.0
Be2	ppm	1.28	2.4	3.15	4.0	1.18	2.0	2.87	3.7
Ca2	%	1.86	1.9	0.88	0.9	1.85	1.9	0.86	0.9
Cd2	ppm	0.08		0.28		0.18		0.32	
Ce2	ppm	69.64	71.0	91.09	98.0	41.47	42.0	70.15	78.0
Co2	ppm	20.78	18.0	18.12	15.0	15.20	15.0	12.42	8.0
Cr2	ppm	53.17	65.0	60.45	74.0	94.97	123.0	37.71	53.0
Cu2	ppm	40.22	47.0	140.19	150.0	19.39	22.0	227.08	237.0
Dy2	ppm	4.79		3.41		2.01		3.07	
Fe2	%	4.78	4.8	3.87	3.8	2.84	2.8	3.99	4.0
K2	%	1.75	1.8	2.52	2.6	1.96	2.0	2.67	2.7
La2	ppm	25.38	28.0	37.90	44.0	19.15	21.0	34.43	41.0
Li2	ppm	15.13	15.0	44.93	47.0	20.89	21.0	27.93	30.0
Mg2	%	1.28	1.3	1.07	1.1	1.05	1.0	0.73	0.8
Mn2	ppm	1379.81	1420.0	759.42	780.0	496.63	520.0	486.73	490.0
Mo2	ppm	-0.71	2.0	13.22	14.0	-0.41	16.9	14.07	
Na2	%	1.97	2.0	1.58	1.6	1.93	2.0	1.76	1.8
Nb2	ppm	10.66	10.0	14.80	20.0	6.82	7.0	13.04	15.0
Ni2	ppm	18.88	24.0	27.69	32.0	36.07	39.0	13.15	17.0
P2	ppm	948.20	930.0	737.28	750.0	491.40	490.0	853.06	880.0
Pb2	ppm	14.91	22.0	23.86	31.0	19.85	26.0	46.25	50.0
Rb2	ppm	46.10		146.78		55.91		152.08	
Sc2	ppm	14.55	13.0	12.62	12.0	10.89	10.0	11.33	10.0
Sr2	ppm	312.78	291.0	156.16	144.0	326.18	300.0	125.33	109.0
Ti2	ppm	5051.04	5990.0	4847.02	5300.0	2871.95	2910.0	4656.91	4840.0
V2	ppm	94.83	99.0	76.17	77.0	60.56	62.0	66.48	67.0
Y2	ppm	27.11	38.0	17.39	40.0	12.61	17.0	15.49	33.0
Zn2	ppm	91.77	98.0	119.98	130.0	52.49	56.0	68.91	70.0
Zr2	ppm	77.79	502.0	80.86	390.0	66.13	390.0	73.23	385.0

**Note:** ppm = parts per million; % = percentage



**Table 4.** Correlation coefficients of laboratory duplicate samples. Values close to 1 indicate a strong positive correlation. Decisions on which analytical approach is appropriate for those elements which were analyzed by more than one method, were based on these correlations (elements bolded). Note: n/a indicates that correlation is not available

Field    Lab			Field    Lab			Field    Lab			Field    Lab		
(n=30)			(n=30)			(n=30)			(n=30)		
Al2	0.911	0.707	<b>Cr1</b>	0.819	0.968	Mn2	0.863	0.902	Sm1	0.813	0.735
As1	0.948	0.958	Cr2	0.739	0.966	<b>Mo1</b>	0.084	n/a	Sr2	0.984	0.760
<b>As2</b>	0.945	0.964	Cs1	0.845	0.871	Mo2	-0.048	n/a	Ta1	0.918	0.728
Au1	-0.025	0.208	Cu2	0.832	0.929	Na1	0.898	0.847	Tb1	0.697	0.600
Ba1	0.879	0.794	Dy2	0.876	0.855	<b>Na2</b>	0.964	0.889	Th1	0.822	0.857
<b>Ba2</b>	0.879	0.844	Eu1	0.430	-0.02	Nb2	0.883	0.909	Ti2	0.968	0.932
Be2	0.982	0.955	Fe1	0.910	0.893	Ni1	n/a	n/a	U1	0.959	0.853
Br1	0.466	0.339	<b>Fe2</b>	0.927	0.949	<b>Ni2</b>	0.960	0.934	V2	0.929	0.857
Ca1	n/a	n/a	Hf1	0.704	0.515	P2	0.823	0.770	W1	0.849	0.728
<b>Ca2</b>	0.828	0.968	K2	0.954	0.851	Pb2	0.651	0.779	Y2	0.872	0.765
Cd2	0.326	0.949	La1	0.716	0.624	Rb1	0.229	0.856	Yb1	0.927	0.394
Ce1	0.685	0.766	<b>La2</b>	0.819	0.961	<b>Rb2</b>	0.963	0.860	Zn1	n/a	n/a
<b>Ce2</b>	0.798	0.796	Li2	0.879	0.825	Sb1	0.998	0.975	<b>Zn2</b>	0.912	0.819
Co1	0.899	0.886	Lu1	0.821	0.517	Sc1	0.913	0.918	Zr1	0.768	0.408
<b>Co2</b>	0.903	0.885	Mg2	0.939	0.949	<b>Sc2</b>	0.924	0.922	<b>Zr2</b>	0.818	0.795

## INTERPRETATION OF GEOCHEMICAL DATA

Dot-plot maps of selected elements (As, Sb, Au, Be, Cr, Cu, Ni, Pb, Y and Zn) are presented in Figures 6 to 15. Most of these elements, either base or precious metals, have been of exploration interest and are described below. Yttrium, a light rare-earth element, was chosen to represent the rare-earth elements (other rare-earth elements are not discussed here but most have similar patterns of background and elevated values) given the recent increased interest elsewhere in the province. As a means of comparison, geochemical data for selected elements is compared against existing geochemical data for the province found within the Geoscience Atlas (<http://gis.geosurv.gov.nl.ca/>). Using the Jenks optimization method within the ArcMap GIS application (described above), element values were divided into 5 population groups: background, slightly elevated, elevated, very elevated, and high (Table 6).

Other element plots are presented in Appendix B. Data on mineral occurrences is found within the Geological Survey's Mineral Occurrence Data System (MODS) (<http://gis.geosurv.gov.nl.ca/mods/mods.asp>).

### ANTIMONY (Sb)

Antimony is used as a pathfinder element for gold, and is a valuable commodity in itself; it is being mined at the Beaver Brook Antimony Mine just to the west of the southwestern corner of the study area. There is only a weak correlation between gold and antimony in the study (0.21).



**Table 5.** Units, detection limits, ranges, medians and standard deviations of geochemical data. Values below detection are coded as half of the detection limit value

		Detection Limit	Maximum	Minimum	Mean	Median	Standard Deviation
Ag1	ppm	5	0.50	0.12	0.50	0.50	0.02
Al2	%	0.01	9.36	0.01	5.52	5.43	0.97
As1	ppm	0.5	295.00	0.25	11.53	6.30	21.19
As2	ppm	2	170.58	1.00	11.20	7.54	13.63
Au1	ppb	1	57.00	0.50	2.14	0.50	4.70
Ba1	ppm	50	1700.00	100.00	320.09	310.00	112.08
Ba2	ppm	50	1484.70	0.50	305.97	291.63	104.93
Be2	ppm	0.2	11.41	0.05	2.84	2.75	1.38
Br1	ppm	0.5	184.00	0.50	17.72	12.00	20.53
Ca2	%	0.01	3.37	0.04	0.49	0.45	0.30
Cd2	ppm	0.1	0.68	0.05	0.42	0.50	0.15
Ce1	ppm	3	323.00	13.00	74.34	70.00	28.54
Ce2	ppm	2	195.42	0.50	53.84	50.27	22.90
Co1	ppm	1	42.00	1.00	8.27	7.00	6.25
Co2	ppm	2	64.31	0.50	12.64	11.47	5.78
Cr1	ppm	5	920.00	5.00	152.31	120.00	108.94
Cr2	ppm	2	182.66	0.50	54.28	50.16	27.88
Cs1	ppm	1	37.00	1.00	6.42	5.90	2.89
Cu2	ppm	2	153.45	0.50	15.86	12.38	15.43
Dy2	ppm	0.2	11.01	0.23	2.20	2.10	1.03
Eu1	ppm	0.2	2.60	0.25	0.94	0.90	0.39
Fe1	%	0.01	10.00	0.30	2.84	2.70	1.28
Fe2	%	0.01	8.25	0.01	2.60	2.45	1.18
Hf1	ppm	1	102.00	4.00	10.89	10.00	6.74
K2	%	0.01	4.42	0.01	1.75	1.76	0.51
La1	ppm	0.5	150.00	6.00	30.21	30.00	10.01
La2	ppm	1	51.88	0.50	20.56	20.21	6.17
Li2	ppm	0.2	225.20	0.50	28.95	27.53	15.34
LOI	%		38.30	0.49	4.94	3.60	4.64
Lu1	ppm	0.05	3.60	0.03	0.57	0.55	0.31
Mg2	%	0.01	3.49	0.05	0.54	0.48	0.33
Mn2	ppm	2	1986.65	0.50	693.21	651.70	224.96
Mo1	ppm	1	14.00	0.50	0.75	0.50	1.20
Mo2	ppm	1	12.34	0.50	0.81	0.50	1.18
Na1	%	0.01	4.00	0.49	1.61	1.60	0.38
Na2	%	0.01	4.13	0.01	1.43	1.38	0.37
Nb2	ppm	2	27.40	0.50	10.21	9.69	2.96
Ni2	ppm	2	117.12	0.50	18.79	13.92	15.50
P2	ppm	5	2281.24	0.50	441.30	380.23	283.32
Pb2	ppm	2	276.49	0.50	13.41	11.93	14.32



**Table 5.** Continued

		Detection Limit	Maximum	Minimum	Mean	Median	Standard Deviation
Rb1	ppm	5	340.00	27.00	113.48	110.00	39.46
Rb2	ppm		338.07	1.00	105.12	102.43	35.69
Sb1	ppm	0.1	26.00	0.10	1.14	0.80	1.83
Sc1	ppm	0.1	30.40	2.40	11.05	10.50	4.22
Sc2	ppm	1	29.00	0.50	9.74	9.27	3.87
Se1	ppm	1	1.00	0.50	0.50	0.50	0.02
Sm1	ppm	0.1	23.60	1.10	5.69	5.50	1.76
Sr2	ppm	2	349.79	0.50	90.10	87.90	33.27
Ta1	ppm	0.2	6.20	0.80	1.73	1.60	0.58
Tb1	ppm	0.5	3.30	0.25	0.80	0.80	0.30
Th1	ppm	0.2	64.80	1.80	11.58	10.90	4.38
Ti2	ppm	5	15545.92	0.50	4173.65	3926.84	1504.33
U1	ppm	0.5	11.10	0.60	3.54	3.10	1.43
V2	ppm	5	204.89	0.50	63.30	58.28	27.96
W1	ppm	1	88.00	0.50	3.20	3.00	4.48
Y2	ppm	2	55.74	0.50	11.93	11.43	4.94
Yb1	ppm	0.2	19.00	0.03	2.16	2.00	1.26
Zn2	ppm	2	909.90	0.50	42.22	36.62	45.12
Zr1	%	0.01	3200.00	50.00	264.20	250.00	249.89
Zr2	ppm	2	190.66	0.50	59.05	57.94	15.25

**Table 6.** Geochemical data of selected elements from the provincial dataset (<http://gis.geosurv.gov.nl.ca>) divided into 5 population groups (using the Jenks optimization method within ArcMap GIS)

Element	Background	Slightly Elevated	Elevated	Very Elevated	High
Arsenic (As)	1.0–25.88	25.88–129.42	129.42–460.0	460.0–2529.0	2529.0–10277.95
Antimony (Sb)	0.02–1.2	1.2–4.3	4.3–20.4	20.4–59.0	59.0–130.0
Gold (Au)	0.5–7.8	7.8–49.0	49.0–287.0	287.0–785.0	785.0–2360.0
Beryllium (Be)	0.05–1.56	1.56–2.75	2.75–5.69	5.69–11.78	11.78–31.8
Chromium (Cr)	0.25–88.0	88.0–262.0	262.0–710.0	710.0–2300.0	2300.0–5550.0
Copper (Cu)	0.5–20.61	20.61–46.84	46.84–96.6	96.6–251.0	251.0–1229.0
Nickel (Ni)	0.5–21.9	21.9–57.6	57.6–156.0	156.0–417.0	417.0–1432.0
Lead (Pb)	0.5–17.6	17.6–43.8	43.8–131.2	131.2–399.0	399.0–1478.6
Yttrium (Y)	1.0–18.6	18.6–27.9	27.9–46.9	46.9–100.0	100.0–317.3
Zinc (Zn)	2.5–39.9	39.9–95.2	95.2–178.0	178.0–647.0	647.0–1690.0



Slightly elevated antimony values are found associated with siliclastic sediments of the Davidsville Group north of Gander Lake (Figure 6). The highest antimony values also come from this area (38 and 40 ppm; samples 914022 and 107118), which are very elevated when compared to the provincial dataset.

Antimony is moderately correlated with calcium (0.31), cobalt (0.31), and zinc (0.29) (Table 7). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## **ARSENIC (As)**

Approximately 7% of the arsenic values identified in till samples are slightly elevated (25.88–129.42 ppm) to very elevated (up to 513 ppm, Figure 7) when compared to the provincial dataset (Table 6). The remaining 93% are background (<25.88 ppm). The highest arsenic values (332 and 513 ppm; samples 107341 and 117175) are found in till overlying the siliclastic sedimentary rocks of the Davidsville Group.

Arsenic is considered a pathfinder for gold in geochemical exploration. In this study, the spatial distribution of arsenic shows a positive correlation with gold (0.35), particularly in till overlying the Davidsville Group, the Gander River Complex, and those overlying metasedimentary rocks of the Jonathan's Pond Formation west of the Home Pond area. Arsenic is moderately correlated with cobalt (0.40), chromium (0.31), copper (0.30), iron (0.44), and scandium (0.30) (Table 7). Field and laboratory duplicates showed a high degree of correlation, and the data is thus considered accurate and precise (Table 4).

Arsenic is also a factor in human health. The Canadian soil quality guidelines indicate values below 12 ppm are acceptable for residential areas. About 20% of the data points are above this value within the study area. Several of these data points occur near communities, particularly throughout the Gander area where elevated arsenic levels have been documented in well water; details of this study are discussed in Serpa *et al.* (2009).

## **BERYLLIUM (Be)**

The highest beryllium value is 18.4 ppm (sample 117217), found in till underlain by the North Pond and Wareham granites in the Wesleyville area (Figure 8). This value is part of a cluster of values (2.1 to 18.4 ppm) that fall into the elevated to high range of the provincial dataset. Slightly elevated to high values are also found in till underlain by the Gander Lake Granite.

Beryllium correlates moderately to well with cesium (0.40), potassium (0.52), sodium (0.55), niobium (0.40), lead (0.34), rubidium (0.66), strontium (0.34), tantalum (0.63), thorium (0.35), and uranium (0.50) (Table 7). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.



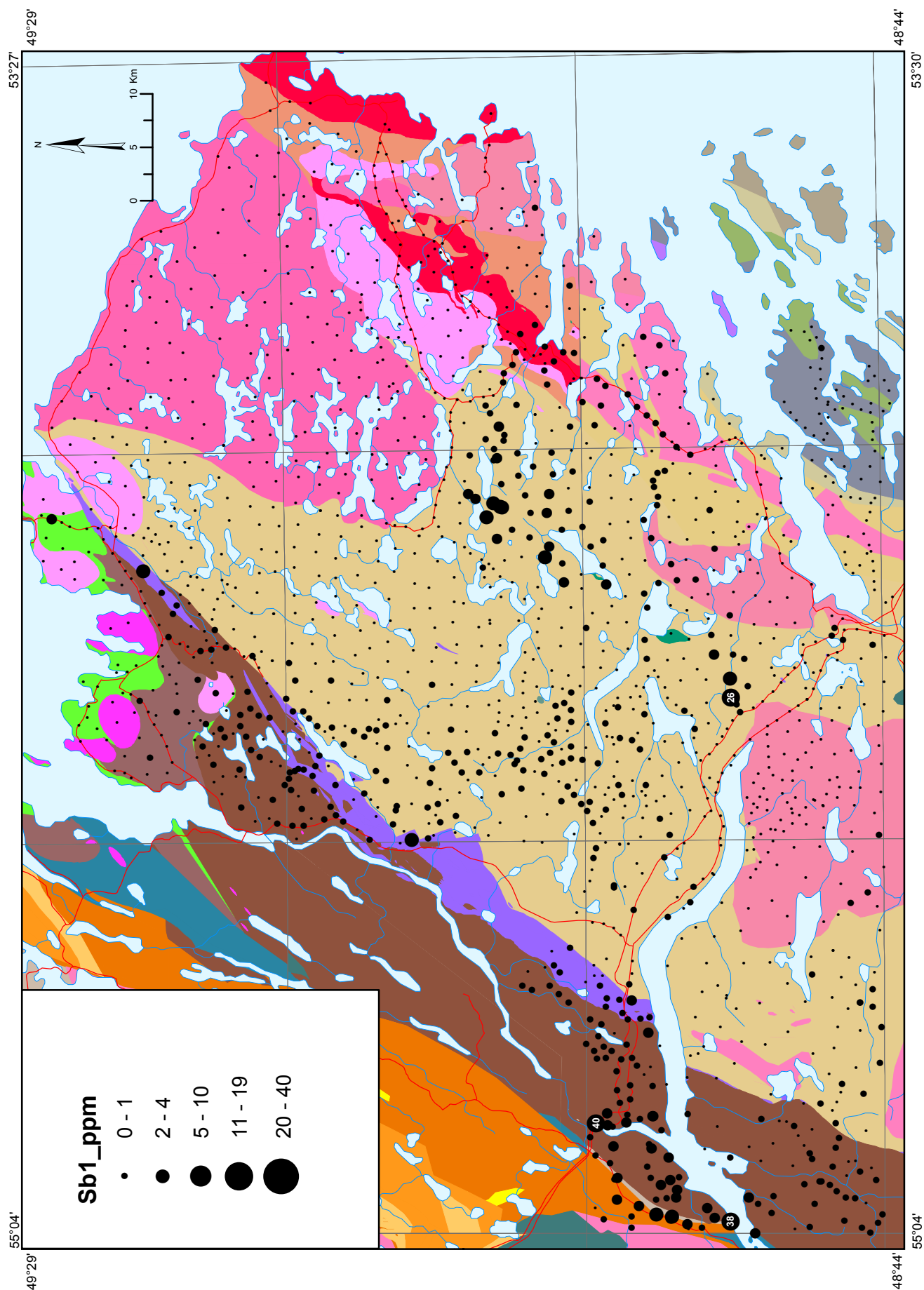
Table 7. Correlation matrix

	Ag1	Ag6	Al2	As1	Au1	Ba1	Ba2	Br1	Ca1	Ca2	Cr1	Cr2	Cs1	Cs2	Cu2	Dy2	Eul	Fe1	Fe2	Hf1	Ir1	K2	La1	La2	Li2	Lu1	Mg2	Mn2	Mo1	Mo2	Nal	Na2							
Ag1	1.00																																						
Ag6	-0.06	1.00																																					
Al2	-0.17	-0.02	1.00																																				
As1	0.06	-0.02	0.09	1.00																																			
As2	0.00	-0.01	0.02	0.48	1.00																																		
Au1	0.17	-0.02	-0.02	0.35	0.17	1.00																																	
Ba1	0.59	-0.05	0.37	0.03	-0.05	0.00	1.00																																
Ba2	0.07	-0.06	0.45	0.02	-0.06	-0.02	0.94	1.00																															
Be1	0.05	0.01	0.30	-0.10	-0.17	-0.18	0.09	0.10	1.00																														
Be2	0.12	0.03	0.30	-0.02	0.03	-0.10	-0.16	-0.14	0.07	1.00																													
Ca1	0.43	-0.05	0.22	0.16	-0.14	0.18	0.10	0.14	0.05	-0.15	1.00																												
Ca2	0.20	0.02	0.03	-0.09	-0.06	-0.06	0.00	-0.02	0.07	-0.04	-0.13	1.00																											
Ca2	0.03	0.12	-0.24	0.00	0.10	-0.03	-0.15	-0.20	0.08	-0.06	-0.15	0.01	1.00																										
Ce1	0.42	0.00	0.20	0.04	0.02	0.34	0.32	0.12	-0.07	0.10	0.03	-0.07	1.00																										
Ce2	0.04	-0.01	0.16	0.14	0.13	0.08	0.10	0.04	-0.09	0.31	-0.04	0.00	0.60	1.00																									
Co1	0.28	-0.05	0.05	0.39	0.40	0.34	-0.05	-0.07	-0.30	-0.09	0.17	0.13	-0.05	0.06	0.34	1.00																							
Co2	-0.39	-0.06	0.15	0.40	0.29	0.31	-0.01	0.04	-0.25	-0.12	0.26	0.12	-0.07	0.04	0.35	0.84	1.00																						
Cr1	0.19	-0.03	-0.19	0.10	0.22	0.24	-0.14	-0.15	-0.37	-0.09	-0.10	0.25	-0.15	-0.07	0.06	0.60	0.40	1.00																					
Cr2	-0.36	-0.04	-0.03	0.19	0.31	0.22	-0.14	-0.12	-0.38	-0.05	0.04	0.26	-0.11	-0.07	0.15	0.79	0.69	0.75	1.00																				
Cs1	0.31	-0.02	0.32	0.11	-0.03	-0.05	0.21	0.21	0.40	0.03	0.11	-0.17	-0.02	0.06	0.01	-0.06	-0.02	-0.21	-0.14	1.00																			
Cs2	-0.35	-0.04	0.18	0.40	0.30	0.40	-0.02	0.02	-0.14	-0.13	0.41	-0.07	-0.04	0.12	0.52	0.63	0.74	0.20	0.43	0.00	1.00																		
Dy2	-0.22	0.00	0.22	0.13	0.07	0.11	0.04	0.05	0.13	0.05	0.35	0.13	0.02	0.34	0.67	0.29	0.36	-0.02	0.11	-0.03	0.46	1.00																	
Eul	0.65	0.01	0.15	0.14	0.08	0.18	0.14	0.12	-0.05	-0.05	0.33	0.09	-0.07	0.47	0.47	0.28	0.24	0.13	0.15	-0.04	0.34	0.45	1.00																
Fe1	0.58	-0.04	0.26	0.32	0.40	0.27	-0.04	-0.06	-0.28	0.24	0.14	0.06	-0.05	0.07	0.35	0.73	0.60	0.36	0.58	0.02	0.55	0.34	0.30	1.00															
Fe2	-0.38	-0.06	0.33	0.32	0.38	0.27	-0.05	0.21	0.21	0.20	0.05	-0.09	0.03	0.39	0.70	0.71	0.32	0.62	0.01	0.85	0.39	0.26	0.93	1.00															
Hf1	0.04	-0.01	0.14	-0.12	-0.11	0.49	0.49	0.22	-0.09	-0.03	0.28	-0.05	0.32	-0.06	-0.33	-0.23	-0.21	-0.30	-0.07	0.41	0.36	0.32	0.14	-0.04	1.00														
Hf2	0.56	-0.05	0.21	0.16	-0.14	0.20	0.10	0.15	0.05	-0.16	0.87	-0.13	-0.15	0.07	0.31	0.16	0.24	-0.10	0.04	0.07	0.44	0.38	0.34	0.15	0.22	-0.04	0.96	1.00											
Ir1	1.00	-0.06	0.22	0.17	-0.15	0.20	0.10	0.15	0.05	-0.16	0.92	-0.13	-0.16	0.08	0.34	0.17	0.26	-0.10	0.04	0.07	0.44	0.38	0.34	0.15	0.22	-0.04	0.96	1.00											
K2	0.09	-0.03	0.43	-0.07	-0.19	-0.12	0.56	0.63	0.52	-0.18	0.13	-0.06	-0.04	0.29	0.06	-0.28	0.17	-0.34	-0.36	0.32	-0.11	0.04	-0.03	0.34	-0.13	0.47	0.13	0.14	1.00										
La1	0.62	-0.01	0.26	0.03	-0.02	0.03	0.38	0.37	0.11	-0.06	0.14	0.02	-0.15	0.92	0.44	0.02	0.02	0.00	-0.06	0.08	0.06	0.27	0.50	0.04	0.01	0.35	0.13	0.15	0.32	1.00									
La2	-0.02	-0.03	0.26	0.13	0.04	0.15	0.17	0.21	0.07	-0.12	0.45	-0.05	-0.12	0.98	0.83	0.26	0.32	0.06	0.14	0.02	0.45	0.54	0.26	0.33	0.03	0.45	0.48	0.16	0.61	1.00									
Li2	0.02	-0.02	0.39	0.17	0.19	0.15	-0.02	0.00	0.22	0.06	0.21	-0.14	-0.05	0.05	0.34	0.36	0.35	0.05	0.23	0.41	0.44	0.29	0.19	0.48	0.55	-0.36	0.21	0.23	-0.03	0.04	0.33	1.00							
Lu1	0.62	0.03	0.05	0.00	0.08	0.03	0.20	0.17	0.13	-0.16	0.19	0.02	0.23	0.44	0.27	-0.08	-0.03	-0.18	-0.19	0.07	0.03	0.28	0.27	-0.05	-0.10	0.32	0.19	0.20	0.26	0.44	0.29	-0.06	1.00						
Mg2	-0.26	-0.04	-0.02	0.21	0.28	0.24	-0.10	-0.09	-0.32	-0.12	0.08	0.33	-0.07	-0.02	0.25	0.82	0.75	0.65	0.91	-0.13	0.51	0.22	0.22	0.61	0.65	-0.32	0.09	0.09	-0.31	-0.03	0.22	0.31	-0.14	1.00					
Mn2	-0.41	-0.03	0.18	0.20	0.21	0.18	0.05	0.09	-0.09	-0.10	0.21	-0.01	-0.06	0.12	0.26	0.46	0.57	0.07	0.23	-0.01	0.46	0.43	0.18	0.34	0.43	-0.12	0.21	0.23	-0.04	0.13	0.29	0.28	0.04	0.26	1.00				
Mo1	0.14	-0.02	0.14	0.04	0.00	-0.02	0.11	0.10	0.03	0.02	0.26	-0.01	-0.02	0.13	0.12	0.03	0.08	-0.08	-0.02	0.07	0.15	0.14	0.11	0.06	0.07	0.11	0.27	0.28	0.10	0.14	0.16	0.06	0.13	0.00	0.11	1.00			
Mo2	-0.21	-0.01	0.14	0.04	0.00	-0.02	0.11	0.10	0.03	0.01	0.01	0.09	0.08	-0.01	0.11	-0.07	-0.03	0.05	0.12	0.14	0.03	0.01	0.05	0.14	0.10	0.10	0.09	0.10	0.04	0.11	-0.02	0.13	0.87	1.00					
Na1	0.64	0.06	0.08	-0.17	-0.23	-0.18	0.09	0.03	0.55	-0.12	-0.08	0.45	0.19	0.11	-0.05	-0.29	-0.33	-0.23	-0.35	0.00	-0.27	-0.02	-0.35	-0.43	0.38	-0.08	-0.08	0.37	0.09	-0.06	-0.21	0.28	-0.26	-0.21	0.06	0.05	1.00		
Na2	0.26	-0.01	0.24	0.09	0.01	0.01	-0.05	0.00	0.30	0.17	0.28	-0.04	0.01	0.08	0.31	0.05	0.16	-0.20	-0.06	0.10	0.27	0.47	0.15	0.22	0.30	-0.11	0.29	0.31	0.09	0.06	0.32	0.29	0.05	-0.02	0.21	0.08	0.07	0.00	-0.01
Ph2	-0.46	-0.02	0.33	0.11	-0.04	0.02	0.18	0.24	0.34	0.06	0.27	0.01	0.00	0.25	0.29	-0.02	0.17	-0.23	-0.15	0.13	0.27	0.31	0.14	0.03	0.09	0.17	0.31	0.30	0.33	0.19	0.28	0.12	0.13	-0.06	0.18	0.17	0.21	0.15	0.17
Rb1	0.60	0.01	0.26	-0.09	-0.18	-0.13	0.38	0.37	0.66	-0.20	0.08	-0.12	0.21	0.02	0.31	-0.29	-0.37	-0.42	0.41	-0.19	0.00	-0.09	-0.39	-0.40	0.32	0.08	0.83	0.22	0.07	0.01	0.27	-0.36	-0.12	0.08	0.05	0.48	0.39		
Rb2	-0.02	-0.05	0.23	0.15	-0.14	0.11	0.15	0.07	-0.16	0.91	-0.13	-0.15	0.12	0.36	0.17	0.27	-0.10	0.04	0.10	0.44	0.39	0.37	0.15	0.22	-0.04	0.91	0.97	0.14	0.18	0.52	0.23	0.21	0.09	0.23	0.32	0.12	-0.07	-0.07	
Rb6	0.08	0.02	0.06	0.07	-0.06	0.11	0.03	0.04	0.02	-0.07	0.33	-0.03	-0.07	0.03	0.14	0.20	0.28	0.03	0.13	0.04	0.27	0.17	0.14	0.12	0.15	-0.01	0.37	0.40	0.05	0.05	0.02	0.09	0.07	0.17	0.14	0.07	0.00	-0.06	-0.05
Sh1	0.14	-0.02	-0.03	0.19	0.17	0.21	0.12	0.09	-0.20	-0.13	0.31	-0.19	-0.01	0.02	0.15	0.31	0.28	0.10	0.06	0.13	0.27	0.24	-0.11	0.21	-0.07	0.02	0.15	0.12	0.06	0.17	0.17	0.15	0.13	-0.27	-0.29	0.15	0.13	-0.27	-0.29
Sh1	0.57	-0.04	0.19	0.29	0.30	0.30	0.12	0.10	-0.44	-0.10	0.20	0.14	-0.06	0.12	0.31	0.69	0.62	0.45	0.66	0.06	0.51	0.24	0.33	0.69	0.66	-0.25	0.19	0.20	-0.26	0.11	0.27	0.35	0.06	0.63	0.32	0.04	-0.02	-0.37	-0.36
Se1	-0.25	-0.07	0.23	0.27	0.28	0.28	0.07	0.11	-0.43	-0.13	0.23	0.13	-0.14	0.05	0.32	0.67	0.71	0.45	0.71	0.44	0.59	0.27	0.27	0.62	0.70	-0.30	0.23	0.24	-0.24	0.06	0.31	0.39	-0.03	0.68	0.40	0.05	0.02	-0.44	-0.37
Se1	0.35	-0.01	-0.05	0.00	-0.02	0.03	0.06	0.02	0.00	0.00	0.18	0.01	-0.02	0.04	0.05	0.01	-0.09	-0.02	-0.04	0.06	-0.03	0.05	0.08	0.05	-0.02	0.03	0.20	0.22											



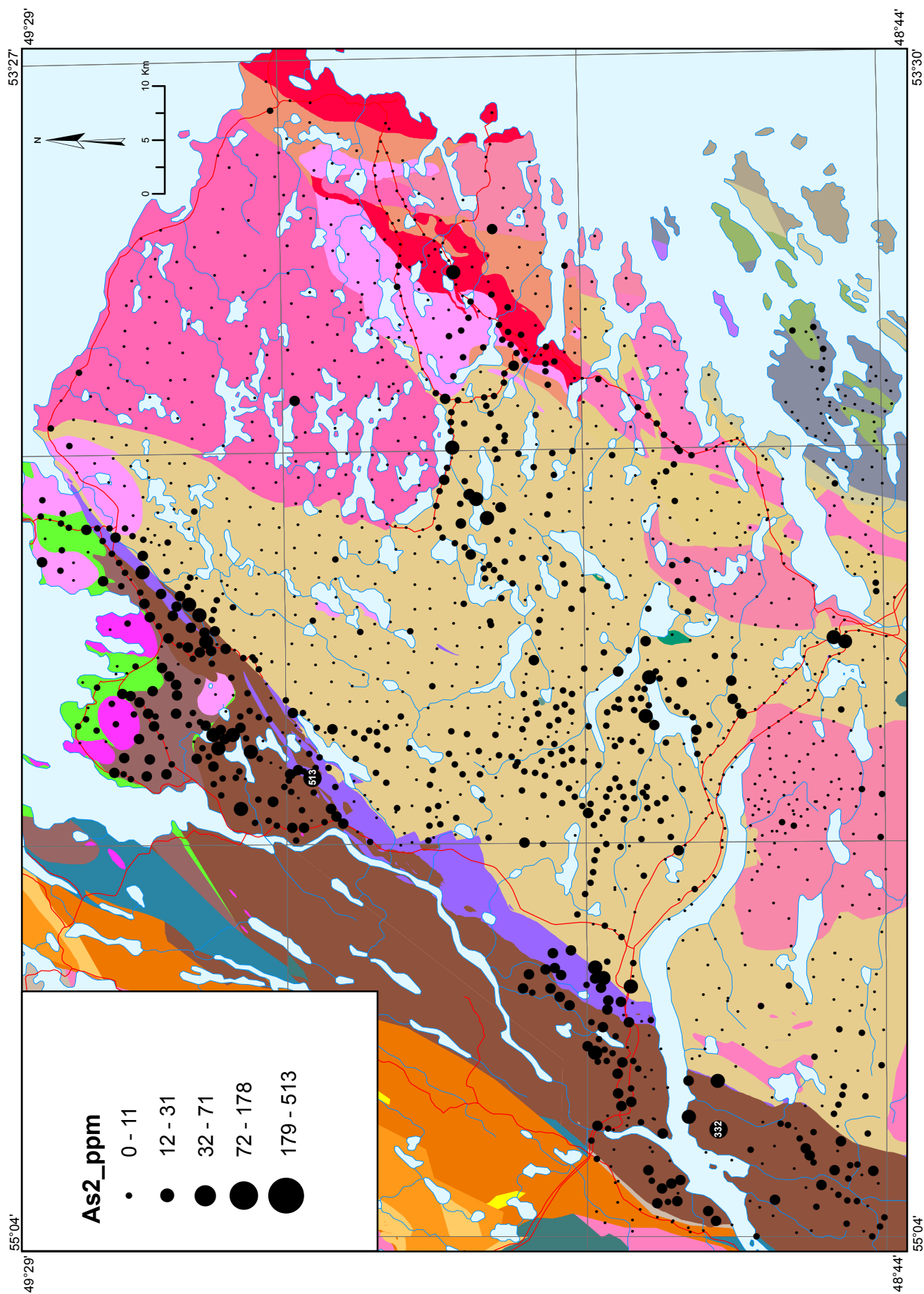
**Table 7. Correlation matrix**[illegible]





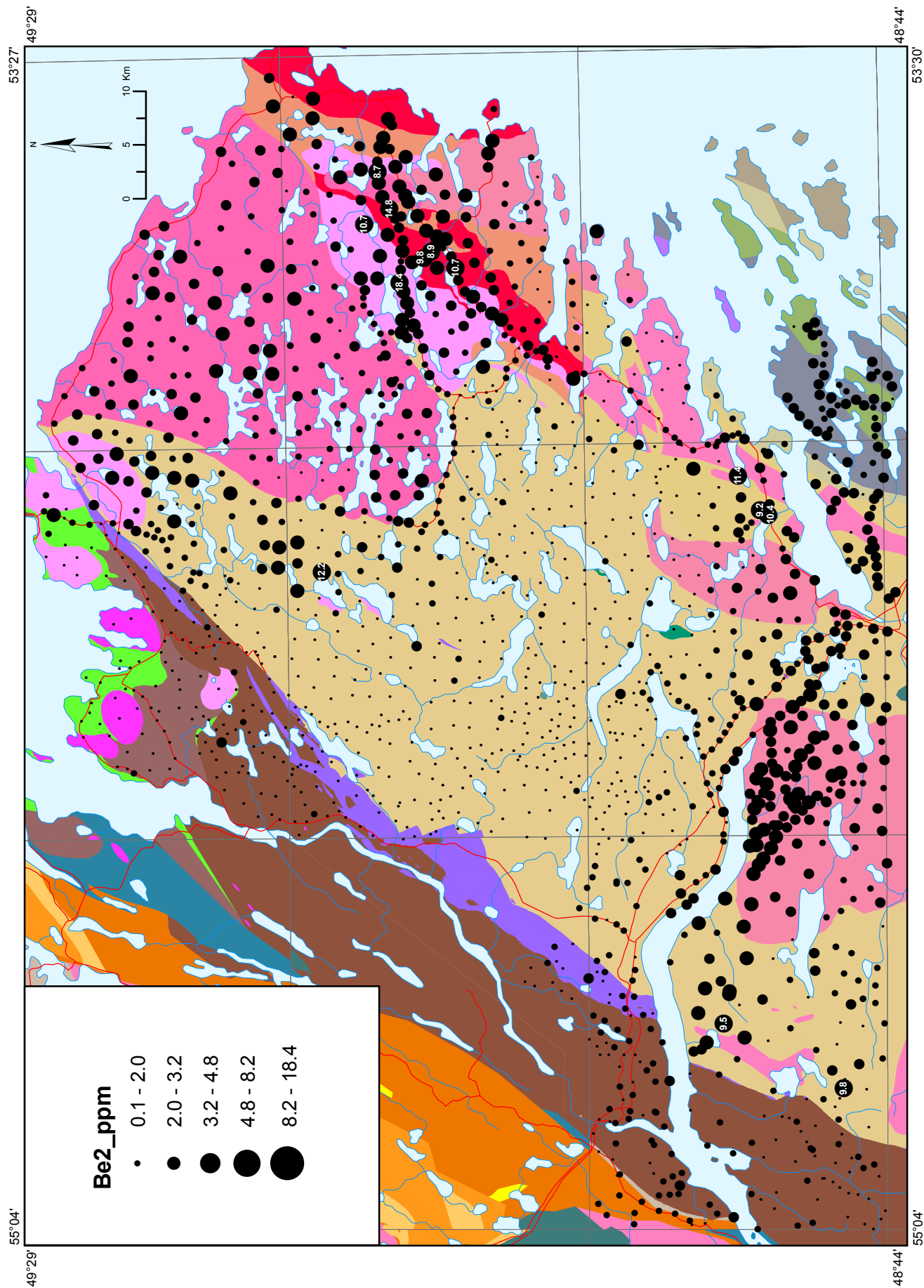
**Figure 6.** *Distribution of antimony (Sb1) in till.*





**Figure 7.** *Distribution of arsenic (As<sub>2</sub>) in till.*





**Figure 8.** *Distribution of beryllium (Be<sub>2</sub>) in till.*



## **CHROMIUM (Cr)**

The highest chromium value is 4430 ppm (sample 107157), found in till underlain by the Gander River Complex and areas to the east of this (Figure 9). This value is part of a cluster of values (701 to 4430 ppm) that fall into the very elevated to high range of the provincial dataset.

Chromium correlates moderately to well with cobalt (0.60), iron (0.36), magnesium (0.65), nickel (0.65), scandium (0.45), and vanadium (0.74), and vanadium (0.31) (Table 7). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## **COPPER (Cu)**

The highest copper value recorded was 251 ppm in till overlying rocks of the Davidsville Group and the Gander River Complex (Figure 10; sample 114076). This value is from the area north of Gander Lake where a cluster of values (14–251 ppm) fall within the slightly elevated to high range of the provincial dataset. Elevated copper values were also found east of Soulis Pond and southeast of Jonathan's Pond in till overlying metasedimentary rocks of the Jonathans Pond Formation. Several copper occurrences have been documented throughout the Gander River Complex (Figure 5) and these are reflected in the till geochemistry for this area.

Copper correlates moderately to well with arsenic (0.40), gold (0.40), calcium (0.41), cerium (0.63), cobalt (0.74), chromium (0.43), dysprosium (0.46), europium (0.34), iron (0.65), mercury (0.41), lanthanum (0.45), lithium (0.44), magnesium (0.51), manganese (0.46), nickel (0.44), rubidium (0.45), scandium (0.59), tin (0.44), strontium (0.44), vanadium (0.48), yttrium (0.48), and zinc (0.60) (Table 7). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

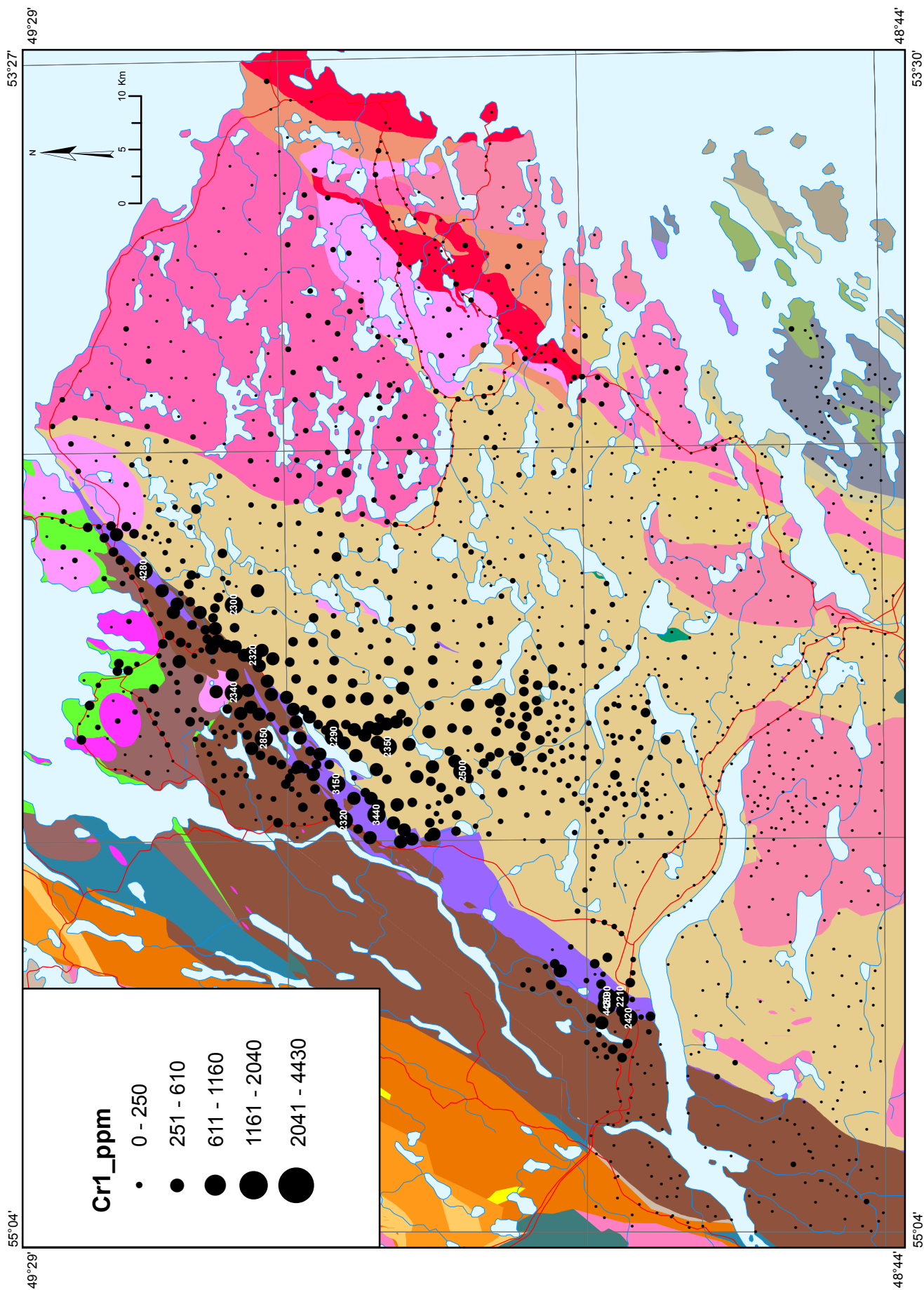
## **GOLD (Au)**

The gold in till data is difficult to interpret, and it shows a spotty distribution (Figure 11). The small (<1 kg) sample is likely a factor and caution must be exercised when interpreting anomalies, due to the 'nugget effect'.

Approximately 6% of the gold values are slightly elevated to elevated (7.8 to 82.0 ppb), with the remaining 94% background when compared to the provincial dataset. The highest values are scattered throughout the study area, but mostly occur in till overlying metasedimentary rocks of Jonathans Pond Formation. The highest gold value recorded was 82 ppb, located near the western end of Home Pond (sample 97262, Figure 11). A cluster of slightly elevated values are present in the siliclastic rocks of the Davidsville Group in the Joe Batts Pond area. Known gold showings near the Benton area do not appear to be reflected in the till geochemistry (Startrack and Stallion prospects; Mineral Occurrence Data System 002D/16/Au001 and 002D/16/Au002).

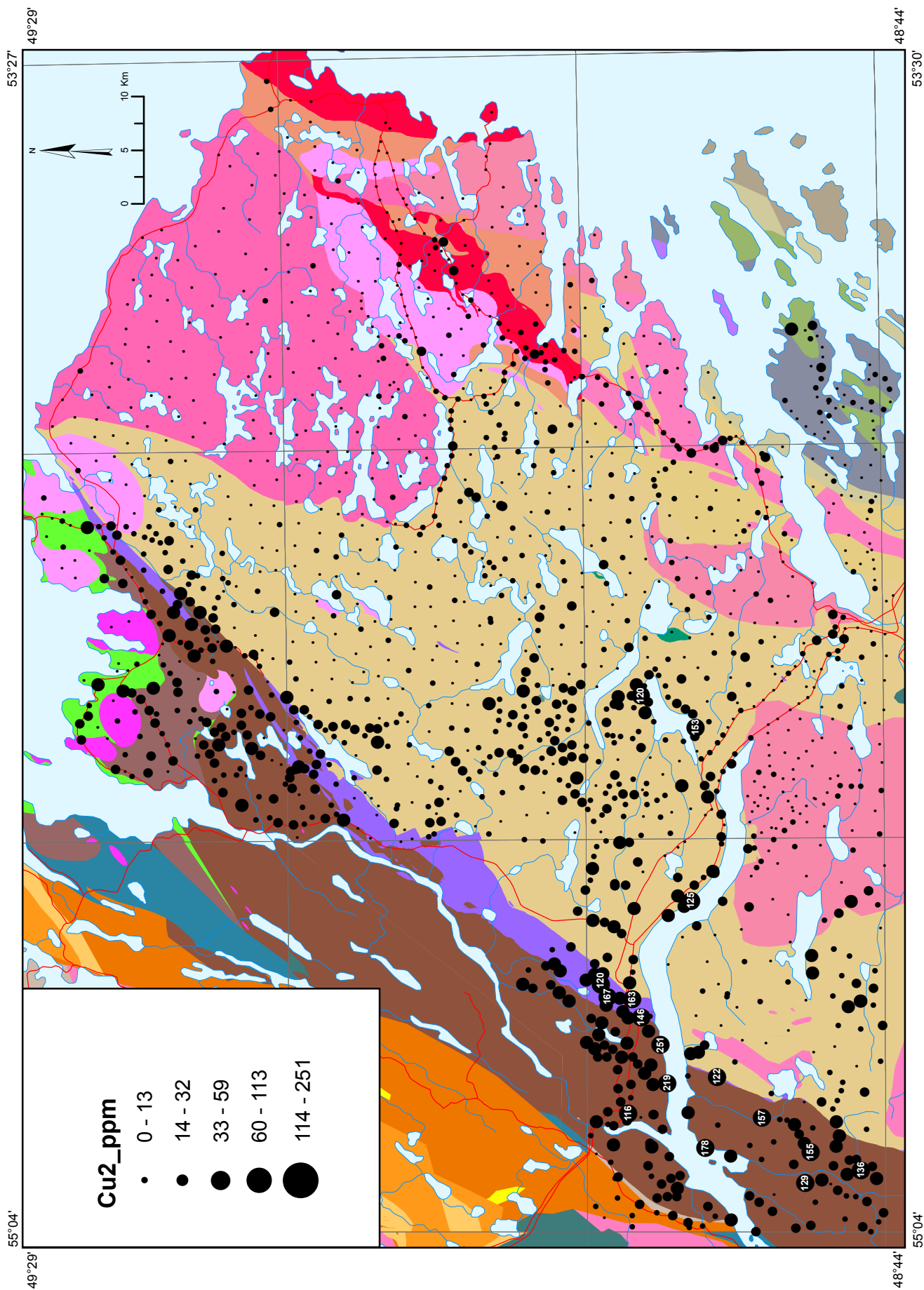
Gold is slightly to moderately correlated with copper (0.40), arsenic (0.35), cobalt (0.34), and scandium (0.30) and poorly correlated with other elements analyzed (Table 7). Field and laboratory duplicates showed a low degree of correlation (-0.025, Table 4).





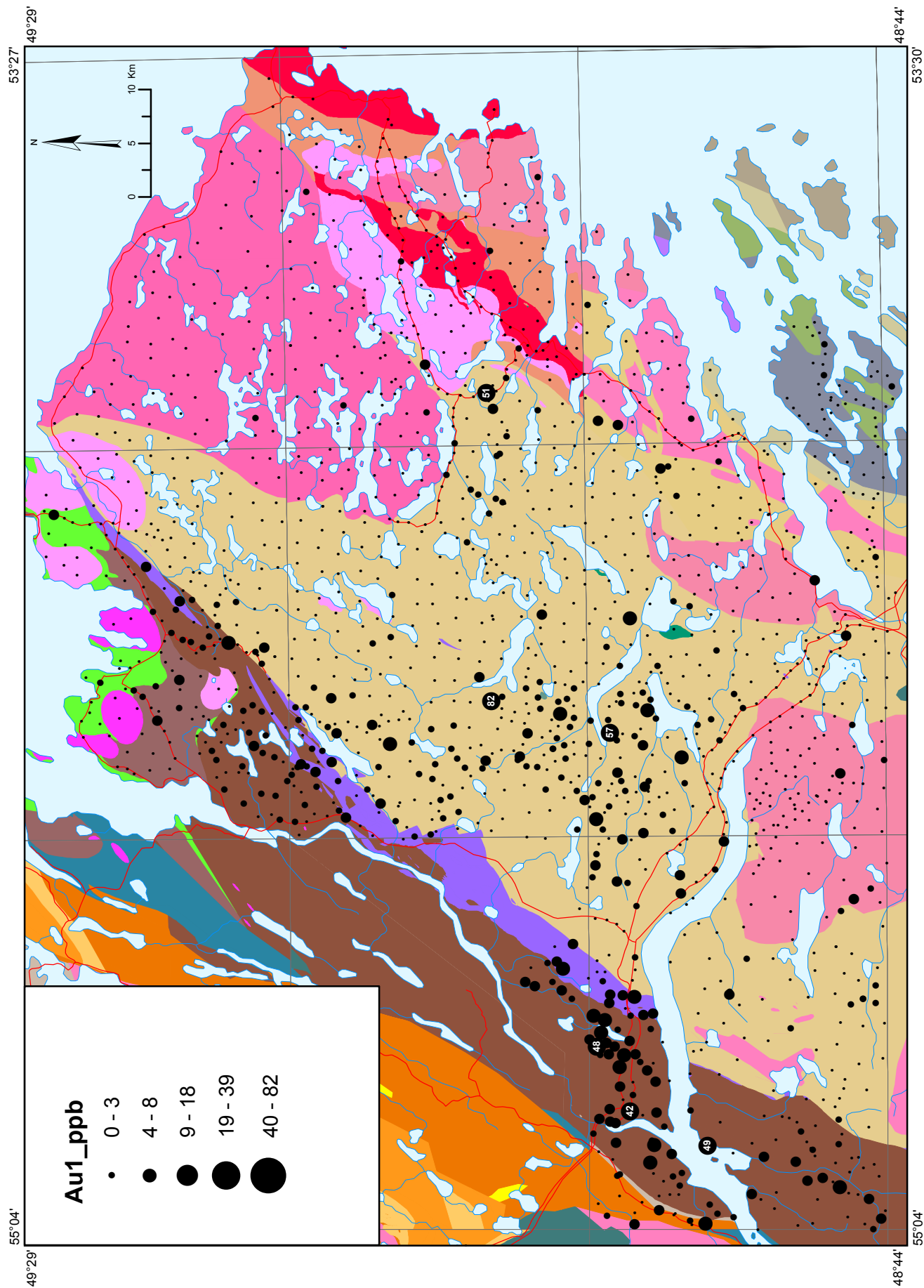
**Figure 9.** *Distribution of chromium (CrI) in till.*





**Figure 10.** *Distribution of copper (Cu2) in till.*





**Figure 11.** *Distribution of gold (Au1) in till.*



## **LEAD (Pb)**

The highest lead value is 276 ppm (sample 97390), found in till overlying bedrock of the Musgravetown Group (Figure 12). Approximately 40% of the data have values that fall into the slightly to very elevated range (17.6–399.0 ppm) of the provincial dataset for lead; the distribution of these values is non-clustered.

Lead is moderately to well correlated with aluminium (0.33), barium (0.34), copper (0.31), hafnium (0.31), iridium (0.33), sodium (0.35), phosphorous (0.33), tin (0.30), strontium (0.30), yttrium (0.30) and zinc (0.44) (Table 7). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## **NICKEL (Ni)**

Slightly elevated to high values of nickel are commonly associated with till overlying bedrock of the Gander River Complex where the highest value occurs (1033 ppm; sample 117210; Figure 13). Slightly to elevated nickel values are also common in till overlying rocks of the Davidsville Group and overlying the Jonathans Pond Formation in the Weirs Pond area and northeast of the Home Pond area. There are no known nickel occurrences in this area.

Nickel is moderately to well correlated with cobalt (0.82), chromium (0.85), copper (0.51), iron (0.59), lithium (0.44), magnesium (0.92), scandium (0.56), vanadium (0.45), and zinc (0.37) (Table 7). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## **YTTRIUM (Y)**

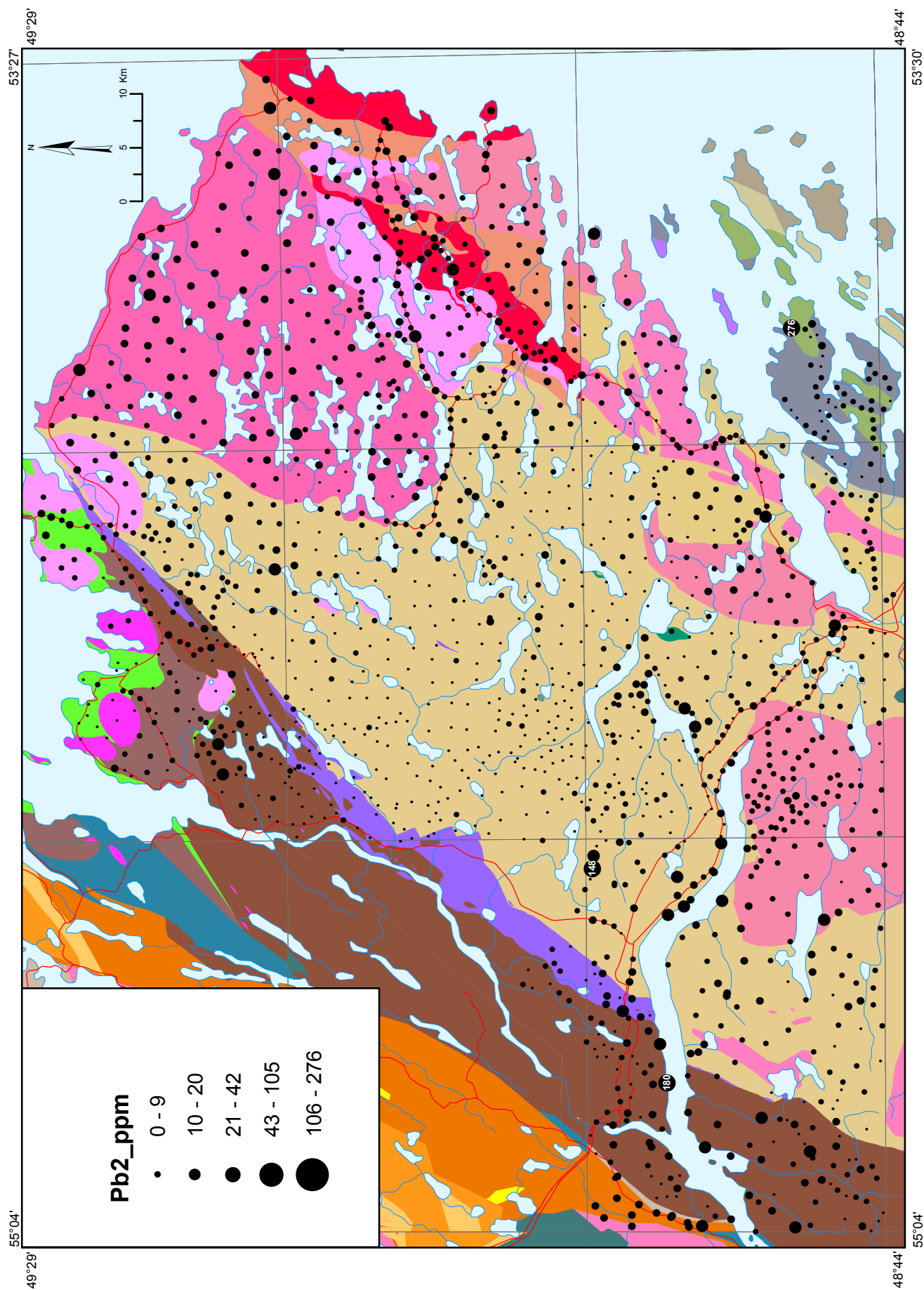
Slightly elevated and higher yttrium values (>18.6 ppm) are scattered throughout the study area. The highest yttrium value is 57 ppm (sample 117387), associated with till overlying bedrock of the Hamilton Sound Group (Figure 14). Yttrium values that fall into the elevated (27.9–46.9 ppm) and very elevated (46.9–100.0 ppm) range of the provincial dataset occur in several small clusters in till overlying bedrock of the Musgravetown Group (25 to 56 ppm), Hare Bay Gneiss (34 to 37 ppm), Gander Lake Granite (25 to 28 ppm) and Botwood Group (39 to 45 ppm).

Yttrium is slightly to highly correlated to calcium (0.32), cobalt (0.42), copper (0.43), magnesium (0.41), manganese (0.48), nickel (0.28), phosphorus (0.44), and iron (0.38) (Table 7). It is also correlated to other rare-earth elements: cerium (0.68), dysprosium (0.93), europium (0.51), niobium (0.23), lanthanum (0.62), lithium (0.24), scandium (0.28), strontium (0.48), samarium (0.23), and terbium (0.53). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is thus considered accurate and precise.

## **ZINC (Zn)**

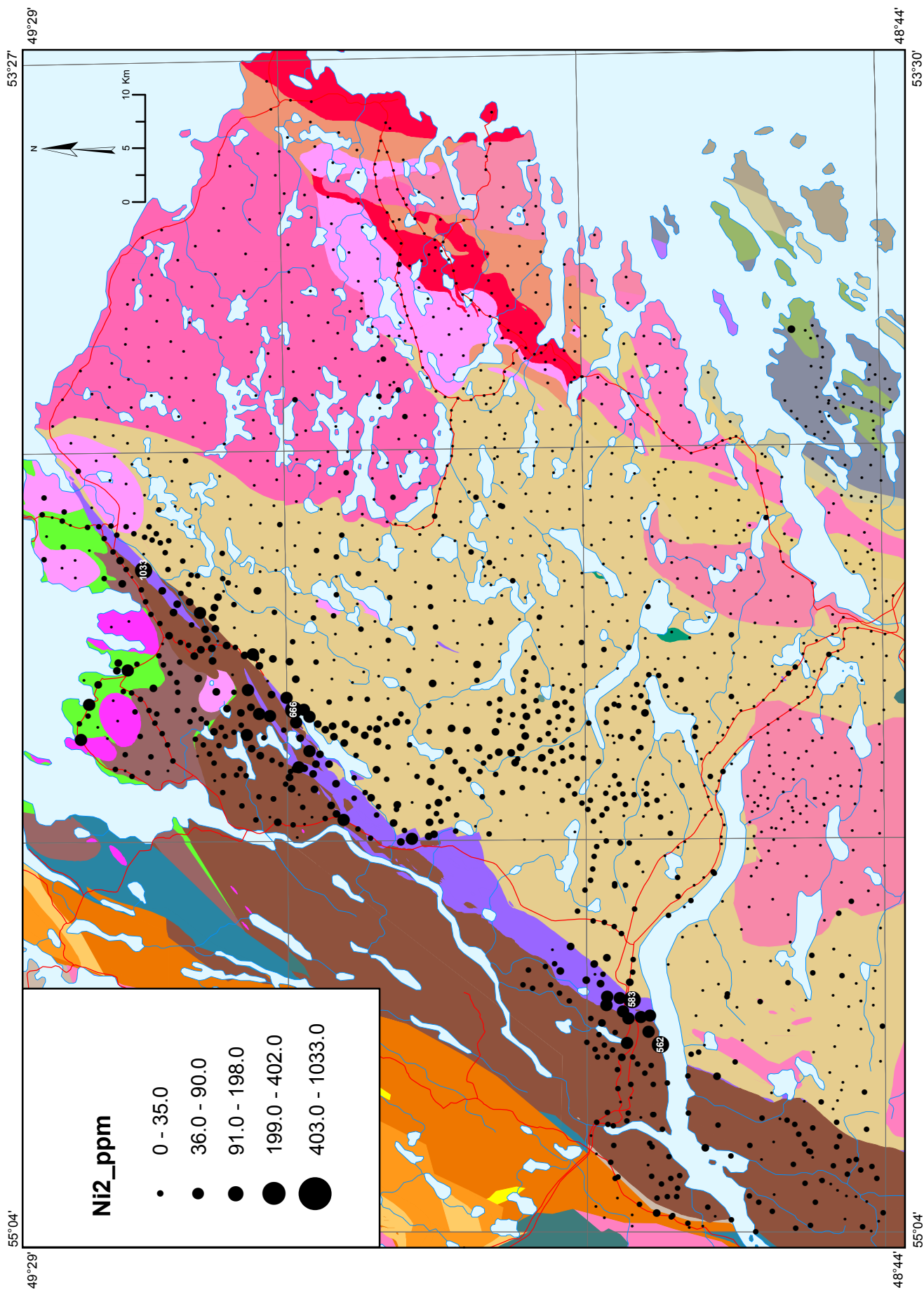
Approximately 38% of the data have values that correspond to the slightly elevated (45.9–78.4 ppm) to elevated (78.4–138.0 ppm) range of the provincial dataset. These values are most concen-





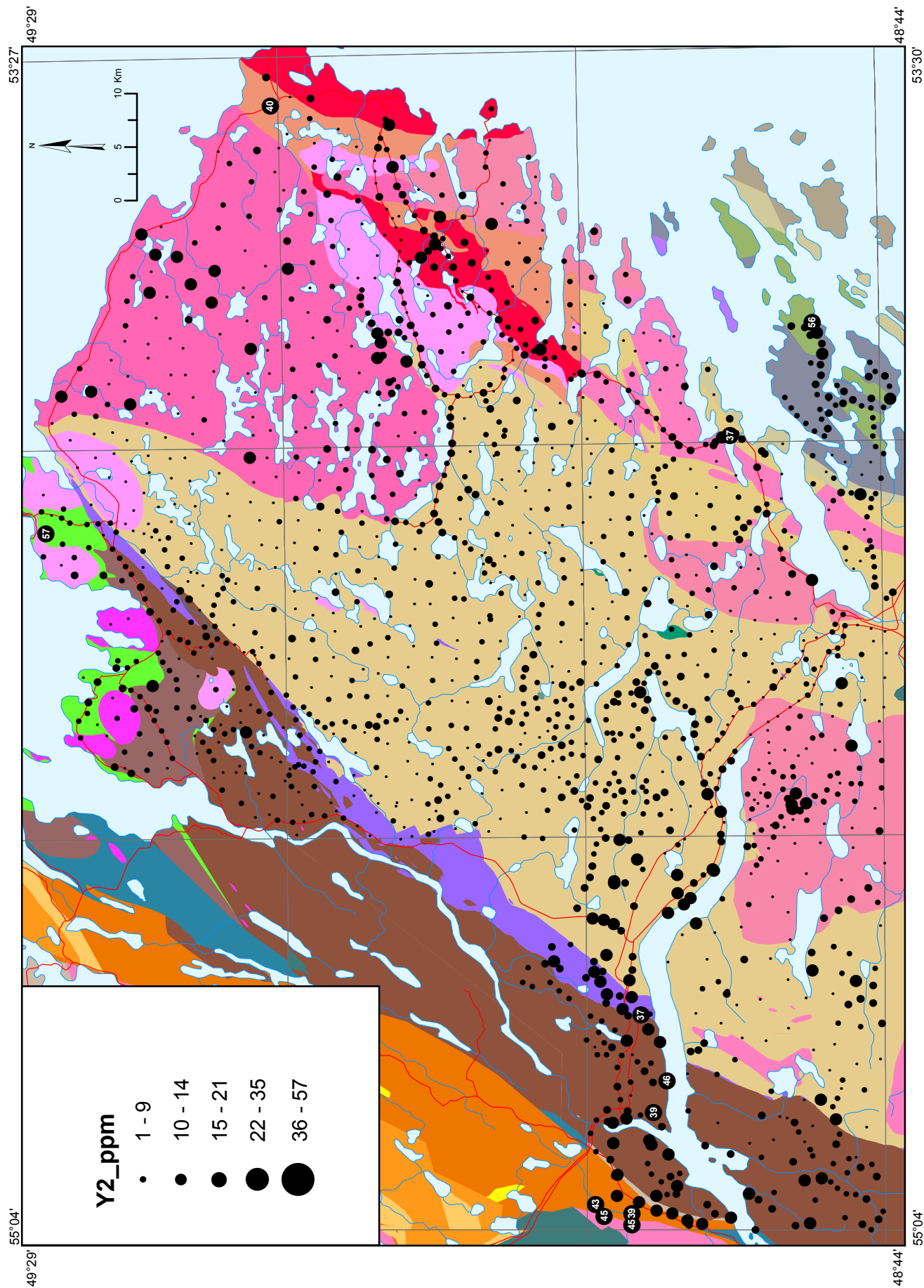
**Figure 12.** *Distribution of lead (Pb<sub>2</sub>) in till.*





**Figure 13.** Distribution of nickel (Ni<sup>2+</sup>) in till.





**Figure 14.** Distribution of yttrium (*Y2*) in till.



trated in till overlying the Davidsville Group and Gander River Complex but are also common in till overlying rocks of the Jonathans Pond Formation, particularly in the Soulis and Home pond areas. One highly elevated zinc value of 910 ppm (sample 97390) was recorded in till overlying rocks of the Musgravetown Group (Figure 15). No known zinc occurrences have been identified in the study area.

Zinc is moderately to well correlated with cerium (0.47), cobalt (0.55), chromium (0.34), copper (0.60), dysprosium (0.37), europium (0.62), iron (0.67), lanthanum (0.54), lithium (0.45), lutetium (0.35), nickel (0.37), lead (0.44), antimony (0.51), scandium (0.53), uranium (0.52), tungsten (0.38), and ytterbium (0.33) (Table 7). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

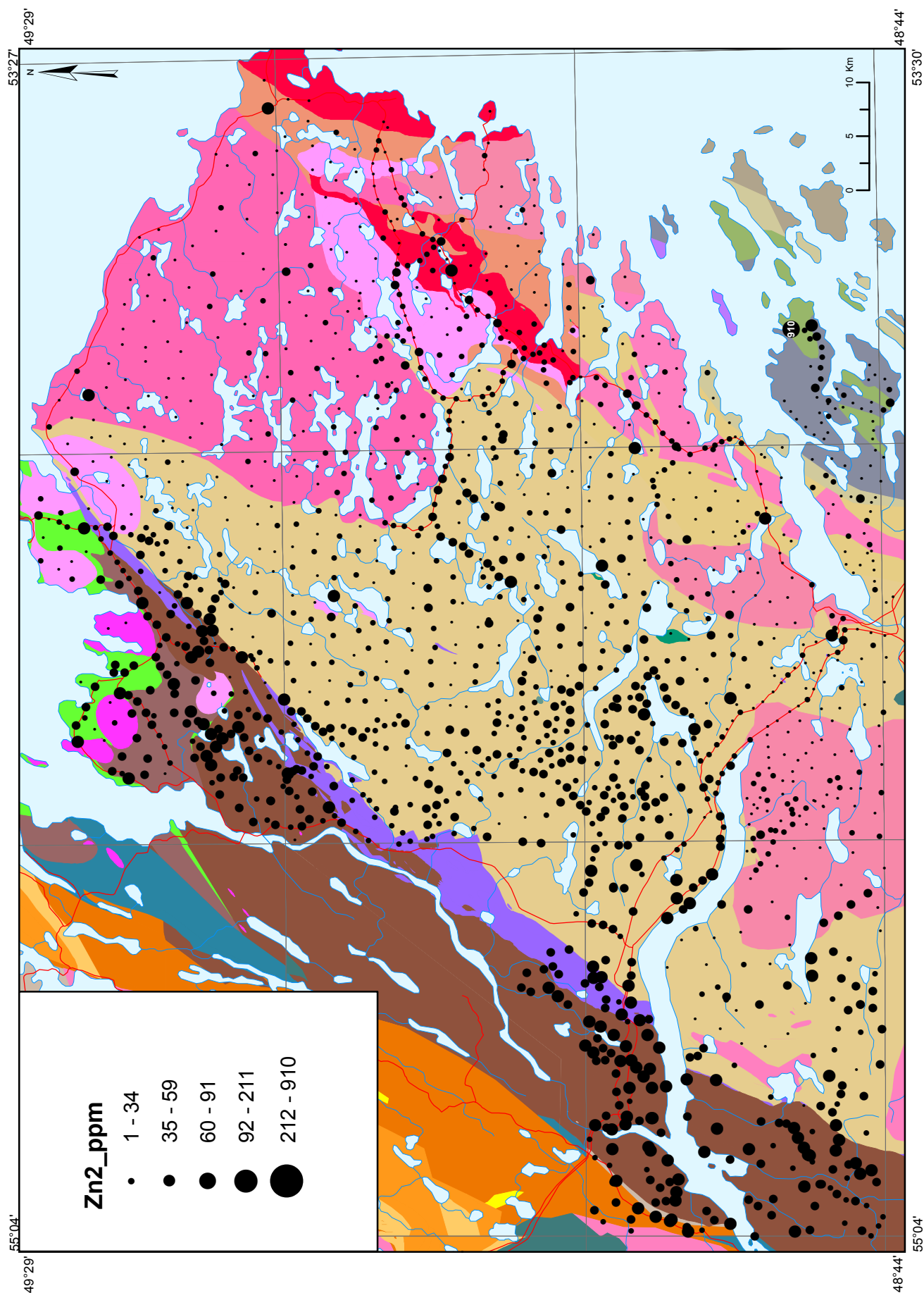
## **GLACIAL HISTORY AND IMPLICATIONS FOR MINERAL EXPLORATION**

The study area has evidence of three Late Wisconsinan ice-flow events. The first was a regional eastward flow that extended into Bonavista Bay. This flow is recorded across much of northeast Newfoundland and likely had a source area north of Red Indian Lake (Vanderveer and Sparkes, 1982; Proudfoot *et al.*, 1988; Batterson and Vatcher, 1991; St. Croix and Taylor, 1990, 1991). The eastward ice-flow event was followed by a north to northeastward ice flow, likely sourced from an ice divide between Middle Ridge and Meelpaeg Lake (Rogerson, 1982). A third, northwestward flow is also preserved in the western portion of the study area with a likely source from the Middle Ridge area (Grant, 1974; St. Croix and Taylor, 1991). Both northward ice-flow phases are only present in the western portion of the field area and are typically associated with thicker till cover interpreted as a basal melt-out till. East of this area no striation or landform evidence of northward flow is observed. Till occurs mostly as a veneer where hummocky and boulder terrain are common, likely formed by a stagnating remnant ice centre, as postulated by Grant (1974). Landform evidence supporting the presence (and possible extent) of stagnant ice includes hummocky topography in the Ten Mile Pond area, and esker-like ridges at Fox Pond (Brushett, 2010a). The area became ice-free sometime before 12.0 ka based on radiocarbon dates in marine shells from Indian Bay (Shaw and Forbes, 1990) and Gander River valley (Blake, 1983). To date, no radiocarbon dateable material has been found in the Bonavista Bay area that could further constrain the region's deglacial history.

Interpretations of till geochemistry and the development of mineral-exploration strategies should consider the following:

1. Three ice-flow directions have affected the area. In the western part where there is evidence for all three ice-flow events, sediment deposited by the earlier eastward ice flow has been reworked by later northward-flowing ice. The dispersal pattern of ultramafic clasts associated with the Gander River Complex suggest that the dominant ice flow was northwestward in the Carmanville area and east of Island Pond. Granitic clasts derived from Gander Lake Granite found in areas underlain by Gander Group in the Barry's Brook and Island Pond areas suggest glacial transport northward. For the remainder of the study area to the east, the dominant and only ice-flow recorded is east-southeastward.





**Figure 15.** *Distribution of zinc (Zn<sub>2</sub>) in till.*



2. Despite the presence of three ice-flow events, only one till unit, interpreted as a basal melt-out till, was observed.
3. Sampling in areas underlain by glaciofluvial or fluvial sediments should be avoided due to sediment reworking, and the difficulty in defining distances and directions of transport. These areas include: those below the marine limit of approximately 67 m above modern sea level in the Carmanville area, Hamilton Sound and along the northeastern coast, areas below the marine limit of 34 m in the Indian Bay area and surrounding coast along Bonavista Bay, and valleys containing glaciofluvial and fluvial sand and gravel in the Indian Bay area, Northwest Brook, Ragged Harbour River, south of Carmanville Arm, Barry's Brook, Butt's Pond, Gambo, and west of Musgrave Harbour.
4. Hummocky deposits, such as those in the Ten Mile Pond and Gander Lake areas, likely formed in a stagnating glacial environment and may contain a greater proportion of supraglacial (and thus more far travelled) sediment than basal till, and is thus less likely to be representative of the underlying bedrock.

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## REFERENCES

- Batterson, M.J., St. Croix, L., Taylor, D.M. and Vatcher, S.  
 1991: Ice-flow indicators on the Gander Lake map sheet (NTS 2D/15). Newfoundland Department of Mines and Energy, Geological Survey Branch, Open File 2D/15 (233), Map 91-01.
- Batterson, M.J. and Taylor, D.M.  
 1998: Surficial geology and geochemical sampling in the Grand Falls to Glenwood areas (NTS 2D/13, 2D/14, 2E/3). *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 98-1, pages 1-8.
- 2001: Quaternary geology and till geochemistry of the Bonavista Peninsula. *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 2001-1, pages 267-278.



Batterson, M.J., Taylor, D.M. and Sheppard, K.

2001: Till geochemistry of the Gander map area. Newfoundland Department of Mines and Energy. Geological Survey Branch, Open File 2D/15/0398, 48 pages.

Batterson, M.J. and Vatcher, S.

1991: Quaternary geology of the Gander (NTS 2D/15) map area. *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 91-1, pages 1-12.

Blackwood, R.F.

1982: Geology of the Gander Lake (2D/15) and Gander River (2E/2) area. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 82-4, 56 pages.

Blackwood, R.F. and Gibbons, R.V.

1977: Geology of the east half of the Gambo (2D/16) map area and the northwest portion of the St. Brendan's (2C/13) map area, Newfoundland. Mineral Development Division, Department of Mines and Energy, Government of Newfoundland and Labrador, Report 77-05, 23 pages.

Blake, W., Jr.

1983: Geological Survey of Canada radiocarbon dates XXIII. Geological Survey of Canada, Report 83-7, 34 pages.

Brushett, D.

2010a: Quaternary geology of the Gander Lake and Gambo map area (NTS 2D/16 and 2C/13). *In* Current Research. Newfoundland and Labrador Department of Natural Resources, Geological Survey, Report 10-1, pages 159-170.

2010b: Surficial geology of the Gambo map area (NTS 2D/16). Newfoundland and Labrador Department of Natural Resources, Geological Survey, Map 2010-53, Open File 02D/16/0764.

2011a: Quaternary geology of Weir's Pond and surrounding areas (NTS map area 2E/01, 2D/15, 2E/02 and 2F/04). *In* Current Research. Newfoundland and Labrador Department of Natural Resources, Geological Survey, Report 11-1, pages 33-42.

2011b: Till geochemistry of the Gander Lake and Gambo map area (NTS 2D/16 and 2C/13). Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Open File NFLD/3134, 104 pages.

2012: Quaternary geology and till geochemistry of the Carmanville (NTS 2E/08), Wesleyville (NTS 2F/04) and Musgrave Harbour (NTS 2F/05) map areas. *In* Current Research. Newfoundland and Labrador Department of Natural Resources, Geological Survey, Report 12-1, pages 179-190.



Butler, A.J., Miller, H.G. and Vanderveer, D.G.

1984: Geoscience studies in the Weir's Pond area, northeast of Gander, Newfoundland. *In* Current Research. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 84-1, pages 271-278.

Colman-Sadd, S.P. and Crisby-Whittle, LV.J.

2005: Partial bedrock geology for the Island of Newfoundland (NTS 02E, 02F, 02L, 02M, 11O, 11P, 12A, 12B, 12G, 12H, 12I, 12P and parts of 01M, 02D). Newfoundland and Labrador Department of Natural Resources, Geological Survey, Open File NFLD/2616 version 6.0.

Currie, K.L.

1995: Geology, Carmanville, Newfoundland. Geological Survey of Canada, Open File Map 3147, scale 1:50 000.

Davenport, P.H., Nolan, L.W. and Hayes, J.P.

1988: Gold and associated elements in lake sediment from regional surveys in the Gander Lake map area, Newfoundland (NTS 2D). Newfoundland Department of Mines and Energy, Geological Survey Branch, Open File 2D/175.

Dreimanis, A.

1988: Tills, their genetic terminology and classification. *In* Genetic Classification of Glacigenic Deposits. *Edited by* R.P. Goldthwait and C.L. Matsch. A.A. Balema, Rotterdam, pages 17-86.

Evans, D.T.W.

1993: Gold mineralization in the eastern Dunnage zone, central Newfoundland. *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 93-1, pages 339-349.

Finch, C.J.

1998: Inductively coupled plasma-emission spectrometry (ICP-ES) at the Geochemical Laboratory. *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey, Report 98-1, pages 179-193.

Grant, D.R.

1974: Prospecting in Newfoundland and the theory of multiple shrinking ice caps. Geological Survey of Canada, Paper 74-1, Part B, pages 215-216.

1989: Quaternary geology of the Atlantic Appalachian region of Canada. *In* Quaternary Geology of Canada and Greenland. *Edited by* R.J. Fulton. Geological Survey of Canada, Geology of Canada No. 1, pages 391-400.

Hill, J.

1984: Wesleyville, Newfoundland. Government of Newfoundland and Labrador, Department of Mines and Energy, Mineral Development Division, Map 84-023.



Jayasinghe, N.R.

1978: Geology of the Wesleyville (2F/4) and the Musgrave Harbour East (2F/5) map area, Newfoundland. Government of Newfoundland and Labrador, Department of Mines and Energy, Mineral Development Division, Report 78-08, 15 pages.

Jenks, G.F.

1967: The Data Model Concept in Statistical Mapping. *International Yearbook of Cartography* 7, pages 186-190.

Jenness, S.E.

1960: Late Pleistocene glaciation of eastern Newfoundland. *Bulletin of the Geological Society of America*, Volume 71, pages 161-179.

Licthe, F.E., Golightly, D.W. and Lamothe, P.J.

1987: Inductively coupled Plasma-Atomic emission Spectrometry. *In Methods for Geochemical Analysis*. U.S. Geological Survey Bulletin 1770, pages B1-B10.

Liverman, D.G.E.

1994: Relative sea-level history and isostatic rebound in Newfoundland, Canada. *Boreas*, Volume 23, pages 217-230.

Lundqvist, J.

1965: Glacial geology in northeastern Newfoundland. *Geologiska Föreningens i Stockholm Förhandlingar*, Volume 87, pages 285-306.

McCuaig, S.

2006: Glacial spillway deposits in the Gander Lake-Gambo area. *In Current Research*. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 06-1, pages 209-219.

Miller, H.G.

1988: Geophysical interpretation of the geology of the northeast Gander Terrane, Newfoundland. *Canadian Journal of Earth Sciences*, Volume 25, pages 1161-1174.

Munro, M. and Catto, N.

1993: Quaternary geology of the Carmanville map area (NTS 2E/8). *In Current Research*. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 93-1, pages 144-159.

O'Brien, S.J. and Knight, I.

1988: The Avalonian geology of southwest Bonavista Bay: Portions of the St. Brendan's (2C/13) and Eastport (2C/12) map areas. *In Current Research*. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 88-1, pages 193-205.



O'Connell, M.J. and Dempson, J.B.

2002: The biology of Arctic char, *Salvelinus alpinus*, of Gander Lake, a large, deep, oligotrophic lake in Newfoundland, Canada. *Environmental Biology of Fishes*, Volume 64, pages 115-126.

O'Neill, P.P.

1987: Geology of the west half of the Weir's Pond (2E/1) area. *In* Current Research. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 87-1, pages 271-281.

1990: Geology of the northeast Gander Lake map area (NTS 2D/15) and the northwest Gambo map area (NTS 2D/16). *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 90-1, pages 317-326.

1991: Geology of the southeastern part of the Gander Lake map area (NTS 2D/15) and the southwestern part of the Gambo map area (NTS 2D/16). *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 91-1, pages 167-174.

O'Neill, P. and Knight, I.

1988: Geology of the east half of the Weir's Pond (2E/1) map area and its regional significance. *In* Current Research. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 88-1, pages 165-176.

Proudfoot, D.N., Scott, S., St. Croix, L., Taylor, D.M. and Vanderveer, D.G.

1988: Glacial striations in southeast-central Newfoundland. 1:250 000 scale. Newfoundland Department of Mines and Energy, Mineral Development Division, Map 88-102, Open file NFLD 1725.

Rogerson, R.J.

1982: The glaciation of Newfoundland and Labrador. *In* Prospecting in Areas of Glaciated Terrain - 1982. *Edited by* P.H. Davenport. Canadian Institute of Mining and Metallurgy, pages 37-56.

Scott, S.

1994: Surficial geology and drift exploration of Comfort Cove-Newstead and Gander River map areas (NTS 2E/7 and 2E/2). *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 94-1, pages 29-42.

Serpa, C., Batterson, M. and Guzzwell, K.

2009: The influence of bedrock and mineral occurrences on arsenic concentrations in groundwater wells in the Gander Bay area, Newfoundland. *In* Current Research. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 09-1, pages 315-337.



Shaw, J.

2003: Submarine moraines in Newfoundland coastal waters: implications for the deglaciation of Newfoundland and adjacent areas. *Quaternary International*, Volume 99-100, pages 115-134.

Shaw, J., Piper, D.J.W., Fader, G.B., King, E.L., Todd, B.J., Bell, T., Batterson, M.J. and Liverman, D.G.E.

2006: A conceptual model of the deglaciation of Atlantic Canada. *Quaternary Science Reviews*, Volume 25, pages 2059-2081.

Smith, J.S.

2010: Glacial stratigraphy of the southwest Red Indian Lake Basin, Newfoundland: preliminary results. *In Current Research*. Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Report 10-1, pages 201-217.

2012: The paleogeography of glacial Lake Shanadithit, Red Indian Lake Basin, Newfoundland: implications for drift prospecting. *In Current Research*. Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Report 12-1, pages 207-227.

Smith, J.S., Batterson, M.J. and Taylor, D.M.

2009: Till geochemistry of the south side of the Red Indian Lake basin (NTS map sheets 12A/16, 7, 9, 10, 11, 15 and 16). Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Open File 12A/1449, 152 pages.

St. Croix, L. and Taylor, D.M.

1990: Ice flow in north-central Newfoundland. *In Current Research*. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 90-1, pages 85-88.

1991: Regional striation survey and deglacial history of the Notre Dame Bay area, Newfoundland. *In Current Research*. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 91-1, pages 61-68.

Taylor, D.M. and Liverman, D.G.E.

2000: Till geochemistry in the Hodges Hill area. *In Current Research*. Newfoundland Department of Mines and Energy, Geological Survey Branch, Report 2000-1, pages 61-67.

Taylor, D.M. and St. Croix, L.

1989: Glacial striations in north-central Newfoundland. Newfoundland Department of Mines and Energy, Geological Survey Branch, Map 89-108, Open File NFLD 1875.

Vanderveer, D.G.

1985: Quaternary mapping, Moran Heights, Labrador, and Gander-Gambo area, Newfoundland. *In Current Research*. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 85-1, pages 55-58.



Vanderveer, D.G. and Sparkes, B.G.

1982: Regional Quaternary mapping; an aid to mineral exploration in west-central Newfoundland. *In* Prospecting in Areas of Glaciated Terrain-1982. *Edited by* P.H. Davenport. Canadian Institute of Mining and Metallurgy, Geology Division, pages 284-299.

Vanderveer, D.G. and Taylor, D.M.

1987: Quaternary mapping in the Gander River area, Newfoundland. *In* Current Research. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 87-1, pages 39-43.

Vanderveer, D.G., Taylor, D.M. and Batterson, M.J.

1987: Landform classification maps for the Gander area (NTS 2D/16, 2E/1, 2E/2). Newfoundland Department of Mines and Energy, Mineral Development Division, Open File NFLD 1575.

Williams, H., Colman-Sadd, S.P. and Swinden, H.S.

1988: Tectonic-stratigraphic subdivisions of central Newfoundland. *In* Current Research. Geological Survey of Canada, Paper 88-1B, pages 91-98.



## **APPENDIX A**

### **Field and Geochemical Data**



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
97003	c	683421	5417681	21	NAD 27	136.1	02D/16		0.5		7.07	5.7	7.00	1.1	4.00	1.0	520.0	500.00	2.80	30.0	0.31	0.05	93.0	81.00	15.0	21.00	120.0	76.00	4.7	35.00	3.00	1.1
97004	c	684499	5417423	21	NAD 27	94.9	02D/16		0.5		5.80	1.1	4.00	1.0	400.0	416.00	0.90	13.0	0.44	0.10	47.0	38.00	5.0	12.00	69.0	62.00	7.5	5.00	1.10	1.1		
97005	c	685494	5417754	21	NAD 27	81.9	02D/16		0.5		6.46	5.9	8.00	2.0	480.0	444.00	3.30	4.0	0.59	0.10	110.0	91.00	15.0	20.00	120.0	70.00	10.0	52.00	4.10	1.7		
97007	c	687661	5418211	21	NAD 27	73.3	02D/16		0.5		6.07	10.0	10.00	1.0	440.0	406.00	2.70	2.0	0.47	0.05	92.0	85.00	15.0	19.00	130.0	63.00	5.8	30.00	2.30	1.1		
97008	c	688649	5418046	21	NAD 27	66.4	02D/16		0.5		7.18	1.5	3.00	1.0	360.0	305.00	1.70	51.0	0.37	0.20	98.0	38.00	13.0	19.00	68.0	69.00	6.1	11.00	1.30	0.9		
97009	c	689485	5417681	21	NAD 27	59.5	02D/16		0.5		6.27	10.0	11.00	1.0	280.0	340.00	3.30	23.0	0.30	0.10	48.0	88.00	11.0	17.00	150.0	72.00	9.3	32.00	2.70	1.6		
97010	c	690258	5416900	21	NAD 27	78.5	02D/16		0.5		6.27	8.7	10.00	1.0	420.0	398.00	3.70	6.0	0.58	0.20	99.0	69.00	14.0	20.00	110.0	67.00	9.4	46.00	2.90	1.5		
97011	c	691168	5416620	21	NAD 27	114.9	02D/16		0.5		6.29	10.0	11.00	1.0	320.0	315.00	4.10	26.0	0.44	0.05	81.0	49.00	5.0	11.00	90.0	44.00	8.7	18.00	2.00	1.0		
97013	c	692752	5415173	21	NAD 27	81.4	02D/16		0.5		7.00	8.7	10.00	1.0	330.0	317.00	2.80	13.0	0.39	0.20	74.0	45.00	9.0	15.00	150.0	81.00	9.2	17.00	1.30	0.9		
97015	c	693997	5413567	21	NAD 27	127.4	02D/16		0.5		4.50	3.8	5.00	1.0	220.0	229.00	4.20	6.0	0.50	0.05	62.0	42.00	1.0	8.00	80.0	30.00	7.4	1.00	1.00	0.8		
97016	c	694573	5412708	21	NAD 27	114.5	02D/16		0.5		6.84	6.8	8.00	1.0	190.0	189.00	4.20	49.0	0.42	0.20	67.0	37.00	1.0	7.00	82.0	39.00	5.5	2.00	1.30	0.8		
97017	c	693507	5411683	21	NAD 27	230.1	02D/16		0.5		5.11	2.3	4.00	1.0	250.0	263.00	5.10	3.0	0.53	0.05	62.0	48.00	6.0	9.00	52.0	27.00	7.2	12.00	2.10	0.5		
97018	c	696008	5410795	21	NAD 27	173.1	02D/16		0.5		5.36	4.7	6.00	1.0	230.0	225.00	4.20	11.0	0.45	0.05	62.0	49.00	3.0	7.00	73.0	34.00	6.8	6.00	0.80	0.8		
97019	c	696598	5409967	21	NAD 27	113.5	02D/16		0.5		5.07	3.5	5.00	1.0	200.0	203.00	4.30	16.0	0.54	0.05	51.0	35.00	1.0	5.00	62.0	25.00	4.7	5.00	1.60	0.8		
97020	c	697587	5410083	21	NAD 27	83.9	02D/16		0.5		4.76	0.6	3.00	1.0	250.0	228.00	4.10	1.0	0.63	0.05	63.0	44.00	1.0	7.00	73.0	28.00	4.5	2.00	1.50	0.9		
97022	c	697574	5409406	21	NAD 27	79.3	02D/16		0.5		5.17	10.0	10.00	1.0	200.0	190.00	3.80	2.0	0.45	0.20	46.0	31.00	6.0	9.00	47.0	34.00	5.0	9.00	0.70	0.8		
97023	c	693997	5413567	21	NAD 27	127.4	02D/16		0.5		4.50	3.8	5.00	1.0	220.0	229.00	4.20	6.0	0.50	0.05	62.0	42.00	1.0	8.00	80.0	30.00	7.4	1.00	1.00	0.8		
97024	c	699269	5408779	21	NAD 27	133.9	02D/16		0.5		5.89	3.4	5.00	1.0	350.0	351.00	3.40	4.0	0.58	0.05	73.0	40.00	5.0	11.00	85.0	46.00	8.8	8.00	1.30	1.1		
97025	c	700709	5408099	21	NAD 27	84.5	02D/16		0.5		5.01	7.5	8.00	1.0	270.0	253.00	3.40	4.0	0.63	0.05	69.0	47.00	8.0	13.00	110.0	68.00	5.7	16.00	2.00	0.8		
97026	c	699934	5410209	21	NAD 27	75.8	02D/16		0.5		4.21	4.6	6.00	1.0	180.0	192.00	3.60	3.0	0.61	0.05	42.0	34.00	3.0	6.00	69.0	27.00	3.7	13.00	1.40	0.7		
97027	c	699064	5409448	21	NAD 27	84.7	02D/16		0.5		4.22	7.0	8.00	1.0	190.0	195.00	3.60	3.0	0.60	0.10	44.0	34.00	5.0	8.00	77.0	27.00	3.7	13.00	1.40	0.6		
97027	c	700307	5407280	21	NAD 27	88.3	02D/16		0.5		4.85	2.8	4.00	1.0	220.0	221.00	3.20	8.0	0.52	0.05	41.0	32.00	4.0	8.00	44.0	24.00	4.0	18.00	1.60	0.6		
97028	c	701046	5406745	21	NAD 27	87.5	02D/16		0.5		4.91	5.5	7.00	1.0	270.0	257.00	3.60	2.0	0.60	0.20	73.0	58.00	8.0	14.00	110.0	52.00	4.7	30.00	2.10	0.8		
97029	c	702195	5408745	21	NAD 27	111.7	02D/16		0.5		6.24	20.0	171.00	13.0	380.0	373.00	3.30	27.0	0.42	0.40	87.0	62.00	14.0	17.00	84.0	57.00	8.5	37.00	2.60	1.2		
97030	c	703121	5406669	21	NAD 27	129.8	02D/16		0.5		5.59	10.0	11.00	1.0	270.0	272.00	3.80	36.0	0.46	0.05	75.0	63.00	4.0	9.00	87.0	46.00	6.3	11.00	1.90	1.0		
97031	c	703263	5405470	21	NAD 27	141.0	02D/16		0.5		4.70	4.5	5.00	1.0	250.0	242.00	2.70	16.0	0.38	0.05	52.0	29.00	1.0	7.00	89.0	32.00	6.2	3.00	0.70	0.6		
97032	c	702727	5402925	21	NAD 27	87.3	02D/09		0.5		4.70	2.3	3.00	1.0	200.0	214.00	3.60	15.0	0.62	0.05	35.0	29.00	3.0	6.00	29.0	17.00	5.3	7.00	1.30	0.3		
97033	c	687766	5412035	21	NAD 27	109.6	02D/16		0.5		4.70	2.7	5.00	1.0	250.0	246.00	4.10	2.0	0.57	0.05	48.0	44.00	3.0	7.00	62.0	25.00	5.3	8.00	2.00	0.8		
97034	c	725929	5430307	21	NAD 27	64.2	02C/13		0.5		3.37	14.0	14.00	2.0	200.0	200.00	1.90	2.0	0.59	0.10	64.0	60.00	11.0	13.00	390.0	57.00	2.6	29.00	2.60	1.0		
97035	c	728080	5435661	21	NAD 27	46.9	02F/04		0.5		4.60	9.1	10.00	2.0	380.0	362.00	2.10	8.0	0.79	0.05	86.0	59.00	9.0	14.00	150.0	49.00	12.0	23.00	3.80	1.4		
97036	c	725278	5429514	21	NAD 27	57.4	02C/13		0.5		4.42	9.2	9.00	1.0	270.0	260.00	1.60	15.0	0.44	0.05	100.0	83.00	16.0	18.00	140.0	65.00	5.4	31.00	2.30	1.7		
97037	c	724521	5427410	21	NAD 27	90.0	02C/13		0.5		5.44	11.0	11.00	1.0	390.0	379.00	2.80	11.0	0.44	0.05	110.0	98.00	14.0	17.00	160.0	61.00	7.4	29.00	2.00	0.9		
97038	c	723429	5426537	21	NAD 27	92.9	02C/13		0.5		5.62	13.0	12.00	1.0	440.0	394.00	2.30	3.0	0.41	0.05	97.0	90.00	18.0	19.00	210.0	76.00	6.5	34.00	2.50	1.1		
97039	c	722635	5425607	21	NAD 27	131.1	02C/13		0.5		5.55	13.0	13.00	1.0	370.0	351.00	1.90	15.0	0.37	0.10	80.0	66.00	15.0	17.00	210.0	75.00	5.8	29.00	2.50	0.8		
97040	c	720956	5424063	21	NAD 27	90.1	02C/13		0.5		5.01	14.0	14.00	3.0	310.0	290.00	2.10	20.0	0.45	0.05	97.0	73.00	12.0	15.00	220.0	67.00	4.9	31.00	2.30	1.0		
97042	c	720232	5423194	21	NAD 27	91.8	02C/13		0.5		5.23	8.6	10.00	2.0	360.0	331.00	2.50	8.0	0.62	0.05	88.0	68.00	11.0	14.00	180.0	60.00	5.3	24.00	3.20	1.6		
97043	c	719090	5421443	21	NAD 27	68.4	02D/16		0.5		5.62	14.0	14.00	1.0	430.0	394.00	2.40	5.0	0.44	0.05	100.0	83.00	16.0	18.00	140.0	65.00	5.4	31.00	2.30	1.7		
97044	c	719679	5420072	21	NAD 27	46.8	02D/16		0.5		5.50	10.0	9.00	2.0	340.0	327.00	2.50	13.0	0.58	0.10	89.0	74.00	10.0	15.00	150.0	52.00	5.4	31.00	2.40	1.4		
97045	c	719564	5419329	21	NAD 27	43.8	02D/16		0.5		5.42	7.6	8.00	1.0	300.0	291.00	2.90	17.0	0.98	0.20	87.0	75.00	15.0	19.00	290.0	69.00	4.2	47.00	3.20	1.4		
97046	c	727247	5435231	21	NAD 27	134.2	02F/04		0.5		4.74	14.0	13.00	1.0	300.0	305.00	3.30	23.0	0.60	0.05	68.0	53.00	9.0	13.00	120.0	42.00	5.8	15.00	2.50	1.1		
97047	c	726543	5435219	21	NAD 27	180.3	02F/04		0.5		4.54	18.0	17.00	1.0	440.0	404.00	2.30	18.0	0.39	0.05	75.0	58.00	9.0	13.00	190.0	74.00	8.1	21.00	2.00	1.2		
97048	c	719508	5422544	21	NAD 27	131.6	02D/16		0.5		5.97	9.2	12.00	1.0	340.0	329.00	1.90	41.0	0.37	0.10	93.0	69.00	9.0	14.00	190.0	67.00	5.2	20.00	3.00	1.7		
97049	c	719751	5422754	21	NAD 27	123.3	02D/16		0.5		5.10	1.4	3.00	1.0	410.0	381.00	2.10	3.0	0.36	0.20	94.0	76.00	19.0	21.00	170.0	74.00	6.1	32.00	2.50	1.4		
97050	c	719950	5419155	21																												



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
97083	C	722473	5433879	21	NAD 27	125.0	02F/04	0.5	0.5	5.13	27.0	22.00	3.0	360.0	312.00	2.00	32.0	0.31	0.10	73.0	49.00	11.0	14.00	180.0	59.00	5.2	18.00	4.0	1.9		
97084	C	721603	5433882	21	NAD 27	119.3	02F/04	0.5	0.5	5.42	20.0	18.00	2.0	400.0	365.00	2.50	10.0	0.49	0.05	75.0	49.00	11.0	14.00	200.0	64.00	5.5	16.00	2.70	1.2		
97085	C	720776	5433871	21	NAD 27	108.1	02F/04	0.5	0.5	6.30	89.3	77.00	6.0	180.0	210.00	2.50	184.0	0.38	0.05	87.0	55.00	13.0	15.00	210.0	73.00	6.1	23.00	2.60	1.3		
97086	C	719167	5433679	21	NAD 27	101.4	02F/04	0.5	0.5	6.30	89.3	77.00	6.0	180.0	210.00	2.50	184.0	0.38	0.05	87.0	55.00	13.0	15.00	210.0	73.00	6.1	23.00	2.60	1.3		
97087	C	718249	5433724	21	NAD 27	99.8	02E/01	0.5	0.5	6.06	10.0	11.00	1.0	480.0	471.00	2.20	25.0	0.27	0.05	120.0	89.00	22.0	23.00	190.0	88.00	7.5	16.00	2.80	1.3		
97088	C	714460	5441358	21	NAD 27	71.6	02E/01	0.5	0.5	5.98	161.0	126.00	7.0	340.0	318.00	1.70	25.0	0.43	0.05	140.0	99.00	22.0	23.00	240.0	83.00	5.1	38.00	3.0	1.7		
97089	C	714958	5442000	21	NAD 27	82.8	02E/01	0.5	0.5	5.14	42.0	36.00	1.0	310.0	302.00	1.70	10.0	0.21	0.10	93.0	58.00	14.0	16.00	180.0	60.00	5.0	23.00	2.10	1.1		
97090	C	707280	5409817	21	NAD 27	29.3	02D/16	0.5	0.5	7.56	6.0	8.00	12.0	270.0	309.00	4.50	104.0	0.60	0.05	110.0	88.00	20.0	18.00	68.0	54.00	3.7	9.00	4.90	1.8		
97091	C	718841	5437543	21	NAD 27	63.4	02D/16	0.5	0.5	5.22	19.0	18.00	2.0	360.0	361.00	1.20	12.0	0.21	0.10	77.0	53.00	12.0	15.00	220.0	68.00	4.8	18.00	1.80	1.1		
97092	C	719948	5438871	21	NAD 27	136.7	02F/04	0.5	0.5	5.83	23.0	20.00	5.0	380.0	359.00	1.70	41.0	0.23	0.10	91.0	62.00	13.0	14.00	190.0	69.00	6.2	16.00	1.90	0.9		
97093	C	727542	5437149	21	NAD 27	26.5	02F/04	0.5	0.5	3.65	13.0	13.00	1.0	240.0	242.00	3.10	4.0	0.63	0.05	67.0	44.00	11.0	14.00	270.0	43.00	3.8	18.00	2.30	1.0		
97094	C	718102	5439736	21	NAD 27	101.2	02E/01	0.5	0.5	4.96	9.4	9.00	7.0	470.0	465.00	1.00	7.0	0.10	0.05	60.0	39.00	6.0	11.00	140.0	57.00	6.7	1.00	1.20	1.0		
97095	C	718302	5439451	21	NAD 27	36.6	02E/01	0.5	0.5	5.11	26.0	23.00	4.0	380.0	374.00	1.70	4.0	0.27	0.20	100.0	74.00	12.0	15.00	220.0	70.00	4.6	31.00	2.30	1.3		
97096	C	719150	5439722	21	NAD 27	126.0	02F/04	0.5	0.5	5.30	28.0	25.00	1.0	330.0	331.00	1.50	12.0	0.32	0.10	93.0	63.00	12.0	14.00	270.0	73.00	4.6	23.00	2.30	1.4		
97097	C	720040	5440550	21	NAD 27	89.9	02F/04	0.5	0.5	7.48	28.0	29.00	1.0	290.0	320.00	2.10	137.0	0.17	0.30	70.0	59.00	13.0	15.00	260.0	97.00	7.9	27.00	2.50	1.1		
97098	C	713697	5438867	21	NAD 27	74.6	02D/16	0.5	0.5	6.72	23.0	23.00	1.0	370.0	387.00	2.00	48.0	0.21	0.20	98.0	50.00	17.0	12.00	180.0	63.00	6.8	19.00	1.70	0.9		
97106	C	726207	5439018	21	NAD 27	99.5	02F/04	0.5	0.5	5.50	29.0	26.00	1.0	330.0	335.00	4.30	17.0	0.44	0.05	66.0	52.00	2.0	8.00	64.0	32.00	8.5	4.00	1.20	0.7		
97107	C	713759	5439066	21	NAD 27	102.7	02D/16	0.5	0.5	5.08	0.3	3.00	1.0	340.0	328.00	3.50	9.0	0.38	0.05	68.0	34.00	1.0	6.00	41.0	17.00	6.9	1.00	0.60	0.6		
97108	C	687148	5413439	21	NAD 27	103.1	02D/16	0.5	0.5	5.24	2.9	5.00	1.0	370.0	327.00	4.80	1.0	0.72	0.05	87.0	69.00	6.0	11.00	53.0	31.00	8.1	10.00	3.50	1.1		
97109	C	684837	5415043	21	NAD 27	72.3	02D/16	0.5	0.5	5.66	3.5	5.00	1.0	280.0	271.00	4.50	14.0	0.54	0.05	52.0	44.00	4.0	9.00	62.0	33.00	8.0	11.00	1.10	0.7		
97110	C	685821	5414880	21	NAD 27	86.5	02D/16	0.5	0.5	5.47	6.1	7.00	1.0	260.0	242.00	5.30	6.0	0.50	0.05	94.0	87.00	10.0	12.00	81.0	39.00	6.2	10.00	2.50	1.0		
97111	C	686671	5414687	21	NAD 27	109.9	02D/16	0.5	0.5	5.85	1.3	3.00	1.0	320.0	339.00	4.40	8.0	0.42	0.05	78.0	56.00	4.0	8.00	61.0	27.00	6.2	1.00	1.60	0.6		
97112	C	687285	5415339	21	NAD 27	82.2	02F/04	0.5	0.5	5.93	2.7	5.00	1.0	330.0	301.00	6.00	7.0	0.85	0.05	120.0	99.00	4.0	10.00	32.0	21.00	9.5	9.00	5.10	0.8		
97113	C	696598	5409967	21	NAD 27	108.9	02D/16	0.5	0.5	5.87	6.0	7.00	1.0	330.0	298.00	5.40	2.0	0.55	0.05	100.0	65.00	5.0	11.00	88.0	37.00	9.4	9.00	2.20	1.1		
97114	C	687373	5414095	21	NAD 27	101.2	02D/16	0.5	0.5	6.03	2.3	5.00	1.0	350.0	335.00	4.30	17.0	0.44	0.05	66.0	52.00	2.0	8.00	64.0	32.00	8.5	4.00	1.20	0.7		
97115	C	689545	5414347	21	NAD 27	124.6	02D/16	0.5	0.5	6.19	5.4	7.00	1.0	350.0	346.00	5.10	9.0	0.46	0.05	71.0	72.00	7.0	12.00	88.0	48.00	8.9	15.00	1.50	0.7		
97116	C	689874	5411151	21	NAD 27	151.6	02D/16	0.5	0.5	5.65	2.0	4.00	1.0	260.0	265.00	4.90	31.0	0.46	0.05	63.0	59.00	1.0	6.00	42.0	27.00	6.0	5.00	2.10	0.7		
97117	C	688942	5411092	21	NAD 27	122.2	02D/16	0.5	0.5	5.08	4.1	6.00	1.0	280.0	261.00	4.40	12.0	0.47	0.05	75.0	64.00	2.0	8.00	53.0	32.00	8.0	13.00	5.50	1.4		
97118	C	688986	5412047	21	NAD 27	133.0	02D/16	0.5	0.5	5.40	2.4	4.00	1.0	300.0	284.00	4.10	13.0	0.48	0.05	78.0	56.00	4.0	8.00	61.0	27.00	6.2	1.00	1.60	0.6		
97119	C	687382	5410797	21	NAD 27	111.9	02D/16	0.5	0.5	5.93	2.7	5.00	1.0	330.0	301.00	6.00	7.0	0.85	0.05	120.0	99.00	4.0	10.00	32.0	21.00	9.5	9.00	5.10	0.8		
97120	C	686598	5409967	21	NAD 27	108.9	02D/16	0.5	0.5	5.87	6.0	7.00	1.0	330.0	298.00	5.40	2.0	0.55	0.05	100.0	65.00	5.0	11.00	88.0	37.00	9.4	9.00	2.20	1.1		
97121	C	686878	5411539	21	NAD 27	111.8	02D/16	0.5	0.5	6.13	3.4	6.00	1.0	320.0	301.00	5.60	1.0	0.54	0.05	89.0	72.00	5.0	9.00	53.0	26.00	11.0	4.00	3.20	0.8		
97122	C	685983	5411085	21	NAD 27	156.2	02D/16	0.5	0.5	5.44	6.8	8.00	1.0	350.0	319.00	4.60	5.0	0.85	0.05	110.0	92.00	6.0	14.00	55.0	32.00	8.8	13.00	5.50	1.4		
97123	C	684711	5404803	21	NAD 27	121.6	02D/16	0.5	0.5	4.48	14.0	13.00	1.0	210.0	200.00	3.20	15.0	0.54	0.05	59.0	52.00	9.0	12.00	120.0	38.00	4.0	14.00	1.70	0.3		
97128	C	684741	5404803	21	NAD 27	164.4	02D/16	0.5	0.5	5.11	9.3	11.00	1.0	230.0	232.00	3.10	19.0	0.59	0.05	67.0	42.00	6.0	11.00	120.0	40.00	4.8	14.00	2.40	1.3		
97130	C	687477	5406900	21	NAD 27	212.3	02D/16	0.5	0.5	4.85	9.0	9.00	1.0	260.0	260.00	3.60	13.0	0.55	0.05	78.0	47.00	5.0	9.00	78.0	31.00	4.5	18.00	2.20	1.3		
97131	C	685188	5428821	21	NAD 27	128.9	02D/16	0.5	0.5	5.92	22.0	19.00	3.0	310.0	293.00	1.60	19.0	0.55	0.10	72.0	57.00	17.0	18.00	320.0	95.00	4.8	28.00	1.80	1.1		
97132	C	688899	5427748	21	NAD 27	130.1	02D/16	0.5	0.5	6.41	25.0	24.00	1.0	270.0	253.00	1.40	53.0	0.72	0.20	59.0	48.00	14.0	17.00	790.0	130.00	4.7	35.00	2.20	1.1		
97133	C	688090	5427332	21	NAD 27	143.8	02D/16	0.5	0.5	5.69	15.0	14.00	4.0	300.0	266.00	1.30	27.0	0.53	0.05	63.0	42.00	13.0	15.00	360.0	99.00	4.3	30.00	2.00	1.2		
97134	C	688556	5426041	21	NAD 27	114.9	02D/16	0.5	0.5	4.48	17.0	16.00	1.0	250.0	234.00	1.30	15.0	0.41	0.10	58.0	50.00	9.0	13.00	210.0	66.00	3.0	24.00	2.10	0.6		
97135	C	687208	5426949	21	NAD 27	148.5	02D/16	0.5	0.5	5.97	30.0	26.00	5.0	370.0	348.00	1.90	3.0	0.51	0.20	90.0	76.00	26.0	25.00	340.0	109.00	5.0	38.00	3.00	1.2		
97136	C	686210	5426675	21	NAD 27	147.2	02D/16	0.5	0.5	5.91	17.0	16.00	1.0	350.0	320.00	1.60	15.0	0.46	0.20	72.0	60.00	16.0	19.00	270.0	92.00	4.9	24.00	2.40	1.2		
97137	C	687140	5425936	21	NAD 27	116.8	02D/16	0.5	0.5	5.52	16.0	15.00	1.0	290.0	278.00	1.50	31.0	0.56	0.05	75.0	58.00	11.0	14.00	320.0	86.00	4.5	36.00	2.30	1.1		
97138	C</																														



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
97160	c	692371	5426173	21	NAD 27	131.0	0.5	0.5	6.34	12.0	12.00	1.0	330.0	321.00	1.40	13.0	0.58	0.10	62.0	48.00	17.0	21.00	133.00	104.00	5.9	5.9	18.00	1.80	0.8
97161	c	692508	5427332	21	NAD 27	121.4	0.5	0.5	6.80	17.0	17.00	1.0	270.0	277.00	1.30	23.0	0.37	0.20	76.0	60.00	10.0	15.00	300.0	104.00	7.6	7.6	24.00	2.00	0.8
97163	c	695442	5411551	21	NAD 27	164.2	0.5	0.5	4.91	3.8	7.00	1.0	250.0	228.00	4.90	5.0	0.58	0.05	61.0	46.00	3.0	6.00	71.0	26.00	6.2	6.2	6.00	1.70	0.5
97164	c	686696	5408212	21	NAD 27	177.8	0.5	0.5	4.56	6.0	7.00	1.0	220.0	229.00	3.80	6.0	0.50	0.05	67.0	52.00	6.0	9.00	30.00	50.00	5.0	5.0	13.00	2.20	1.1
97166	c	687246	5409143	21	NAD 27	168.5	0.5	0.5	4.54	3.1	4.00	1.0	320.0	218.00	4.60	6.0	0.57	0.05	66.0	49.00	4.0	7.00	60.0	22.00	5.1	5.1	6.00	2.40	1.0
97167	c	686533	5408918	21	NAD 27	165.6	0.5	0.5	5.76	4.0	6.00	1.0	330.0	301.00	6.60	6.0	0.73	0.05	120.0	96.00	6.0	12.00	82.0	31.00	14.0	14.0	9.00	5.30	0.9
97168	c	684964	5409754	21	NAD 27	191.4	0.5	0.5	5.22	7.9	8.00	1.0	270.0	246.00	4.20	6.0	0.56	0.05	72.0	53.00	8.0	11.00	84.0	37.00	6.5	6.5	13.00	1.90	0.9
97169	c	685792	5410397	21	NAD 27	171.6	0.5	0.5	5.43	1.9	4.00	1.0	340.0	317.00	4.60	10.0	0.52	0.05	92.0	68.00	4.0	8.00	49.0	22.00	7.4	7.4	5.00	2.90	1.0
97170	c	686338	5411174	21	NAD 27	152.6	0.5	0.5	4.91	4.0	6.00	1.0	240.0	241.00	5.00	4.0	0.74	0.05	82.0	69.00	5.0	10.00	59.0	24.00	7.0	7.0	9.00	4.70	0.9
97171	c	689020	5418849	21	NAD 27	91.1	0.5	0.5	6.33	11.0	11.00	2.0	500.0	435.00	2.50	15.0	0.38	0.05	88.0	72.00	17.0	20.00	150.0	83.00	7.1	7.1	43.00	2.30	1.0
97173	c	727934	5436283	21	NAD 27	0.0	0.5	0.5	5.99	5.1	6.00	1.0	340.0	327.00	2.50	24.0	0.58	0.05	110.0	67.00	10.0	14.00	160.0	61.00	4.2	4.2	35.00	2.50	0.3
97174	c	728318	5435251	21	NAD 27	94.0	0.5	0.5	4.37	12.0	11.00	2.0	270.0	256.00	2.60	21.0	0.48	0.05	75.0	59.00	7.0	12.00	290.0	63.00	3.8	3.8	15.00	2.20	0.8
97175	c	730415	5425645	21	NAD 27	66.5	0.5	0.5	5.15	6.4	7.00	2.0	230.0	232.00	1.90	58.0	0.35	0.05	68.0	57.00	7.0	11.00	240.0	72.00	3.5	3.5	19.00	2.10	0.3
97176	c	732548	5429953	21	NAD 27	48.9	0.5	0.5	4.67	7.3	7.00	1.0	200.0	197.00	1.30	92.0	0.34	0.05	58.0	31.00	1.0	7.00	250.0	54.00	4.3	4.3	4.00	1.20	0.3
97177	c	739232	5430979	21	NAD 27	53.7	0.5	0.5	7.63	1.0	3.00	1.0	140.0	148.00	7.00	33.0	0.45	0.05	74.0	20.00	1.0	3.00	2.5	7.00	2.8	2.8	1.00	2.10	0.3
97178	mudboil	729911	5426107	21	NAD 27	125.3	0.5	0.5	3.85	2.4	4.00	1.0	280.0	261.00	1.40	5.0	0.31	0.05	70.0	34.00	1.0	9.00	170.0	28.00	6.8	6.8	1.00	0.80	0.3
97179	mudboil	729200	5424581	21	NAD 27	123.8	0.5	0.5	2.50	1.7	1.00	1.0	180.0	172.00	0.70	2.0	0.11	0.05	46.0	29.00	2.0	7.00	290.0	37.00	4.2	4.2	2.00	1.00	0.6
97180	mudboil	729608	5423291	21	NAD 27	175.4	0.5	0.5	3.41	7.3	7.00	1.0	200.0	187.00	2.00	14.0	0.41	0.05	51.0	28.00	1.0	5.00	230.0	23.00	3.1	3.1	1.00	0.80	0.7
97181	mudboil	719633	5431136	21	NAD 27	45.3	0.5	0.5	4.28	1.5	3.00	1.0	340.0	308.00	1.30	22.0	0.39	0.05	69.0	44.00	4.0	12.00	200.0	57.00	7.4	7.4	1.00	1.30	1.0
97182	mudboil	727015	5422894	21	NAD 27	171.6	0.5	0.5	4.85	5.35	10.00	1.0	510.0	482.00	1.30	14.0	0.60	0.05	81.0	24.00	1.0	12.00	130.0	26.00	5.6	5.6	1.00	0.60	0.3
97184	c	724992	5422137	21	NAD 27	141.2	0.5	0.5	5.96	6.3	8.00	1.0	400.0	394.00	1.50	13.0	1.14	0.05	70.0	32.00	1.0	14.00	380.0	160.00	10.0	10.0	1.00	0.70	0.8
97185	c	723737	5431619	21	NAD 27	44.9	0.5	0.5	8.18	0.5	3.00	1.0	700.0	671.00	2.90	14.0	2.89	0.05	34.0	22.00	1.0	17.00	16.0	11.00	1.0	1.0	1.00	2.10	1.6
97186	c	721605	5430401	21	NAD 27	85.1	0.5	0.5	3.93	3.0	3.00	1.0	260.0	248.00	1.40	5.0	0.25	0.05	46.0	29.00	2.0	7.00	290.0	37.00	4.2	4.2	2.00	1.00	0.6
97187	c	728346	5433519	21	NAD 27	123.8	0.5	0.5	2.50	1.7	1.00	1.0	180.0	172.00	0.70	2.0	0.11	0.05	46.0	29.00	2.0	7.00	290.0	37.00	4.2	4.2	2.00	1.00	0.6
97188	bc	719933	5431136	21	NAD 27	45.3	0.5	0.5	3.41	7.3	7.00	1.0	200.0	187.00	2.00	14.0	0.41	0.05	51.0	28.00	1.0	5.00	230.0	23.00	3.1	3.1	1.00	0.80	0.7
97189	bc	718546	5430720	21	NAD 27	109.5	0.5	0.5	4.46	2.3	3.00	1.0	250.0	269.00	2.90	9.0	0.20	0.05	52.0	30.00	1.0	7.00	140.0	50.00	10.0	10.0	1.00	0.70	0.3
97190	mudboil	715800	5430754	21	NAD 27	76.8	0.5	0.5	3.99	0.6	1.00	1.0	340.0	327.00	0.80	4.0	0.04	0.05	27.0	15.00	1.0	9.00	89.0	38.00	5.4	5.4	1.00	0.60	0.3
97191	c	714484	5430700	21	NAD 27	116.9	0.5	0.5	3.04	2.3	2.00	1.0	190.0	184.00	0.40	1.0	0.26	0.05	67.0	37.00	3.0	8.00	240.0	36.00	2.2	2.2	1.00	1.00	0.9
97192	c	712088	5431311	21	NAD 27	115.1	0.5	0.5	4.28	5.5	6.00	1.0	370.0	363.00	0.80	2.0	0.10	0.05	78.0	41.00	1.0	6.00	210.0	40.00	3.5	3.5	1.00	1.00	0.8
97193	c	710261	5430500	21	NAD 27	136.2	0.5	0.5	5.80	1.8	5.00	1.0	440.0	437.00	0.80	2.0	0.07	0.05	140.0	59.00	1.0	8.00	120.0	55.00	9.0	9.0	1.00	1.40	1.3
97194	c	704117	5430188	21	NAD 27	83.1	0.5	0.5	5.68	4.5	6.00	1.0	360.0	360.00	1.20	2.0	0.19	0.05	61.0	44.00	1.0	8.00	260.0	64.00	6.4	6.4	1.00	1.30	0.7
97195	bc	702726	5430705	21	NAD 27	92.2	0.5	0.5	4.64	6.3	7.00	1.0	310.0	312.00	0.90	2.0	0.11	0.05	80.0	35.00	2.0	8.00	340.0	64.00	7.2	7.2	1.00	1.10	1.5
97196	c	721597	5427170	21	NAD 27	79.2	0.5	0.5	3.33	1.0	1.00	1.0	330.0	326.00	0.90	2.0	0.22	0.05	80.0	60.00	1.0	7.00	180.0	26.00	2.3	2.3	1.00	0.80	1.1
97197	c	719377	5425037	21	NAD 27	75.8	0.5	0.5	6.04	0.8	2.00	1.0	780.0	783.00	1.00	5.0	1.06	0.05	110.0	24.00	1.0	7.00	71.0	32.00	3.5	3.5	1.00	0.20	1.1
97198	c	716551	5424860	21	NAD 27	111.4	0.5	0.5	5.42	14.0	14.00	1.0	180.0	179.00	1.20	30.0	0.52	0.10	52.0	40.00	8.0	11.00	210.0	62.00	2.8	2.8	15.00	1.90	0.8
97200	c	701183	5431184	21	NAD 27	94.2	0.5	0.5	5.50	3.8	5.00	1.0	360.0	351.00	1.30	5.0	0.46	0.05	61.0	49.00	10.0	13.00	470.0	112.00	4.5	4.5	10.00	1.70	1.3
97201	c	699038	5430886	21	NAD 27	68.7	0.5	0.5	6.20	11.0	12.00	1.0	400.0	393.00	1.80	40.0	0.34	0.05	57.0	53.00	13.0	16.00	270.0	116.00	5.6	5.6	25.00	2.30	1.0
97202	c	697275	5431147	21	NAD 27	122.2	0.5	0.5	5.50	4.7	6.00	1.0	410.0	408.00	1.70	7.0	0.38	0.05	77.0	78.00	18.0	20.00	210.0	75.00	4.1	4.1	44.00	3.60	1.0
97203	c	690131	5429310	21	NAD 27	97.1	0.5	0.5	5.37	19.0	16.00	3.0	330.0	297.00	1.50	5.0	0.44	0.05	75.0	60.00	13.0	17.00	310.0	96.00	4.6	4.6	25.00	2.80	1.4
97205	c	690648	5424497	21	NAD 27	71.0	0.5	0.5	5.51	5.2	6.00	3.0	360.0	332.00	1.70	5.0	0.40	0.05	66.0	43.00	6.0	12.00	340.0	75.00	7.5	7.5	4.00	1.60	0.9
97206	mudboil	685604	5422339	21	NAD 27	160.8	0.5	0.5	5.72	1.1	4.00	1.0	370.0	418.00	1.40	2.0	0.11	0.05	42.0	27.00	1.0	10.00	200.0	63.00	6.5	6.5	1.00	0.80	0.8
97207	c	700848	5426775	21	NAD 27	62.8	0.5	0.5	5.78	22.0	20.00	1.0	420.0	385.00	2.30	9.0	0.38	0.05	84.0	72.00	16.0	18.00	260.0	90.00	15.0	15.0	35.00	2.20	0.3
97208	bc	704715	5425100	21	NAD 27	56.8	0.5	0.5	7.00	17.0	17.00	1.0	480.0	481.00	2.50	2.0	0.35	0.05	80.0	68.00	21.0	24.00	150.0	95.00	7.2	7.2	14.00	2.90	0.3
97209	c	707056	5424100	21	NAD 27	56.6	0.5	0.5	6.03	2.2	4.00	1.0	420.0	422.00	1.40	2.0	0.47	0.05	83.0	44.00	1.0	8.00	80						



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
97241	bc	703627	5411275	21	NAD 27	110.9	02D/16		0.5		6.15	4.3	6.00	1.0	180.0	181.00	2.20	57.0		0.98	0.20	64.0	26.00	1.0	6.00	95.0	70.00	2.7	6.00	0.60	0.9
97242	c	701693	5414464	21	NAD 27	89.4	02D/16		0.5		6.40	3.5	5.00	1.0	300.0	305.00	2.50	16.0		0.38	0.05	54.0	30.00	7.0	11.00	120.0	72.00	6.6	16.00	2.10	0.9
97243	mudboill	697679	5415495	21	NAD 27	92.2	02D/16		0.5		7.27	5.0	7.00	3.0	300.0	316.00	2.80	20.0		0.26	0.05	48.0	25.00	4.0	9.00	96.0	51.00	6.5	16.00	2.70	0.3
97244	mudboill	697788	5408794	21	NAD 27	84.4	02D/16		0.5		6.79	1.3	2.00	1.0	660.0	110.00	0.90	8.0		2.26	0.05	72.0	50.00	4.0	15.00	30.0	56.00	8.9	16.00	5.10	0.3
97246	c	694705	5407615	21	NAD 27	146.1	02D/16		0.5		5.14	5.0	6.00	1.0	210.0	217.00	3.80	23.0		0.43	0.05	47.0	47.00	2.0	8.00	73.0	26.00	4.8	8.00	2.80	1.6
97247	bc	684663	5408117	21	NAD 27	179.7	02D/16		0.5		5.21	5.0	6.00	1.0	260.0	273.00	2.60	16.0		0.41	0.05	57.0	32.00	1.0	7.00	62.0	28.00	7.4	1.00	1.90	0.3
97248	c	684086	5402948	21	NAD 27	177.0	02D/16		0.5		6.06	19.0	18.00	1.0	330.0	328.00	3.40	2.0		0.40	0.05	89.0	70.00	14.0	18.00	120.0	56.00	7.2	18.00	4.10	1.2
97249	c	683635	5422451	21	NAD 27	152.4	02D/16		0.5		6.00	23.0	21.00	6.0	350.0	335.00	1.80	7.0		0.47	0.05	88.0	68.00	17.0	21.00	380.0	91.00	4.8	27.00	3.80	1.2
97250	c	686163	5403427	21	NAD 27	194.8	02D/16		0.5		5.32	2.6	7.00	1.0	250.0	252.00	4.20	9.0		0.38	0.05	48.0	41.00	1.0	6.00	51.0	23.00	5.9	8.00	2.40	0.3
97251	c	689565	5404970	21	NAD 27	101.7	02D/16		0.5		5.06	3.3	4.00	1.0	270.0	266.00	3.70	3.0		0.47	0.05	57.0	36.00	3.0	10.00	100.0	37.00	7.2	3.00	2.80	0.8
97252	c	691585	5402759	21	NAD 27	111.4	02D/16		0.5		5.25	7.3	8.00	1.0	220.0	215.00	4.60	17.0		0.42	0.05	61.0	41.00	1.0	7.00	74.0	30.00	5.3	6.00	2.70	1.2
97253	c	692438	5403144	21	NAD 27	140.1	02D/16		0.5		4.12	2.7	3.00	1.0	210.0	210.00	3.20	3.0		0.39	0.05	51.0	30.00	1.0	7.00	110.0	26.00	6.7	1.00	2.40	0.8
97254	c	694344	5403260	21	NAD 27	106.4	02D/16		0.5		5.65	3.2	5.00	1.0	230.0	249.00	4.50	7.0		0.48	0.05	100.0	37.00	1.0	6.00	44.0	11.00	1.0	1.00	2.40	1.0
97255	c	695611	5402868	21	NAD 27	110.6	02D/16		0.5		5.87	5.7	7.00	1.0	220.0	219.00	4.30	4.0		0.43	0.05	47.0	34.00	3.0	8.00	110.0	34.00	7.0	6.00	2.20	0.8
97256	c	698433	5402836	21	NAD 27	75.6	02D/09		0.5		5.94	10.0	10.00	1.0	250.0	195.00	2.10	42.0		0.32	0.05	43.0	28.00	2.0	8.00	120.0	51.00	6.0	6.00	2.50	0.3
97257	bc	700697	5402730	21	NAD 27	346.5	02D/09		0.5		5.29	10.0	10.00	1.0	210.0	177.00	3.00	5.0		0.44	0.05	40.0	28.00	4.0	9.00	150.0	43.00	5.5	8.00	1.90	0.6
97258	c	691953	5412906	21	NAD 27	68.1	02D/16		0.5		8.06	0.3	2.00	1.0	510.0	514.00	1.60	6.0		1.52	0.05	220.0	53.00	1.0	19.00	93.0	65.00	4.4	1.00	2.30	1.8
97259	c	714832	5412920	21	NAD 27	104.3	02D/16		0.5		5.17	2.8	3.00	1.0	370.0	339.00	2.60	6.0		0.64	0.05	47.0	31.00	1.0	8.00	70.0	19.00	5.5	1.00	2.50	0.6
97260	c	693560	5420342	21	NAD 27	64.5	02D/16		0.5		7.08	63.2	54.00	5.0	450.0	412.00	2.90	15.0		0.42	0.30	160.0	134.00	26.0	28.00	150.0	94.00	9.3	153.00	3.50	1.2
97261	c	692603	5428522	21	NAD 27	105.2	02D/16		0.5		3.98	7.5	8.00	2.0	230.0	208.00	1.00	7.0		0.24	0.20	71.0	58.00	9.0	12.00	280.0	58.00	3.5	21.00	2.40	1.0
97262	c	692603	5428522	21	NAD 27	105.2	02D/16		0.5		4.44	7.0	8.00	57.0	250.0	242.00	1.20	16.0		0.24	0.05	57.0	46.00	9.0	13.00	200.0	55.00	3.8	18.00	1.60	0.7
97263	c	693823	5428685	21	NAD 27	95.0	02D/16		0.5		5.82	22.0	19.00	7.0	430.0	372.00	1.80	6.0		0.41	0.10	100.0	75.00	21.0	22.00	360.0	98.00	6.4	36.00	2.60	1.3
97264	c	695027	5428669	21	NAD 27	86.7	02D/16		0.5		5.15	17.0	15.00	3.0	350.0	305.00	1.60	4.0		0.46	0.10	90.0	66.00	16.0	18.00	300.0	100.00	4.6	31.00	2.40	0.9
97265	c	695492	5427972	21	NAD 27	90.5	02D/16		0.5		5.37	23.0	20.00	3.0	410.0	344.00	1.80	5.0		0.39	0.20	110.0	88.00	18.0	19.00	280.0	83.00	7.3	37.00	3.00	1.2
97266	c	695384	5427546	21	NAD 27	106.3	02D/16		0.5		5.87	25.0	22.00	6.0	350.0	322.00	1.80	15.0		0.42	0.20	90.0	77.00	26.0	24.00	310.0	109.00	7.1	50.00	2.30	1.3
97267	c	696218	5427619	21	NAD 27	77.8	02D/16		0.5		5.09	27.0	23.00	4.0	390.0	330.00	3.30	2.0		0.41	0.10	200.0	170.00	19.0	22.00	180.0	66.00	14.0	64.00	4.20	1.1
97268	c	695783	5428427	21	NAD 27	92.7	02D/16		0.5		5.75	16.0	14.00	4.0	410.0	363.00	2.10	4.0		0.37	0.10	120.0	98.00	24.0	25.00	260.0	87.00	7.6	42.00	2.80	0.9
97269	bc	694803	5425075	21	NAD 27	120.6	02D/16		0.5		5.77	90.0	77.00	21.0	310.0	283.00	2.00	26.0		0.66	0.40	130.0	114.00	35.0	33.00	920.0	157.00	10.0	72.00	4.50	2.1
97270	c	693989	5424274	21	NAD 27	78.3	02D/16		0.5		5.51	41.0	36.00	5.0	520.0	310.00	1.50	28.0		0.40	0.20	90.0	75.00	10.0	15.00	370.0	93.00	13.0	20.00	1.70	1.0
97271	c	696417	5425526	21	NAD 27	88.2	02D/16		0.5		6.09	14.0	13.00	4.0	300.0	443.00	2.40	9.0		0.41	0.05	180.0	147.00	22.0	24.00	170.0	67.00	11.0	120.00	4.60	1.1
97272	c	697404	5425924	21	NAD 27	76.1	02D/16		0.5		5.32	14.0	13.00	1.0	410.0	365.00	1.90	8.0		0.31	0.10	130.0	109.00	20.0	21.00	180.0	62.00	10.0	66.00	2.80	1.4
97273	c	697304	5425233	21	NAD 27	76.9	02D/16		0.5		5.58	16.0	15.00	1.0	390.0	346.00	1.90	4.0		0.21	0.05	82.0	68.00	15.0	18.00	140.0	62.00	8.9	31.00	2.40	1.2
97275	c	698355	5424844	21	NAD 27	86.6	02D/16		0.5		6.44	104.0	84.00	1.0	530.0	461.00	2.40	6.0		0.24	0.20	130.0	112.00	19.0	22.00	160.0	80.00	13.0	50.00	2.70	1.3
97276	c	698289	5424687	21	NAD 27	78.0	02D/16		0.5		4.90	14.0	14.00	2.0	350.0	308.00	1.80	3.0		0.25	0.05	70.0	56.00	16.0	19.00	230.0	76.00	6.6	25.00	2.20	1.0
97277	c	694775	5420664	21	NAD 27	76.4	02D/16		0.5		5.14	26.0	22.00	2.0	410.0	352.00	1.20	6.0		0.47	0.05	110.0	88.00	14.0	16.00	140.0	57.00	7.9	41.00	2.90	1.3
97278	bc	696532	5417058	21	NAD 27	79.2	02D/16		0.5		7.01	55.8	48.00	4.0	1700.0	1485.00	2.70	5.0		0.10	0.05	100.0	88.00	21.0	22.00	130.0	107.00	10.0	41.00	3.80	1.3
97279	bc	695923	5416531	21	NAD 27	86.4	02D/16		0.5		5.84	23.0	23.00	2.0	300.0	304.00	3.40	47.0		0.37	0.20	94.0	78.00	15.0	17.00	72.0	52.00	5.3	11.00	2.70	0.9
97280	bc	695234	5416184	21	NAD 27	88.2	02D/16		0.5		5.74	48.0	43.00	6.0	300.0	275.00	3.20	37.0		0.38	0.05	120.0	68.00	6.0	13.00	150.0	60.00	10.0	15.00	2.20	1.4
97281	bc	695648	5414940	21	NAD 27	106.1	02D/16		0.5		7.70	2.6	6.00	1.0	450.0	416.00	5.80	3.0		1.30	0.05	323.0	99.00	5.0	8.00	73.0	32.00	6.1	9.00	2.00	0.3
97282	c	696255	5414106	21	NAD 27	95.7	02D/16		0.5		5.89	3.6	5.00	1.0	330.0	313.00	1.90	36.0		0.49	0.05	72.0	39.00	3.0	11.00	120.0	52.00	7.4	10.00	1.10	1.0
97283	c	697225	5413139	21	NAD 27	95.3	02D/16		0.5		4.82	1.5	4.00	1.0	300.0	275.00	4.10	2.0		0.62	0.05	70.0	58.00	3.0	7.00	47.0	22.00	5.6	4.00	2.90	0.7
97284	c	698102	5412419	21	NAD 27	83.4	02D/16		0.5		5.40	1.0	3.00	1.0	440.0	400.00	1.70	3.0		0.39	0.05	110.0	56.00	1.0	8.00	110.0	33.00	14.0	1.00	1.50	0.9
97285	c	698412	5413326	21	NAD 27	81.2	02D/16		0.5		6.05	3.1	5.00																		



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
97316	c	701981	5409299	21	NAD 27	91.5	0.5	0.5	5.26	4.5	76.00	3.0	230.0	231.00	486.00	3.70	8.0	0.46	0.05	64.0	38.00	100.0	76.00	10.0	14.00	90.0	40.00	10.0	41.00	1.50	1.0
97317	c	702553	5407822	21	NAD 27	119.5	0.5	0.5	7.06	91.1	76.00	3.0	520.0	486.00	3.50	3.0	0.31	0.30	100.0	64.0	38.00	10.0	14.00	110.0	62.00	10.0	53.00	2.80	1.6	1.6	1.6
97318	c	704171	5406853	21	NAD 27	67.6	0.5	0.5	5.65	11.0	11.00	1.0	300.0	284.00	3.60	12.0	0.43	0.05	82.0	54.00	78.00	7.8	21.00	91.00	46.00	7.8	21.00	1.90	0.8	0.8	0.8
97319	c	688188	5413816	21	NAD 27	114.9	0.5	0.5	6.14	4.2	6.00	1.0	350.0	323.00	4.90	16.0	0.37	0.05	74.0	63.00	60.0	10.0	13.00	91.00	86.0	10.0	11.00	1.80	0.9	0.9	0.9
97320	c	688697	5414751	21	NAD 27	110.1	0.5	0.5	6.19	2.9	5.00	1.0	330.0	325.00	5.10	23.0	0.45	0.05	76.0	53.00	50.0	10.0	10.00	74.0	36.00	10.0	7.00	1.90	0.8	0.7	0.7
97322	c	692874	5408753	21	NAD 27	102.7	0.5	0.5	4.60	6.2	7.00	1.0	210.0	210.00	4.30	9.0	0.55	0.05	53.0	36.00	3.0	6.00	65.0	24.00	4.9	10.00	2.00	0.7	0.7	0.7	0.7
97323	c	692603	5409387	21	NAD 27	126.3	0.5	0.5	4.46	5.2	6.00	1.0	180.0	188.00	5.20	10.0	0.48	0.05	47.0	33.00	1.0	5.00	66.0	22.00	4.3	3.00	2.10	0.7	0.7	0.7	0.7
97324	c	691632	5409336	21	NAD 27	168.9	0.5	0.5	4.80	5.9	6.00	1.0	200.0	193.00	3.90	7.0	0.52	0.05	47.0	31.00	3.0	7.00	76.0	27.00	4.8	8.00	1.40	0.3	0.3	0.3	0.3
97325	c	690929	5410691	21	NAD 27	169.3	0.5	0.5	5.32	4.6	6.00	1.0	280.0	236.00	5.70	14.0	0.47	0.05	81.0	46.00	4.0	8.00	68.0	28.00	7.1	4.00	2.00	0.9	0.9	0.9	0.9
97326	c	686372	5414349	21	NAD 27	95.3	0.5	0.5	5.51	1.6	5.00	1.0	310.0	302.00	4.40	27.0	0.44	0.05	83.0	64.00	3.0	11.00	47.0	24.00	6.3	2.00	1.60	1.1	1.1	1.1	1.1
97327	bc	698992	5424988	21	NAD 27	107.6	0.5	0.5	5.22	9.4	11.00	2.0	340.0	336.00	1.30	7.0	0.13	0.05	73.0	47.00	5.0	11.00	120.0	50.00	8.3	2.00	1.60	1.1	1.1	1.1	1.1
97328	bc	698909	5424240	21	NAD 27	94.0	0.5	0.5	5.91	2.9	24.00	7.0	360.0	261.00	2.70	5.0	0.34	0.20	89.0	59.00	7.0	19.00	79.0	115.00	10.0	24.00	3.30	0.9	0.9	0.9	0.9
97329	c	697335	5423273	21	NAD 27	113.9	0.5	0.5	6.29	10.0	11.00	3.0	390.0	362.00	2.10	20.0	0.38	0.05	72.0	49.00	13.0	15.00	300.0	82.00	8.6	17.00	2.40	1.2	1.2	1.2	1.2
97330	c	696359	5422972	21	NAD 27	120.3	0.5	0.5	5.74	16.0	15.00	3.0	350.0	334.00	2.00	17.0	0.35	0.05	100.0	73.00	19.0	20.00	220.0	75.00	7.1	30.00	2.30	1.7	1.7	1.7	1.7
97332	c	695728	5422162	21	NAD 27	135.7	0.5	0.5	5.80	29.0	27.00	5.0	400.0	386.00	2.30	5.0	0.35	0.10	110.0	81.00	20.0	21.00	190.0	69.00	7.4	41.00	3.00	1.2	1.2	1.2	1.2
97333	c	695223	5421359	21	NAD 27	114.9	0.5	0.5	5.84	36.0	31.00	5.0	440.0	408.00	2.30	5.0	0.38	0.20	100.0	72.00	25.0	24.00	220.0	76.00	7.9	54.00	2.80	1.0	1.0	1.0	1.0
97334	c	692692	5420402	21	NAD 27	68.5	0.5	0.5	5.78	14.0	14.00	3.0	380.0	362.00	2.60	4.0	0.47	0.05	130.0	105.00	16.0	19.00	230.0	74.00	5.1	40.00	3.00	1.6	1.6	1.6	1.6
97335	bc	691366	5420178	21	NAD 27	66.2	0.5	0.5	5.50	13.0	13.00	2.0	330.0	321.00	1.70	18.0	0.54	0.05	69.0	42.00	7.0	14.00	230.0	60.00	8.9	8.00	1.80	1.0	1.0	1.0	1.0
97336	c	690597	5419723	21	NAD 27	150.4	0.5	0.5	5.75	3.4	5.00	1.0	410.0	378.00	2.30	6.0	0.56	0.05	89.0	71.00	12.0	17.00	96.0	54.00	4.8	20.00	2.90	1.1	1.1	1.1	1.1
97337	c	684516	5419604	21	NAD 27	150.4	0.5	0.5	5.43	27.0	23.00	25.0	290.0	257.00	1.50	15.0	0.48	0.20	73.0	56.00	18.0	19.00	370.0	101.00	5.5	29.00	2.20	1.1	1.1	1.1	1.1
97338	c	683598	5428923	21	NAD 27	148.6	0.5	0.5	5.98	7.7	9.00	5.0	340.0	321.00	1.50	5.0	0.75	0.05	67.0	42.00	21.0	23.00	460.0	104.00	7.2	10.00	2.30	1.1	1.1	1.1	1.1
97339	c	682728	5413593	21	NAD 27	159.9	0.5	0.5	5.66	12.0	14.00	2.0	290.0	272.00	1.60	25.0	0.70	0.05	72.0	47.00	15.0	16.00	340.0	89.00	6.3	30.00	3.00	1.5	1.5	1.5	1.5
97340	c	687833	5407950	21	NAD 27	190.6	0.5	0.5	4.73	9.1	11.00	1.0	220.0	231.00	3.20	11.0	0.58	0.05	54.0	43.00	5.0	9.00	73.0	29.00	4.3	9.00	2.10	0.3	0.3	0.3	0.3
97341	c	689428	5412937	21	NAD 27	155.9	0.5	0.5	5.75	6.2	8.00	1.0	310.0	281.00	4.90	21.0	0.62	0.05	82.0	52.00	7.0	11.00	93.0	40.00	7.9	14.00	2.50	0.8	0.8	0.8	0.8
97342	c	690163	5413358	21	NAD 27	160.8	0.5	0.5	4.95	5.0	7.00	1.0	280.0	267.00	4.40	6.0	0.55	0.05	60.0	29.00	4.0	7.00	81.0	22.00	6.8	1.00	1.20	0.7	0.7	0.7	0.7
97343	c	691113	5413406	21	NAD 27	164.1	0.5	0.5	5.24	3.4	5.00	1.0	290.0	274.00	4.40	14.0	0.54	0.05	78.0	54.00	4.0	8.00	72.0	29.00	5.8	5.00	1.90	0.8	0.8	0.8	0.8
97344	c	692126	5413502	21	NAD 27	160.4	0.5	0.5	5.27	2.5	4.00	1.0	280.0	246.00	4.80	14.0	0.56	0.05	86.0	52.00	4.0	8.00	78.0	30.00	5.7	5.00	1.60	0.6	0.6	0.6	0.6
97345	c	693207	5413593	21	NAD 27	143.1	0.5	0.5	5.41	3.9	5.00	1.0	280.0	256.00	5.10	13.0	0.52	0.05	89.0	38.00	5.0	8.00	84.0	32.00	6.8	7.00	1.70	0.9	0.9	0.9	0.9
97346	c	710428	5406824	21	NAD 27	104.8	0.5	0.5	5.19	4.5	6.00	1.0	240.0	222.00	3.70	5.0	0.56	0.05	59.0	45.00	4.0	8.00	93.0	35.00	5.3	7.00	2.30	0.7	0.7	0.7	0.7
97347	c	709194	5406692	21	NAD 27	113.0	0.5	0.5	4.64	3.5	5.00	2.0	280.0	269.00	2.80	7.0	0.36	0.05	51.0	25.00	2.0	7.00	78.0	29.00	6.1	5.00	1.20	0.3	0.3	0.3	0.3
97348	c	708462	5406004	21	NAD 27	71.0	0.5	0.5	4.95	8.7	9.00	2.0	250.0	230.00	3.70	1.0	0.46	0.05	56.0	43.00	7.0	9.00	120.0	38.00	6.1	15.00	1.50	0.6	0.6	0.6	0.6
97349	c	709190	5405379	21	NAD 27	98.6	0.5	0.5	5.57	9.4	10.00	1.0	260.0	243.00	3.70	19.0	0.57	0.05	52.0	28.00	6.0	10.00	140.0	49.00	8.6	5.00	1.30	0.3	0.3	0.3	0.3
97350	c	710302	5404750	21	NAD 27	56.6	0.5	0.5	4.61	4.8	6.00	1.0	210.0	207.00	3.70	6.0	0.55	0.05	41.0	30.00	5.0	8.00	98.0	28.00	5.0	12.00	1.90	0.7	0.7	0.7	0.7
97351	bc	717384	5409767	21	NAD 27	86.7	0.5	0.5	7.89	0.9	4.00	1.0	460.0	439.00	1.70	18.0	0.73	0.05	46.0	41.00	19.0	19.00	120.0	101.00	4.5	10.00	0.80	1.2	1.2	1.2	1.2
97352	c	716823	5408063	21	NAD 27	83.7	0.5	0.5	6.44	14.0	14.00	1.0	340.0	312.00	4.00	11.0	0.38	0.05	72.0	55.00	13.0	15.00	120.0	60.00	9.4	25.00	2.30	0.8	0.8	0.8	0.8
97354	c	715562	5407332	21	NAD 27	76.4	0.5	0.5	4.90	3.6	6.00	1.0	300.0	279.00	3.60	8.0	0.60	0.05	61.0	41.00	5.0	9.00	78.0	32.00	5.4	12.00	2.90	0.3	0.3	0.3	0.3
97355	c	715487	5406392	21	NAD 27	84.2	0.5	0.5	4.93	4.8	6.00	1.0	250.0	238.00	3.30	19.0	0.50	0.05	58.0	51.00	4.0	8.00	110.0	30.00	4.9	6.00	2.00	0.7	0.7	0.7	0.7
97356	bc	715393	5405507	21	NAD 27	126.7	0.5	0.5	8.72	1.1	4.00	1.0	270.0	259.00	0.80	59.0	1.88	0.20	54.0	50.00	26.0	30.00	120.0	87.00	4.3	5.00	4.10	1.9	1.9	1.9	1.9
97357	c	715046	5404496	21	NAD 27	76.8	0.5	0.5	4.94	7.7	8.00	1.0	260.0	248.00	3.70	1.0	0.55	0.05	78.0	62.00	8.0	11.00	130.0	38.00	5.9	15.00	2.70	0.8	0.8	0.8	0.8
97358	c	714202	5404547	21	NAD 27	64.9	0.5	0.5	5.42	3.2	5.00	1.0	240.0	236.00	3.20	27.0	0.66	0.05	65.0	47.00	6.0	9.00	83.0	35.00	4.3	14.00	2.70	0.6	0.6	0.6	0.6
97359	c	713356	5404865	21	NAD 27	59.5	0.5	0.5	6.53	6.6	7.00	1.0	320.0	315.00	3.60	50.0	0.57	0.05	76.0	57.00	7.0	12.00	100.0	51.00	7.9	12.00	2.60	0.3	0.3	0.3	0.3
97360	c	712148	5405071	21	NAD 27	65.5	0.5																								



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
97392	c	727754	5405015	21	NAD 27	85.4	02C/13		0.5		5.14	4.1	6.00	2.0	290.0	261.00	3.70	13.0		0.64	0.05	77.0	58.00	5.0	10.00	78.0	30.00	4.5	5.00	2.40	1.0
97393	c	726912	5404484	21	NAD 27	70.9	02C/13		0.5		7.62	5.9	9.00	2.0	290.0	235.00	3.10	34.0		0.47	0.05	65.0	50.00	6.0	11.00	80.0	48.00	5.1	14.00	3.40	1.2
97394	c	726509	5403535	21	NAD 27	72.6	02C/12		0.5		5.56	3.3	6.00	1.0	310.0	284.00	3.70	12.0		0.85	0.05	64.0	49.00	6.0	10.00	75.0	35.00	5.7	27.00	2.80	1.0
97395	c	725554	5403088	21	NAD 27	78.7	02C/12		0.5		5.89	11.0	11.00	4.0	320.0	301.00	3.90	14.0		0.55	0.05	72.0	59.00	11.0	15.00	100.0	50.00	8.3	19.00	2.70	0.6
97397	c	724348	5402990	21	NAD 27	59.6	02C/12		0.5		5.87	2.9	5.00	1.0	200.0	186.00	1.70	39.0		1.83	0.20	48.0	39.00	22.0	34.00	96.0	62.00	2.1	1.00	4.60	1.4
97398	c	723608	5402589	21	NAD 27	76.8	02C/12		0.5		5.81	7.7	9.00	1.0	330.0	303.00	4.40	5.0		0.44	0.05	74.0	71.00	9.0	14.00	74.0	46.00	8.9	16.00	2.30	0.3
97399	c	723507	5404749	21	NAD 27	80.1	02C/13		0.5		5.36	2.6	5.00	1.0	260.0	236.00	2.80	53.0		0.63	0.05	51.0	40.00	1.0	6.00	42.0	22.00	3.8	5.00	1.90	1.2
97400	c	724345	5404743	21	NAD 27	89.4	02C/13		0.5		5.11	4.0	7.00	1.0	330.0	292.00	4.30	2.0		0.85	0.05	60.0	69.00	5.0	10.00	68.0	30.00	5.3	14.00	3.30	1.1
97401	c	722597	5404589	21	NAD 27	105.1	02C/13		0.5		5.09	2.1	5.00	2.0	290.0	294.00	3.10	3.0		0.89	0.05	49.0	47.00	5.0	8.00	32.0	23.00	4.2	12.00	2.50	0.8
97402	c	721723	5404743	21	NAD 27	114.8	02C/13		0.5		4.47	3.7	6.00	1.0	240.0	226.00	3.50	16.0		0.60	0.05	52.0	44.00	4.0	9.00	72.0	25.00	4.1	5.00	2.20	0.9
97403	c	725619	5407996	21	NAD 27	43.3	02C/13		0.5		4.69	1.3	4.00	1.0	230.0	217.00	3.20	18.0		0.53	0.05	38.0	34.00	1.0	5.00	45.0	17.00	4.3	4.00	1.90	0.7
97404	bc	724953	5407302	21	NAD 27	40.6	02C/13		0.5		5.91	5.7	8.00	1.0	270.0	254.00	2.90	30.0		0.59	0.05	51.0	44.00	4.0	9.00	66.0	31.00	3.7	6.00	2.90	0.7
97405	bc	724209	5406434	21	NAD 27	60.8	02C/13		0.5		5.07	5.6	7.00	1.0	280.0	234.00	3.80	19.0		0.47	0.05	160.0	138.00	14.0	14.00	54.0	24.00	4.4	24.00	3.70	0.3
97406	c	723822	5407352	21	NAD 27	48.8	02C/13		0.5		5.03	3.1	5.00	1.0	270.0	275.00	3.70	4.0		0.56	0.05	88.0	77.00	4.0	9.00	72.0	32.00	4.6	12.00	3.00	0.9
97407	c	724362	5408718	21	NAD 27	39.7	02C/13		0.5		5.54	5.2	8.00	1.0	320.0	316.00	3.40	22.0		0.85	0.05	140.0	135.00	8.0	13.00	73.0	31.00	4.2	16.00	4.00	1.2
97408	c	723673	5408089	21	NAD 27	54.0	02C/13		0.5		5.03	2.6	5.00	1.0	270.0	238.00	3.20	14.0		0.71	0.05	55.0	52.00	4.0	9.00	76.0	28.00	4.0	8.00	2.50	0.8
97409	c	724601	5409831	21	NAD 27	38.2	02C/13		0.5		5.06	3.2	5.00	1.0	280.0	253.00	3.50	16.0		0.60	0.05	62.0	50.00	4.0	9.00	77.0	31.00	4.2	10.00	2.00	0.7
97410	c	725537	5409944	21	NAD 27	72.9	02C/13		0.5		5.30	2.9	5.00	1.0	240.0	218.00	3.30	34.0		0.69	0.05	54.0	42.00	5.0	9.00	93.0	30.00	3.7	5.00	2.50	0.9
97417	c	723678	5405637	21	NAD 27	63.9	02C/13		0.5		5.43	4.2	6.00	1.0	360.0	326.00	3.60	4.0		0.53	0.05	56.0	39.00	6.0	8.00	87.0	27.00	5.0	10.00	1.90	1.1
97418	c	722122	5417855	21	NAD 27	90.8	02C/13		0.5		5.34	2.7	5.00	1.0	260.0	357.00	2.90	30.0		0.82	0.05	73.0	63.00	5.0	10.00	84.0	39.00	3.5	9.00	3.50	1.2
97419	bc	729799	5431603	21	NAD 27	125.1	02C/13		0.5		5.00	2.5	3.00	1.0	270.0	264.00	1.70	27.0		0.24	0.05	52.0	22.00	1.0	7.00	31.0	39.00	6.3	1.00	1.80	0.3
97413	c	727390	5409555	21	NAD 27	66.8	02C/13		0.5		5.21	10.0	13.00	1.0	240.0	224.00	3.20	29.0		1.11	0.05	57.0	48.00	9.0	14.00	100.0	50.00	3.5	39.00	2.90	1.4
97414	c	728397	5409391	21	NAD 27	96.7	02C/13		0.5		5.87	1.9	5.00	1.0	310.0	300.00	2.90	27.0		1.41	0.05	58.0	50.00	6.0	13.00	79.0	38.00	3.2	7.00	4.40	1.4
97415	c	730087	5410579	21	NAD 27	83.3	02C/13		0.5		5.55	8.0	9.00	1.0	290.0	255.00	3.50	22.0		1.01	0.05	77.0	57.00	11.0	16.00	86.0	36.00	6.3	14.00	4.30	1.6
97416	c	730841	5411095	21	NAD 27	72.9	02C/13		0.5		5.30	2.9	5.00	1.0	240.0	218.00	3.30	34.0		0.69	0.05	54.0	42.00	5.0	9.00	93.0	30.00	3.7	5.00	2.50	0.9
97417	c	723678	5405637	21	NAD 27	63.9	02C/13		0.5		5.43	4.2	6.00	1.0	360.0	326.00	3.60	4.0		0.53	0.05	56.0	39.00	6.0	8.00	87.0	27.00	5.0	10.00	1.90	1.1
97418	c	722122	5417855	21	NAD 27	90.8	02C/13		0.5		5.34	2.7	5.00	1.0	260.0	357.00	2.90	30.0		0.82	0.05	73.0	63.00	5.0	10.00	84.0	39.00	3.5	9.00	3.50	1.2
97700	bc	729799	5431603	21	NAD 27	125.1	02C/13		0.5		5.00	2.5	3.00	1.0	270.0	264.00	1.70	27.0		0.24	0.05	52.0	22.00	1.0	7.00	31.0	39.00	6.3	1.00	1.80	0.3
97701	bc	732402	5431659	21	NAD 27	107.0	02C/13		0.5		5.15	5.0	5.00	1.0	310.0	312.00	1.50	18.0		0.22	0.05	88.0	34.00	1.0	9.00	220.0	49.00	7.3	1.00	2.30	0.8
97702	c	734949	5431124	21	NAD 27	76.3	02C/13		0.5		5.75	9.4	10.00	1.0	360.0	343.00	2.70	10.0		0.57	0.05	64.0	65.00	10.0	15.00	250.0	64.00	7.0	29.00	4.20	1.4
97703	c	735335	5427935	21	NAD 27	108.0	02C/13		0.5		5.37	1.8	6.00	1.0	300.0	316.00	1.90	100.0		0.36	0.05	48.0	33.00	1.0	8.00	74.0	31.00	3.4	1.00	3.80	0.8
97704	c	732926	5427706	21	NAD 27	122.7	02C/13		0.5		5.10	2.7	4.00	1.0	250.0	254.00	2.10	60.0		0.43	0.05	72.0	44.00	1.0	9.00	120.0	35.00	3.8	2.00	3.90	1.6
97705	c	729117	5427966	21	NAD 27	105.0	02C/13		0.5		7.39	3.0	2.00	1.0	200.0	228.00	3.80	4.0		0.12	0.05	28.0	17.00	1.0	2.00	10.0	7.00	37.0	2.00	2.00	0.3
97706	bc	728196	5426876	21	NAD 27	87.7	02C/13		0.5		5.27	6.9	7.00	1.0	260.0	247.00	2.00	11.0		0.36	0.05	76.0	50.00	8.0	11.00	160.0	57.00	4.6	9.00	3.10	0.9
97707	c	726652	5423984	21	NAD 27	169.0	02C/13		0.5		5.19	9.4	9.00	2.0	330.0	300.00	1.70	10.0		0.43	0.05	77.0	54.00	10.0	14.00	270.0	64.00	5.0	16.00	3.10	1.0
97708	c	726043	5427114	21	NAD 27	140.1	02C/13		0.5		5.74	1.9	4.00	1.0	290.0	266.00	1.80	38.0		0.48	0.05	99.0	55.00	10.0	16.00	200.0	76.00	5.7	22.00	2.10	0.9
97709	bc	724656	5426462	21	NAD 27	161.8	02C/13		0.5		5.03	4.8	5.00	1.0	280.0	282.00	1.40	25.0		0.36	0.05	83.0	26.00	1.0	8.00	200.0	30.00	6.5	1.00	2.10	0.9
97710	c	723466	5429897	21	NAD 27	145.5	02D/16		0.5		5.76	3.9	5.00	3.0	400.0	413.00	1.20	8.0		0.13	0.05	29.0	21.00	3.0	10.00	130.0	55.00	6.5	1.00	1.00	0.3
97711	c	721305	5428530	21	NAD 27	108.1	02C/13		0.5		4.06	1.5	2.00	1.0	270.0	242.00	1.50	14.0		0.35	0.05	67.0	44.00	8.0	11.00	260.0	57.00	4.8	15.00	3.10	0.9
97712	c	721305	5428530	21	NAD 27	108.1	02C/13		0.5		4.06	1.5	2.00	1.0	270.0	242.00	1.50	14.0		0.35	0.05	67.0	44.00	8.0	11.00	260.0	57.00	4.8	15.00	3.10	0.9
97713	bc	718918	5428801	21	NAD 27	76.3	02D/16		0.5		7.79	12.0	13.00	3.0	200.0	230.00	2.20	138.0		0.37	0.05	48.0	38.00	6.0	13.00	140.0	74.00	9.1	12.00	3.10	0.3
97714	c	716937	5428834	21	NAD 27	130.6	02D/16		0.5		5.66	7.5	10.00	3.0	230.0	362.00	1.50	50.0		0.30	0.05	60.0	59.00	4.0	16.00	190.0	70.00	5.7	22.00	3.50	1.1
97715	c	714885	5428700	21	NAD 27	149.7	02D/16		0.5		5.80	10.0	10.00	1.0	380.0	363.00	1.50	26.0		0.29	0.05	79.0	63.00	11.0							



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
97750	c	700507	5418762	21	NAD 27	81.7			0.5	5.80	15.0	14.00	8.0	450.0	409.00	2.50	3.0		0.34	0.05	97.0	6.9	74.00	13.0	16.00	59.00	6.9	22.00	2.20	1.4	
97751	bc	702312	5419028	21	NAD 27	50.1		0.5		7.30	11.0	11.00	3.0	290.0	294.00	1.90	34.0		0.27	0.20	68.0	6.9	43.00	17.0	19.00	69.00	6.1	11.00	1.50	1.1	
97752	mudboil	727067	5425749	21	NAD 27	124.2		0.5		5.69	5.2	6.00	3.0	400.0	368.00	1.30	4.0		0.53	0.05	47.0	9.3	40.00	10.0	12.00	180.0	9.3	1.00	0.90	0.3	
97753	bc	726646	5420049	21	NAD 27	68.9		0.5		6.19	7.4	8.00	1.0	380.0	382.00	1.50	52.0		0.97	0.20	47.0	44.00	30.00	10.0	18.00	99.0	80.00	5.1	1.00	1.70	0.8
97754	mudboil	718149	5419032	21	NAD 27	145.4		0.5		3.60	1.0	3.00	4.0	320.0	314.00	1.20	8.0		0.20	0.05	91.0	54.00	1.0	10.00	150.0	29.00	7.7	1.00	1.30	0.6	
97755	mudboil	715700	5418988	21	NAD 27	135.0		0.5		4.12	1.8	3.00	2.0	330.0	302.00	1.40	10.0		0.34	0.05	84.0	48.00	1.0	9.00	130.0	33.00	6.5	1.00	1.00	0.9	
97756	c	713985	5419484	21	NAD 27	130.0		0.5		5.18	10.0	9.00	3.0	340.0	308.00	2.10	36.0		0.45	0.05	68.0	53.00	8.0	11.00	150.0	53.00	5.1	17.00	1.80	0.7	
97757	c	711898	5419115	21	NAD 27	150.3		0.5		4.45	6.4	7.00	2.0	290.0	282.00	2.10	26.0		0.47	0.05	61.0	48.00	4.0	9.00	140.0	44.00	4.4	6.00	1.60	0.7	
97758	c	710391	5418968	21	NAD 27	104.1		0.5		5.06	10.0	10.00	2.0	330.0	313.00	2.40	5.0		0.46	0.05	87.0	76.00	8.0	12.00	140.0	58.00	4.5	11.00	2.00	1.4	
97759	c	708354	5419491	21	NAD 27	60.2		0.5		5.10	11.0	11.00	2.0	300.0	285.00	2.60	4.0		0.48	0.10	94.0	66.00	8.0	11.00	160.0	59.00	4.4	13.00	3.20	1.1	
97761	mudboil	706165	5419365	21	NAD 27	69.9		0.5		5.32	7.2	8.00	3.0	290.0	282.00	2.40	18.0		0.40	0.10	74.0	59.00	11.0	14.00	160.0	55.00	5.8	16.00	1.50	0.7	
97762	mudboil	703863	5419365	21	NAD 27	57.4		0.5		8.62	5.7	9.00	3.0	210.0	221.00	2.20	77.0		0.14	0.30	62.0	58.00	25.0	28.00	130.0	107.00	6.7	32.00	3.50	1.4	
97763	c	706120	5419537	21	NAD 27	52.7		0.5		4.87	4.0	5.00	1.0	300.0	294.00	3.20	5.0		0.48	0.05	83.0	60.00	4.0	8.00	110.0	45.00	4.7	19.00	2.40	1.0	
97764	c	705562	5413690	21	NAD 27	60.0		0.5		6.95	6.3	7.00	3.0	250.0	231.00	3.30	51.0		0.36	0.05	71.0	45.00	4.0	9.00	96.0	52.00	6.6	21.00	1.70	0.8	
97765	c	706032	5412039	21	NAD 27	118.6		0.5		5.25	6.5	8.00	1.0	250.0	235.00	5.00	6.0		0.51	0.05	96.0	38.00	5.0	7.00	89.0	43.00	6.1	10.00	1.70	0.7	
97766	c	706032	5412039	21	NAD 27	118.6		0.5		5.35	3.3	5.00	1.0	260.0	246.00	4.20	5.0		0.59	0.05	86.0	46.00	3.0	7.00	90.0	39.00	5.6	6.00	2.10	1.0	
97767	c	702170	5413195	21	NAD 27	92.9		0.5		5.68	3.8	5.00	1.0	250.0	236.00	3.80	4.0		0.40	0.05	58.0	39.00	4.0	8.00	98.0	39.00	4.5	8.00	2.20	0.9	
97768	bc	700234	5415925	21	NAD 27	90.6		0.5		6.77	4.9	6.00	2.0	330.0	281.00	3.70	17.0		0.31	0.05	96.0	51.00	9.0	12.00	93.0	44.00	6.6	11.00	0.80	0.3	
97769	c	695757	5406938	21	NAD 27	99.5		0.5		4.90	4.7	5.00	2.0	240.0	216.00	4.20	12.0		0.46	0.05	49.0	32.00	4.0	7.00	73.0	28.00	5.2	7.00	1.10	0.7	
97770	c	695840	5406938	21	NAD 27	92.7		0.5		4.96	14.0	13.00	2.0	200.0	193.00	3.60	3.0		0.45	0.10	87.0	50.00	7.0	12.00	120.0	43.00	5.3	17.00	1.80	1.0	
97771	c	690238	5409384	21	NAD 27	107.2		0.5		5.17	3.0	4.00	1.0	200.0	196.00	5.10	1.0		0.35	0.05	70.0	52.00	2.0	7.00	67.0	26.00	8.5	1.00	1.40	0.7	
97772	bc	684315	5405477	21	NAD 27	182.7		0.5		5.91	6.9	8.00	1.0	260.0	254.00	3.30	46.0		0.39	0.05	50.0	36.00	4.0	8.00	65.0	32.00	10.0	6.00	1.20	0.8	
97773	c	686334	5405312	21	NAD 27	181.2		0.5		4.74	9.5	10.00	1.0	190.0	198.00	3.00	35.0		0.36	0.05	55.0	31.00	3.0	8.00	98.0	39.00	4.5	8.00	2.20	0.9	
97774	c	688120	5402892	21	NAD 27	143.2		0.5		5.27	18.0	16.00	10.0	200.0	190.00	3.20	4.0		0.44	0.10	63.0	48.00	10.0	13.00	130.0	49.00	5.4	23.00	2.50	0.9	
97775	c	690706	5402897	21	NAD 27	137.7		0.5		5.82	10.0	10.00	4.0	200.0	203.00	3.40	35.0		0.45	0.10	50.0	32.00	5.0	8.00	130.0	42.00	6.1	8.00	2.10	0.8	
97776	c	691943	5405754	21	NAD 27	102.0		0.5		6.18	7.0	8.00	1.0	230.0	219.00	3.90	56.0		0.44	0.05	69.0	46.00	5.0	9.00	96.0	43.00	6.6	12.00	3.60	1.4	
97777	c	694601	5410604	21	NAD 27	206.9		0.5		5.11	3.7	6.00	1.0	240.0	236.00	4.30	15.0		0.46	0.05	72.0	51.00	3.0	7.00	79.0	29.00	6.6	7.00	1.70	0.9	
97778	c	693946	5405941	21	NAD 27	93.2		0.5		4.81	11.0	11.00	7.0	180.0	182.00	3.60	2.0		0.42	0.10	52.0	33.00	5.0	8.00	100.0	31.00	4.9	17.00	1.10	0.3	
97779	bc	684315	5405477	21	NAD 27	182.7		0.5		5.91	6.9	8.00	1.0	260.0	254.00	3.30	46.0		0.39	0.05	50.0	36.00	4.0	8.00	65.0	32.00	10.0	6.00	1.20	0.8	
97780	c	696224	5404648	21	NAD 27	99.3		0.5		6.80	1.9	4.00	1.0	260.0	273.00	5.40	29.0		0.60	0.05	66.0	41.00	1.0	9.00	51.0	31.00	14.0	1.00	1.30	0.3	
97781	mudboil	698356	5404962	21	NAD 27	82.8		0.5		5.33	6.3	7.00	1.0	200.0	190.00	3.20	4.0		0.34	0.05	41.0	22.00	1.0	6.00	83.0	27.00	1.0	1.00	0.60	0.7	
97782	c	700512	5405043	21	NAD 27	178.5		0.5		5.49	8.5	9.00	2.0	260.0	244.00	3.70	24.0		0.43	0.05	62.0	46.00	8.0	11.00	120.0	58.00	6.5	14.00	1.90	0.8	
97783	c	701807	54050978	21	NAD 27	209.8		0.5		7.95	6.2	7.00	2.0	560.0	546.00	2.50	2.0		0.23	0.05	88.0	77.00	10.0	15.00	110.0	79.00	11.0	18.00	1.30	0.8	
97784	c	717107	5412943	21	NAD 27	150.9		0.5		5.45	1.1	3.00	1.0	350.0	348.00	3.00	16.0		0.55	0.05	53.0	37.00	2.0	9.00	59.0	26.00	5.7	1.00	1.20	0.8	
107001	c	686335	5432900	21	NAD 27	128.3		0.5	0.05	5.12	16.0	12.74	7.0	250.0	251.46	1.51	24.0		0.42	0.05	56.0	46.78	13.0	13.58	360.0	110.04	6.5	17.31	1.31	0.8	
107002	c	687855	5432040	21	NAD 27	122.0		0.5	0.05	6.71	18.0	13.67	3.0	350.0	346.66	1.65	18.0		0.50	0.17	68.0	58.17	19.0	17.34	260.0	103.87	5.1	28.59	1.96	0.8	
107003	c	687086	5431458	21	NAD 27	123.8		0.5	0.05	4.64	39.0	30.71	6.0	400.0	391.05	2.11	2.0		0.46	0.05	73.0	66.82	27.0	25.45	320.0	125.28	8.1	48.86	2.86	0.9	
107004	c	686269	5430732	21	NAD 27	108.7		0.5	0.05	5.53	29.0	22.16	12.0	350.0	329.53	1.72	3.0		0.61	0.05	80.0	69.17	24.0	22.71	320.0	110.44	4.9	35.92	2.37	0.8	
107005	c	690732	5443243	21	NAD 27	133.6		0.5	0.05	5.79	21.0	15.88	6.0	330.0	308.70	1.49	19.0		0.67	0.13	88.0	73.24	33.0	28.20	930.0	228.75	4.6	33.69	2.39	1.0	
107006	c	689814	5442672	21	NAD 27	137.7		0.5	0.05	4.73	17.0	11.83	5.0	240.0	228.02	1.12	11.0		0.98	0.05	81.0	56.10	23.0	40.92	1260.0	193.60	3.1	34.08	2.50	0.8	
107007	c	688961	5441940	21	NAD 27	136.6		0.5	0.05	4.71	25.0	19.31	5.0	240.0	231.47	1.24	4.0		0.93	0.12	94.0	69.31	25.0	21.95	2500.0	254.24	3.5	43.53	3.00	1.2	
107008	c	688203	5441372	21	NAD 27	127.7		0.5	0.05	5.32	5.6	4.30	2.0	250.0	246.58	1.15	20.0		0.80	0.05	59.0	45.38	13.0	25.89	690.0	157.65	3.2	17.46	1.64	0.8	
107009	c	688939	5440322	21	NAD 27	132.3		0.5	0.05	5.07	17.0	13.68	6.0	290.0	270.98	1.31	10.0		0.79	0.13	90.0	77.27	34.0	28.66	1000.0	208.69	3.2	29.96	2.34	1.1	
107010	c	689687	5440029	21	NAD 27	135.2		0.5	0.05	5.10	11.0	9.38	1.0	280.0	273.14	1.29	17.0		0.59	0.05	77.0	65.56	20.0	20.13	720.0	141.55	3.7	20.15	2.11		



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm wt. %	As1 ppm	As2 ppb	Au1 ppm	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
107042	c	689210	5435186	21	NAD 27	123.5	02E/01		0.05	6.93	14.0	14.46	4.0	390.0	402.04	1.76	26.0		0.55	0.05	78.0	62.78	27.0	24.96	440.0	164.09	6.1	35.56	2.45	1.2
107043	c	689031	5434257	21	NAD 27	144.8	02E/01		0.05	5.90	11.0	11.84	3.0	320.0	319.94	1.35	19.0		0.56	0.10	71.0	52.06	15.0	15.85	420.0	155.34	4.5	21.76	1.41	0.9
107044	c	695374	5433395	21	NAD 27	145.1	02E/01		0.05	5.57	24.0	22.29	5.0	300.0	308.92	1.43	4.0		0.54	0.19	80.0	62.61	25.0	23.76	490.0	159.42	3.5	37.43	2.39	1.0
107045	c	696640	5431962	21	NAD 27	145.9	02E/01		0.05	5.93	25.0	23.93	5.0	350.0	363.42	1.67	10.0		0.53	0.23	81.0	71.97	22.0	22.60	400.0	137.76	4.1	42.92	2.73	1.4
107046	c	697165	5433720	21	NAD 27	117.8	02E/01		0.05	4.68	4.5	6.64	1.0	220.0	251.98	1.02	7.0		0.66	0.05	54.0	42.23	8.0	11.28	820.0	132.60	3.4	2.60	1.45	0.6
107047	c	696935	5432794	21	NAD 27	139.2	02E/01		0.05	5.78	14.0	14.60	3.0	340.0	383.60	1.96	0.5		0.60	0.05	77.0	70.41	16.0	19.30	280.0	99.72	5.1	35.00	3.67	1.3
107048	c	695655	5432591	21	NAD 27	147.0	02E/01		0.05	5.99	15.0	16.73	4.0	250.0	298.37	1.28	14.0		0.55	0.11	68.0	54.64	19.0	21.75	400.0	155.74	3.9	26.29	1.92	1.1
107049	c	695035	5431941	21	NAD 27	135.9	02E/01		0.05	5.76	18.0	16.63	2.0	300.0	291.15	1.34	9.0		0.64	0.15	67.0	55.05	21.0	19.92	480.0	179.01	3.6	43.63	1.81	1.0
107050	c	694199	5433185	21	NAD 27	130.0	02E/01		0.05	5.32	20.0	18.92	29.0	340.0	302.68	1.34	6.0		0.50	0.19	72.0	57.13	22.0	21.41	480.0	150.07	3.7	28.82	1.90	1.1
107051	c	693681	5433987	21	NAD 27	117.2	02E/01		0.05	5.75	19.0	18.06	1.0	400.0	369.59	1.66	11.0		0.48	0.20	100.0	89.72	29.0	27.10	510.0	150.65	5.8	37.01	2.21	1.1
107052	c	693071	5433328	21	NAD 27	116.5	02E/01		0.05	5.94	6.7	7.99	2.0	300.0	305.08	1.30	17.0		0.59	0.05	66.0	53.34	12.0	14.28	590.0	135.97	4.7	18.76	1.59	1.2
107053	c	693906	5431878	21	NAD 27	123.8	02E/01		0.05	5.55	10.0	9.99	4.0	300.0	317.29	1.41	0.5		0.58	0.13	68.0	56.89	20.0	21.17	400.0	143.31	3.8	29.47	2.01	0.9
107054	c	693905	5432751	21	NAD 27	118.2	02E/01		0.05	5.14	6.7	7.21	6.0	280.0	273.35	1.23	14.0		0.71	0.05	57.0	47.72	11.0	12.80	550.0	152.21	3.6	20.85	1.48	0.8
107055	c	691961	5433451	21	NAD 27	92.2	02E/01		0.05	5.98	15.0	14.74	4.0	290.0	268.55	1.24	36.0		0.71	0.05	75.0	68.58	17.0	17.08	500.0	156.22	3.7	48.97	2.67	1.4
107056	c	692623	5434066	21	NAD 27	99.3	02E/01		0.05	5.78	11.0	11.32	3.0	310.0	294.35	1.32	13.0		0.60	0.05	65.0	59.87	17.0	17.44	500.0	154.66	3.8	19.52	1.19	1.2
107057	c	692015	5434831	21	NAD 27	106.6	02E/01		0.05	4.75	12.0	12.82	2.0	290.0	249.96	1.19	11.0		0.58	0.16	63.0	46.78	16.0	16.60	690.0	145.00	3.7	17.67	1.32	0.9
107059	c	690342	5434605	21	NAD 27	120.7	02E/01		0.05	5.82	18.0	15.84	2.0	420.0	386.57	1.74	3.0		0.72	0.05	73.0	71.69	25.0	23.16	630.0	194.27	12.0	25.39	3.62	1.0
107060	c	690990	5433761	21	NAD 27	90.2	02E/01		0.05	6.15	18.0	16.67	5.0	390.0	375.27	1.78	12.0		0.40	0.14	68.0	61.03	35.0	32.14	270.0	147.57	4.6	39.45	2.61	0.8
107062	c	691317	5432737	21	NAD 27	95.3	02E/01		0.05	6.57	16.0	18.36	4.0	350.0	346.46	1.96	45.0		0.63	0.05	120.0	118.49	30.0	27.91	500.0	169.76	5.1	35.20	4.52	1.4
107063	c	691628	5431868	21	NAD 27	109.5	02E/01		0.05	5.94	17.0	16.52	2.0	310.0	299.74	1.44	16.0		0.61	0.11	88.0	83.60	20.0	18.55	390.0	167.04	5.1	57.84	2.40	0.9
107064	c	690510	5431808	21	NAD 27	126.4	02E/01		0.05	6.02	28.0	26.03	3.0	300.0	293.96	1.49	18.0		0.50	0.15	62.0	58.12	21.0	21.61	360.0	145.14	4.0	44.08	1.85	1.1
107065	c	691515	5430461	21	NAD 27	133.0	02D/16		0.05	6.16	10.0	10.59	5.0	270.0	253.16	1.22	47.0		0.48	0.25	53.0	42.46	12.0	14.03	340.0	124.86	4.7	15.82	1.15	0.7
107066	c	690391	5430720	21	NAD 27	117.9	02E/01		0.05	7.25	23.0	23.49	2.0	290.0	309.49	1.63	22.0		0.40	0.14	68.0	61.03	35.0	32.14	270.0	147.57	4.6	39.45	2.61	0.8
107067	c	690091	5432596	21	NAD 27	97.1	02E/01		0.05	5.99	20.0	21.30	4.0	310.0	320.04	1.56	9.0		0.67	0.17	70.0	68.96	21.0	21.37	350.0	155.41	3.9	33.55	1.98	0.1
107068	c	689776	5433541	21	NAD 27	106.5	02E/01		0.05	5.58	6.5	6.91	2.0	320.0	310.85	1.32	16.0		0.47	0.05	57.0	49.13	11.0	12.71	460.0	148.05	4.8	12.56	1.49	0.7
107069	c	685903	5444106	21	NAD 27	119.4	02E/01		0.05	5.78	27.0	23.04	5.0	410.0	359.51	1.71	0.5		0.78	0.05	81.0	71.76	27.0	23.59	550.0	168.01	4.9	42.90	3.12	1.3
107070	c	685542	5445048	21	NAD 27	106.7	02E/01		0.05	6.08	19.0	17.52	2.0	370.0	347.94	1.69	5.0		0.54	0.05	74.0	67.49	24.0	21.54	460.0	154.16	4.6	32.30	1.90	1.3
107071	c	684900	5444719	21	NAD 27	100.9	02E/01		0.05	6.07	6.0	6.90	2.0	360.0	360.64	1.46	4.0		0.72	0.05	72.0	60.03	16.0	15.78	510.0	167.14	4.4	11.14	1.44	0.9
107072	c	684222	5443846	21	NAD 27	102.8	02E/01		0.05	5.15	17.0	15.84	8.0	300.0	289.76	1.33	3.0		0.92	0.17	86.0	68.02	19.0	18.60	500.0	185.94	3.1	41.98	2.68	1.2
107073	c	684034	5444878	21	NAD 27	97.5	02E/01		0.05	6.66	19.0	18.63	3.0	310.0	312.67	1.83	31.0		0.64	0.21	61.0	57.68	34.0	30.35	770.0	293.20	5.3	46.43	1.71	0.9
107074	c	682974	5444456	21	NAD 27	98.0	02E/01		0.05	5.22	8.3	8.30	3.0	280.0	283.86	1.24	4.0		0.98	0.05	63.0	50.55	20.0	18.88	1400.0	233.90	3.4	14.72	1.47	0.7
107075	c	693654	5449835	21	NAD 27	124.6	02E/01		0.05	5.68	5.3	6.75	1.0	270.0	303.60	1.12	1.0		0.82	0.05	67.0	66.07	16.0	18.47	750.0	198.24	3.6	5.02	1.54	1.0
107076	c	694096	5447815	21	NAD 27	135.1	02E/01		0.05	6.13	8.8	12.54	1.0	280.0	317.51	1.44	27.0		0.68	0.13	77.0	70.17	35.0	34.22	870.0	217.51	4.3	23.67	2.23	0.9
107077	c	693336	5447199	21	NAD 27	141.9	02E/01		0.05	5.84	5.9	7.18	3.0	350.0	328.53	1.37	13.0		0.79	0.05	77.0	65.17	17.0	16.37	1150.0	207.25	7.0	13.37	1.38	1.0
107078	c	693308	5448210	21	NAD 27	136.1	02E/01		0.05	5.92	11.0	11.15	3.0	270.0	229.48	1.07	29.0		0.88	0.21	81.0	47.74	23.0	19.48	1720.0	227.80	3.2	23.00	1.73	0.8
107079	c	693102	5449160	21	NAD 27	134.3	02E/01		0.05	5.39	18.0	16.03	1.0	260.0	242.27	1.31	29.0		0.56	0.16	110.0	79.67	30.0	18.94	1240.0	204.03	3.7	30.73	2.68	1.8
107081	c	692609	5450010	21	NAD 27	123.2	02E/01		0.05	5.22	19.0	18.25	3.0	330.0	323.56	1.48	4.0		0.82	0.18	89.0	72.18	30.0	27.53	1210.0	238.13	3.9	44.18	2.39	1.3
107082	c	692713	5450723	21	NAD 27	122.6	02E/01		0.05	4.72	23.0	20.44	10.0	270.0	250.26	1.28	6.0		0.80	0.13	100.0	75.42	24.0	18.83	1920.0	208.52	3.9	51.23	3.55	1.6
107083	bc	691001	5448972	21	NAD 27	133.2	02E/01		0.05	4.87	27.0	23.03	22.0	240.0	221.72	1.00	37.0		1.16	0.27	83.0	67.55	30.0	23.18	2350.0	330.57	3.0	20.41	1.65	1.4
107084	c	691415	5449932	21	NAD 27	124.2	02E/01		0.05	5.51	12.0	11.55	3.0	310.0	292.51	1.34	15.0		0.81	0.05	92.0	67.43	30.0	16.64	1520.0	226.31	4.3	62.83	2.06	1.2
107085	c	692008	5451146	21	NAD 27	114.0	02E/01		0.05	5.92	17.0	16.21	3.0	340.0	331.21	1.52	10.0		0.73	0.05	78.0	70.61	30.0	25.07	1260.0	245.95	4.2	31.04	1.82	1.1
107086	c	692531	5452096	21	NAD 27	114.0	02E/01		0.05	5.32	19.0	18.05	3.0	300.0	236.19	0.10	55.0		0.82	0.18	89.0	72.18	30.0	27.53	1210.0	238.13	3.9	44.18	2.39	1.3
107087	c	692958	5452935	21	NAD 27	120.3	02E/01		0.05	5.																				



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
107118	bc or c	665664	5428571	21	NAD 27	77.7	02D/15			0.10	5.20	68.5	55.75	9.0	630.0	580.29	1.80	10.0	0.12	0.21	58.0	50.75	17.0	18.30	130.0	62.06	7.1	73.64	1.94	0.1
107119	bc or c	658903	5425477	21	NAD 27	113.7	02D/15			0.12	6.30	58.0	51.75	5.0	390.0	388.72	2.54	6.0	0.07	0.05	130.0	83.57	9.0	11.70	130.0	91.08	6.5	17.67	1.05	1.1
107121	c	660138	5425111	21	NAD 27	124.1	02D/15			0.05	6.17	31.0	25.82	3.0	330.0	323.13	1.97	13.0	0.15	0.10	78.0	62.19	16.0	17.66	130.0	77.73	4.8	45.96	2.22	0.8
107122	c	663952	5426986	21	NAD 27	89.8	02E/02			0.12	7.17	73.3	67.23	13.0	300.0	299.94	1.90	34.0	0.30	0.18	74.0	53.57	22.0	23.15	260.0	104.00	4.9	69.43	1.91	1.0
107123	c	663334	5428943	21	NAD 27	96.8	02D/15			0.16	6.56	93.6	88.12	48.0	340.0	257.20	1.90	33.0	0.18	0.24	69.0	53.55	21.0	21.90	440.0	112.10	3.6	69.06	1.14	1.0
107124	c	663717	5428086	21	NAD 27	94.8	02D/15			0.16	6.29	37.0	28.56	11.0	340.0	310.95	1.94	5.0	0.17	0.14	86.0	69.35	25.0	23.22	300.0	102.60	4.9	54.69	2.17	1.5
107125	c	662621	5427850	21	NAD 27	98.2	02D/15			0.14	5.88	38.0	30.79	11.0	360.0	325.95	1.98	5.0	0.29	0.05	88.0	72.30	22.0	21.66	370.0	86.13	4.4	47.55	2.63	1.5
107126	c	663340	5427303	21	NAD 27	86.0	02D/15			0.05	6.24	26.0	20.29	9.0	350.0	340.59	2.22	2.0	0.18	0.10	110.0	78.96	26.0	24.72	720.0	126.40	5.3	52.45	3.80	2.1
107127	c	662564	5428668	21	NAD 27	112.7	02D/15			0.17	5.81	38.0	29.85	8.0	320.0	282.03	1.77	15.0	0.23	0.18	97.0	70.99	19.0	17.68	240.0	85.46	3.9	50.19	2.13	1.5
107128	c	661472	5426804	21	NAD 27	106.0	02D/15			0.05	6.51	45.0	37.42	20.0	320.0	301.47	1.94	6.0	0.25	0.12	87.0	70.57	22.0	22.62	180.0	84.37	5.4	37.52	2.25	1.2
107129	c	662689	5425384	21	NAD 27	118.2	02D/15			0.20	7.33	18.0	14.63	10.0	320.0	306.04	1.98	23.0	0.08	0.16	98.0	71.07	25.0	25.23	200.0	100.70	5.7	49.27	1.61	1.6
107130	c	664664	5428592	21	NAD 27	84.3	02D/15			0.05	7.12	26.0	20.21	35.0	340.0	341.05	2.09	14.0	0.26	0.15	98.0	66.11	26.0	26.23	470.0	124.60	4.9	65.17	2.12	1.7
107131	c	666188	5429369	21	NAD 27	88.4	02D/15			0.24	7.24	35.0	31.43	39.0	310.0	319.76	2.45	6.0	0.32	0.29	85.0	58.64	33.0	30.89	700.0	134.20	7.1	59.85	1.52	1.2
107132	c	665774	5428313	21	NAD 27	91.0	02D/15			0.19	6.38	53.0	43.27	24.0	330.0	322.57	2.23	5.0	0.39	0.19	89.0	61.39	33.0	28.50	1270.0	165.72	5.5	68.92	2.43	1.0
107133	bc or c	664966	5427076	21	NAD 27	88.5	02D/15			0.13	8.65	16.0	14.50	4.0	280.0	290.39	2.34	35.0	0.07	0.29	130.0	115.05	36.0	37.76	510.0	209.63	7.2	101.03	3.52	0.9
107134	bc or c	656057	5422474	21	NAD 27	65.2	02D/15			0.05	6.64	53.4	46.53	6.0	400.0	393.35	2.32	14.0	0.20	0.10	110.0	108.30	15.0	19.64	110.0	71.79	9.1	47.88	1.65	0.1
107142	c	671875	5428045	21	NAD 27	154.8	02D/15			0.05	5.47	25.0	21.63	1.0	330.0	329.47	2.13	0.5	0.86	0.12	85.0	74.35	33.0	32.81	790.0	160.74	4.2	39.61	4.02	1.2
107143	c	670314	5428366	21	NAD 27	94.1	02D/15			0.05	5.65	104.0	106.74	1.0	250.0	291.45	2.43	7.0	0.12	0.13	68.0	56.43	7.0	13.43	110.0	59.19	3.6	12.88	1.78	0.9
107144	c	670252	5429133	21	NAD 27	96.2	02D/15			0.21	6.92	25.0	20.25	4.0	290.0	285.24	1.78	20.0	0.11	0.19	78.0	55.07	25.0	24.82	110.0	81.20	5.2	47.70	1.78	1.1
107145	c	669423	5428557	21	NAD 27	95.1	02D/15			0.05	5.45	19.0	14.11	9.0	320.0	297.41	1.85	3.0	0.58	0.24	57.0	58.71	42.0	38.37	920.0	333.15	6.4	28.08	1.95	0.9
107137	c	666537	5423851	21	NAD 27	79.5	02D/15			0.05	5.45	30.0	24.91	3.0	270.0	258.10	1.36	9.0	1.99	0.34	80.0	56.11	36.0	37.76	510.0	209.63	7.2	101.03	3.52	0.9
107138	c	669698	5429915	21	NAD 27	104.3	02E/02			0.05	6.29	107.0	87.96	1.0	390.0	368.04	2.21	7.0	0.67	0.29	130.0	115.05	41.0	39.71	680.0	148.16	5.3	57.11	3.47	1.1
107141	c	671285	5429171	21	NAD 27	115.8	02D/15			0.05	5.69	25.0	21.63	1.0	330.0	329.47	2.13	0.5	0.86	0.12	85.0	74.35	33.0	32.81	790.0	160.74	4.2	39.61	4.02	1.2
107148	c	670314	5428366	21	NAD 27	94.1	02D/15			0.05	5.65	104.0	106.74	1.0	250.0	291.45	2.43	7.0	0.12	0.13	68.0	56.43	7.0	13.43	110.0	59.19	3.6	12.88	1.78	0.9
107150	c	682700	5444953	21	NAD 27	110.5	02E/01			0.05	5.15	18.0	13.89	5.0	310.0	287.07	1.26	2.0	0.94	0.12	61.0	51.42	10.0	11.57	190.0	40.09	4.9	10.03	4.44	1.1
107151	c	682195	5429282	21	NAD 27	150.7	02D/15			0.05	5.25	22.0	19.39	3.0	350.0	301.59	1.58	4.0	0.61	0.25	76.0	58.57	22.0	22.97	430.0	115.69	4.6	21.59	2.20	1.2
107152	c	681256	5429471	21	NAD 27	141.6	02D/15			0.05	5.07	24.0	21.59	6.0	270.0	258.23	1.36	20.0	0.70	0.31	73.0	51.96	18.0	19.57	440.0	105.26	4.1	27.62	2.35	1.2
107153	c	680157	5428573	21	NAD 27	120.0	02D/15			0.05	6.40	20.0	17.40	9.0	360.0	358.42	2.05	7.0	0.51	0.64	92.0	91.97	19.0	23.04	260.0	110.09	6.7	76.59	2.97	0.9
107154	c	679103	5429788	21	NAD 27	123.6	02E/01			0.05	5.63	8.7	6.64	3.0	320.0	320.15	1.41	7.0	0.80	0.05	66.0	55.77	23.0	22.71	680.0	167.71	3.8	23.14	2.33	1.1
107155	c	686253	5443229	21	NAD 27	117.4	02E/01			0.05	5.47	6.4	4.26	6.0	320.0	311.06	1.30	2.0	1.01	0.05	66.0	53.34	19.0	18.88	770.0	188.14	3.8	5.54	1.67	0.9
107149	c	685878	5446552	21	NAD 27	114.0	02E/01			0.05	5.24	5.5	3.73	2.0	310.0	291.68	1.12	1.0	0.71	0.05	67.0	61.02	10.0	13.88	620.0	134.78	3.9	3.03	1.08	1.0
107156	c	676148	5430926	21	NAD 27	108.6	02E/02			0.05	4.60	38.0	31.43	2.0	250.0	231.67	2.10	6.0	0.92	0.14	87.0	74.76	20.0	22.23	470.0	84.01	7.7	43.73	3.56	1.1
107157	c	667447	5427939	21	NAD 27	86.6	02D/15			0.05	4.74	82.4	60.06	13.0	330.0	296.41	1.90	6.0	0.93	0.30	100.0	81.43	91.0	65.68	4430.0	502.73	6.2	96.26	3.36	1.0
107158	c	682424	5427884	21	NAD 27	114.7	02D/15			0.05	4.75	74.3	59.72	10.0	220.0	214.30	2.00	4.0	1.53	0.61	70.0	61.77	86.0	65.67	2890.0	555.49	6.6	167.59	4.49	1.5
107159	c	688128	5426699	21	NAD 27	95.0	02D/15			0.05	5.05	80.9	61.61	14.0	250.0	230.57	2.43	6.0	1.10	0.35	88.0	70.05	46.0	35.85	2210.0	491.69	5.9	79.43	3.84	1.2
107162	c	723637	5449380	21	NAD 27	95.7	02F/04			0.05	4.53	4.6	3.08	1.0	290.0	295.59	3.22	22.0	0.53	0.05	69.0	50.00	6.0	16.07	220.0	38.37	3.1	6.77	2.65	0.9
107163	c	724728	5449701	21	NAD 27	106.1	02F/04			0.05	5.02	3.1	1.00	1.0	380.0	345.80	3.31	9.0	0.97	0.05	120.0	78.16	10.0	11.56	290.0	48.73	5.2	9.33	3.83	1.0
107165	c	726911	5450808	21	NAD 27	108.6	02F/04			0.05	4.99	3.6	2.27	1.0	360.0	350.90	3.05	15.0	0.59	0.05	110.0	85.43	10.0	11.57	190.0	40.09	4.9	10.03	4.44	1.1
107166	c	728358	5450524	21	NAD 27	114.8	02F/04			0.05	5.85	5.4	3.89	1.0	450.0	413.66	3.13	26.0	0.60	0.05	140.0	106.53	14.0	15.97	250.0	63.22	6.5	14.00	4.71	1.1
107167	c	729318	5449871	21	NAD 27	108.7	02F/04			0.05	6.08	3.1	1.00	1.0	350.0	361.44	2.69	73.0	0.45	0.05	150.0	102.45	6.0	11.96	200.0	43.65	5.0	5.83	3.06	1.7
107168	bc	715117	5444740	21	NAD 27	114.4	02E/01			0.05	4.96	36.0	29.45	2.0	230.0	206.77	2.27	24.0	0.38	0.15	51.0	40.32	10.0	12.28	270.0	57.94	4.9	29.78	2.10	0.1
107169	c	716189	5444369	21	NAD 27	115.7	02E/01			0.05	5.77	60.3	49.11	4.0	370.0	342.25	2.65	16.0	0.34	0.12	68.0	52.01	12.0	15.71	190.0	67.06	6.5	29.09	2.21	0.1
107170	c	717323	5444110	21	NAD 27	109.8	02E/01			0.05	5.16																			



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
107197	c	649578	5422795	21	NAD 27	115.2	02D/15		0.05	6.74	34.0	32.17	1.0	330.0	353.73	2.41	12.0	0.12	0.12	0.12	85.0	80.36	21.0	24.59	130.0	68.76	10.0	43.76	4.71	1.1
107198	c	653562	5428535	21	NAD 27	97.8	02D/15		0.05	5.24	18.0	17.26	1.0	330.0	332.48	1.19	9.0	0.30	0.05	0.30	60.0	48.50	9.0	13.29	130.0	56.23	4.9	5.65	2.08	0.1
107199	c	669585	5425823	21	NAD 27	136.3	02D/15		0.05	5.80	118.0	100.99	3.0	380.0	360.48	2.29	1.0	0.77	0.65	110.0	86.10	40.0	38.50	900.0	132.97	5.3	70.20	5.64	1.6	
107201	bc	684637	5453558	21	NAD 27	72.5	02E/01		0.05	4.97	52.6	47.86	5.0	240.0	251.43	1.03	20.0	0.85	0.44	60.0	48.00	31.0	27.08	1530.0	379.21	3.4	28.90	1.64	0.7	
107202	bc	685419	5454080	21	NAD 27	71.5	02E/01		0.05	5.43	50.0	44.29	2.0	230.0	242.33	1.13	36.0	0.66	0.47	49.0	41.32	32.0	29.42	1250.0	323.36	2.9	23.69	1.92	0.1	
107203	bc	683521	5457623	21	NAD 27	53.0	02E/01		0.05	5.31	37.0	32.06	5.0	340.0	332.59	1.46	4.0	0.17	0.05	110.0	74.00	18.0	18.00	270.0	93.66	4.0	33.82	2.56	1.3	
107204	bc	683587	5456560	21	NAD 27	73.5	02E/01		0.05	6.88	34.0	31.48	2.0	410.0	401.01	1.92	79.0	0.06	0.24	68.0	50.07	19.0	18.91	160.0	113.82	6.0	25.55	1.95	0.1	
107205	bc	684160	5454638	21	NAD 27	51.6	02E/01		0.05	8.04	34.0	30.01	3.0	190.0	212.11	1.85	54.0	0.19	0.28	61.0	42.04	39.0	35.31	430.0	133.79	5.2	48.86	2.76	0.7	
107206	c	710821	5446363	21	NAD 27	76.8	02E/01		0.05	4.84	21.0	20.90	1.0	320.0	295.45	2.26	9.0	0.43	0.05	84.0	57.91	6.4	10.06	220.0	55.39	6.4	10.06	2.79	0.9	
107207	c	711752	5444743	21	NAD 27	105.2	02E/01		0.05	5.95	22.0	22.78	1.0	310.0	315.31	2.41	18.0	0.39	0.05	76.0	61.54	11.0	15.87	200.0	64.72	5.5	18.75	2.48	0.9	
107208	c	712596	5445175	21	NAD 27	117.3	02E/01		0.05	5.77	10.0	10.63	1.0	430.0	409.35	2.39	6.0	0.42	0.05	87.0	75.42	18.0	21.47	230.0	74.63	7.2	31.49	2.68	0.8	
107209	c	713796	5445026	21	NAD 27	124.0	02E/01		0.05	4.92	19.0	17.05	3.0	330.0	311.61	2.17	27.0	0.46	0.05	65.0	49.48	10.0	15.59	280.0	68.47	5.7	12.88	2.07	0.1	
107210	c	725426	5446226	21	NAD 27	104.9	02E/04		0.05	6.07	6.7	7.94	1.0	370.0	379.72	3.29	13.0	0.47	0.05	96.0	57.29	8.0	12.78	180.0	50.80	5.9	12.35	2.28	0.9	
107211	c	726435	5446662	21	NAD 27	99.9	02E/04		0.05	5.39	4.4	5.68	9.0	420.0	409.01	2.95	13.0	0.60	0.05	110.0	73.81	11.0	13.47	250.0	47.24	5.0	9.07	4.00	1.2	
107212	c	727938	5446842	21	NAD 27	96.3	02E/04		0.05	6.37	4.5	5.93	1.0	580.0	498.55	4.73	13.0	0.86	0.05	99.0	64.61	16.0	19.40	200.0	75.13	11.0	41.70	3.30	0.9	
107213	bc	729253	5447349	21	NAD 27	127.6	02E/04		0.05	6.86	0.6	3.11	1.0	430.0	440.88	3.93	11.0	0.52	0.05	62.0	39.60	3.0	5.83	67.0	15.48	7.4	1.90	1.77	0.1	
107214	c	731253	5448219	21	NAD 27	126.4	02E/04		0.05	5.76	2.5	4.39	1.0	370.0	337.08	4.58	26.0	0.57	0.05	75.0	45.58	9.0	9.72	230.0	37.95	7.6	5.77	1.42	1.0	
107215	c	732068	5448480	21	NAD 27	142.2	02E/04		0.05	6.01	3.3	5.14	1.0	340.0	360.20	5.88	16.0	0.49	0.05	100.0	80.23	9.0	12.80	200.0	47.32	9.3	6.48	1.83	1.0	
107216	c	733171	5448829	21	NAD 27	125.1	02E/04		0.05	7.39	4.7	6.52	1.0	380.0	374.79	6.51	41.0	0.39	0.05	78.0	57.77	8.0	11.51	150.0	51.62	11.0	5.14	2.09	0.8	
107217	c	733999	5449210	21	NAD 27	103.8	02E/04		0.05	8.76	16.0	16.97	1.0	320.0	313.18	18.36	5.0	0.94	0.05	73.0	54.35	7.0	8.49	77.0	14.81	20.0	7.29	3.47	0.1	
107218	c	735194	5449136	21	NAD 27	115.3	02E/04		0.05	8.76	5.4	8.14	1.0	320.0	327.99	18.36	84.0	0.30	0.05	77.0	68.45	9.0	13.73	130.0	57.43	14.0	8.10	2.00	1.1	
107219	c	735900	5448127	21	NAD 27	99.3	02E/04		0.05	6.00	4.7	8.04	1.0	360.0	365.12	7.87	12.0	0.52	0.05	91.0	55.07	8.0	9.99	200.0	45.41	11.0	4.75	2.09	1.0	
107221	c	736389	5446992	21	NAD 27	93.5	02E/04		0.05	6.04	3.7	4.41	1.0	560.0	520.50	9.85	3.0	1.09	0.05	91.0	69.11	9.0	12.30	170.0	30.55	12.0	12.58	4.70	0.9	
107222	c	736995	5446349	21	NAD 27	92.6	02E/04		0.05	6.73	4.2	5.71	1.0	520.0	468.27	8.91	35.0	0.85	0.05	96.0	73.80	10.0	15.12	170.0	40.71	13.0	6.05	3.51	1.1	
107223	c	737608	5445756	21	NAD 27	82.9	02E/04		0.05	5.93	2.7	4.58	1.0	490.0	466.15	6.56	4.0	0.96	0.05	110.0	79.24	8.0	11.85	170.0	32.51	11.0	16.02	4.62	1.3	
107224	c	729920	5437573	21	NAD 27	96.5	02E/04		0.05	4.77	15.0	14.53	1.0	350.0	342.22	2.78	28.0	0.36	0.05	67.0	57.66	11.0	13.87	180.0	56.06	4.9	15.66	1.56	0.9	
107225	c	735529	5444022	21	NAD 27	96.1	02E/04		0.05	6.81	92.1	84.06	1.0	380.0	384.79	10.73	18.0	0.73	0.11	85.0	43.50	23.0	16.51	110.0	36.17	17.0	37.15	2.84	0.1	
107226	bc	746267	5441243	21	NAD 27	72.8	02E/04		0.05	8.64	1.4	2.30	1.0	330.0	354.23	6.73	46.0	0.91	0.05	43.0	25.64	2.0	16.21	16.0	10.30	7.3	1.00	1.43	0.1	
107227	c	740252	5443192	21	NAD 27	47.6	02E/04		0.05	5.40	6.3	4.72	1.0	400.0	364.90	4.71	12.0	0.52	0.05	88.0	63.90	9.0	13.54	230.0	53.42	8.8	12.40	2.01	1.0	
107228	c	738183	5445050	21	NAD 27	77.2	02E/04		0.05	6.99	3.4	5.58	1.0	460.0	448.70	5.06	11.0	0.76	0.05	75.0	44.34	12.0	17.60	110.0	53.10	15.0	39.62	1.62	1.1	
107229	c	684038	5452897	21	NAD 27	74.8	02E/01		0.16	5.59	78.4	71.43	18.0	250.0	328.63	10.0	10.0	1.11	0.16	54.0	54.80	56.0	47.81	2320.0	305.55	3.1	100.61	1.75	1.0	
107230	c	683275	5451556	21	NAD 27	91.9	02E/01		0.05	4.65	6.8	8.74	2.0	200.0	249.41	0.81	6.0	0.87	0.05	54.0	43.92	14.0	17.47	1060.0	216.16	2.8	8.13	1.13	0.8	
107231	bc	682431	5450353	21	NAD 27	97.3	02E/01		0.05	3.81	14.0	13.41	2.0	190.0	200.84	0.51	12.0	0.52	0.05	59.0	36.89	11.0	12.99	1390.0	156.37	2.9	6.97	0.53	0.1	
107232	c	671777	5425594	21	NAD 27	146.8	02D/15		0.05	6.16	14.0	13.52	7.0	340.0	340.00	1.94	10.0	0.79	0.05	72.0	61.39	22.0	24.39	390.0	112.59	4.7	33.94	3.15	1.0	
107233	c	674186	5426743	21	NAD 27	146.5	02D/15		0.05	5.80	15.0	16.33	2.0	340.0	328.74	2.22	12.0	0.63	0.12	84.0	69.75	22.0	23.43	510.0	108.16	4.6	33.81	2.33	0.7	
107234	c	675179	5428356	21	NAD 27	142.1	02D/15		0.05	7.38	8.3	9.36	1.0	470.0	466.49	2.50	29.0	0.29	0.05	77.0	57.93	14.0	19.49	120.0	70.82	7.7	25.42	1.93	1.1	
107240	bc	678563	5420082	21	NAD 27	142.1	02D/15		0.05	7.38	29.0	27.18	1.0	350.0	337.05	2.30	35.0	0.67	0.13	90.0	62.86	15.0	17.76	140.0	60.34	5.6	37.46	3.51	0.9	
107241	bc	682343	5421682	21	NAD 27	141.9	02D/15		0.12	6.59	38.0	34.44	2.0	330.0	314.42	1.68	18.0	0.88	0.05	81.0	62.86	18.0	22.75	580.0	111.61	5.0	36.40	3.51	0.9	
107242	bc	681531	5422877	21	NAD 27	170.8	02D/15		0.10	6.23	9.2	10.68	2.0	410.0	388.96	1.65	46.0	0.18	0.05	73.0	53.06	20.0	24.32	260.0	82.68	11.0	8.40	1.58	0.1	
107243	c	655793	5405931	21	NAD 27	219.6	02D/15		0.05	7.71	37.0	34.55	3.0	370.0	356.18	1.93	33.0	0.25	0.05	74.0	65.86	30.0	29.76	150.0	92.69	5.5	63.85	2.04	0.7	
107244	c	658327	5406620	21	NAD 27	209.1	02D/15		0.05	6.35	20.0	20.72	2.0	340.0	347.22	1.58	19.0	0.30	0.05	63.0	53.22	14.0	18.53	130.0	74.53	5.3	22.90	1.95	0.8	
107245	c	653711	5408370	21	NAD 27	207.9	02D/15		0.05	5.74	23.0	22.07	3.0	280.0	267.95	1.75	8.0	0.34	0.05	78.0	64.52	16.0	20.92	140.0	58.99	4.0	32.37	2.48	0.7	
107246	c	654354	5409757	21	NAD 27	121.0	02D/15		0.26	7.89	49.0	46.81	3.0	310.0	308.40	2.14	42.0	0.12	0.40	91.0	82.86	35.0	34.68	140.0	96.10	7.8	42.38	1.78	1.0	
107247	c	65499																												



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Ce2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
107272	bc	717589	5436061	21	NAD 27	69.2	02E/01		0.15	4.42	14.0	15.28	1.0	180.0	186.93	0.90	17.0	0.13	0.15	0.05	43.0	37.96	4.0	8.28	200.0	62.79	4.0	14.87	0.82	0.1
107273	c	714914	5436737	21	NAD 27	88.9	02E/01		0.05	4.08	3.8	7.26	1.0	240.0	278.31	0.82	1.0	0.05	0.05	0.07	74.0	54.96	5.0	6.15	220.0	39.29	4.0	1.00	0.61	1.1
107274	bc	713240	5436190	21	NAD 27	106.4	02E/01		0.05	10.85	2.4	4.92	2.0	590.0	698.09	1.89	18.0	0.07	0.05	0.40	68.0	34.90	5.0	11.00	110.0	103.11	14.0	9.34	1.32	0.1
107275	c	710996	5436226	21	NAD 27	89.3	02E/01		0.05	4.71	4.1	5.52	1.0	290.0	312.72	0.86	1.0	0.12	0.05	0.69	44.24	1.0	6.46	210.0	44.67	5.0	1.00	0.99	0.1	
107276	c	709184	5436741	21	NAD 27	86.4	02E/01		1.05	6.45	28.0	29.08	1.0	480.0	585.73	1.32	18.0	0.15	0.05	0.82	50.0	56.95	69.0	62.40	85.0	79.09	13.0	4.62	6.53	0.1
107277	c	705223	5436544	21	NAD 27	68.0	02E/01		0.05	6.64	7.0	8.99	1.0	300.0	348.75	1.22	13.0	0.16	0.05	0.69	54.06	4.0	10.14	180.0	58.35	12.0	4.03	1.10	0.1	
107278	c	703167	5437018	21	NAD 27	80.1	02E/01		0.05	4.94	1.5	3.62	1.0	280.0	287.86	1.17	0.5	0.02	0.05	0.30	82.11	1.0	6.05	120.0	43.57	10.0	1.00	0.94	2.1	
107279	c	700273	5436338	21	NAD 27	76.4	02E/01		0.05	4.98	6.3	7.52	1.0	250.0	285.56	1.08	7.0	0.29	0.05	0.28	20.75	3.0	11.01	80.0	49.56	4.8	1.00	0.80	0.1	
107280	bc	700844	5436372	21	NAD 27	81.6	02E/01		0.05	5.13	5.1	7.38	1.0	300.0	388.23	0.89	1.0	0.06	0.05	0.30	20.75	1.0	7.50	85.0	35.29	5.0	1.00	1.28	2.2	
107281	c	700745	5440433	21	NAD 27	102.6	02E/01		0.05	5.68	4.7	6.06	1.0	280.0	319.17	1.26	11.0	0.41	0.05	0.40	33.31	10.0	15.44	540.0	103.31	4.7	7.19	1.30	0.1	
107283	c	698880	5440822	21	NAD 27	136.2	02E/01		0.05	5.72	7.7	9.78	1.0	310.0	319.86	1.38	8.0	0.57	0.05	0.69	48.00	18.0	20.26	950.0	182.00	3.5	25.27	1.43	1.7	
107284	c	695079	5441600	21	NAD 27	138.0	02E/01		0.05	4.91	6.5	7.90	1.0	240.0	270.60	0.80	2.0	0.47	0.05	0.40	44.26	5.0	7.93	1310.0	88.96	4.5	1.00	0.57	0.1	
107285	c	718442	5441960	21	NAD 27	122.0	02E/01		0.05	3.11	0.8	1.00	1.0	330.0	404.11	0.25	2.0	0.12	0.05	0.21	12.14	1.0	10.98	27.0	30.57	2.8	1.00	0.05	0.1	
107286	c	712173	5442725	21	NAD 27	104.9	02E/01		0.05	4.93	28.0	33.09	1.0	290.0	350.82	1.17	4.0	0.08	0.05	0.47	31.86	1.0	12.79	150.0	45.97	10.0	1.00	0.98	0.1	
107287	c	710795	5439273	21	NAD 27	78.2	02E/01		0.05	7.27	20.0	27.67	1.0	360.0	463.84	1.63	3.0	0.07	0.05	0.91	80.37	4.0	11.02	75.0	69.73	11.0	9.16	1.84	0.1	
107288	bc	707093	5443165	21	NAD 27	79.2	02E/01		0.05	5.53	10.0	10.94	1.0	380.0	366.68	1.21	7.0	0.20	0.05	0.38	20.97	4.0	13.69	260.0	67.71	8.8	1.00	0.77	0.1	
107289	c	704784	5443075	21	NAD 27	107.3	02E/01		0.05	6.41	3.5	5.83	1.0	330.0	324.80	1.62	23.0	0.33	0.05	0.64	49.35	10.0	16.25	240.0	97.97	10.0	16.32	1.67	0.1	
107290	c	702883	5443151	21	NAD 27	124.3	02E/01		0.05	5.98	0.3	2.14	1.0	710.0	750.93	0.81	2.0	0.11	0.05	0.24	12.32	1.0	15.11	86.0	55.70	5.2	1.00	0.90	0.1	
107291	bc	700835	5442730	21	NAD 27	89.7	02E/01		0.05	4.81	2.5	3.86	1.0	330.0	368.03	1.03	2.0	0.26	0.05	0.25	13.15	3.0	10.80	220.0	53.44	4.6	1.00	0.71	0.1	
107292	c	699120	5442780	21	NAD 27	100.1	02E/01		0.05	7.76	0.3	1.00	1.0	1000.0	1122.79	2.86	2.0	0.24	0.05	0.10	12.53	3.0	28.61	220.0	70.65	8.4	1.00	0.05	1.2	
107293	bc	697063	5443089	21	NAD 27	159.9	02E/01		0.05	7.13	0.3	2.17	1.0	720.0	790.78	2.22	0.5	0.11	0.05	0.10	6.96	3.0	14.19	130.0	67.07	8.5	1.00	0.85	0.1	
107294	c	695177	5443097	21	NAD 27	131.7	02E/01		0.05	6.76	0.9	2.21	1.0	500.0	590.72	1.42	1.0	0.43	0.05	0.18	41.24	1.0	9.52	17.0	7.37	6.2	1.00	0.64	1.3	
107295	c	692698	5441635	21	NAD 27	137.2	02E/01		0.05	5.70	16.0	17.09	2.0	330.0	319.28	1.45	5.0	0.67	0.05	0.72	10.00	33.65	1.0	16.72	170.0	39.91	6.3	1.00	1.03	2.0
107297	c	691123	5440498	21	NAD 27	155.9	02E/01		0.05	6.57	0.3	2.24	1.0	640.0	709.03	1.56	2.0	0.08	0.05	0.15	7.69	1.0	13.99	51.0	54.35	12.0	1.00	0.80	0.1	
107298	bc	690849	5441487	21	NAD 27	135.1	02E/01		0.05	6.52	0.9	2.59	1.0	280.0	312.30	1.37	33.0	0.71	0.05	0.66	55.64	22.0	23.05	770.0	218.12	4.3	31.82	1.70	0.1	
107299	c	717993	5446087	21	NAD 27	104.3	02E/01		0.05	6.06	0.8	2.50	1.0	670.0	702.07	1.26	2.0	0.14	0.05	0.44	17.08	1.0	9.19	59.0	19.03	5.4	1.00	0.78	0.1	
107300	c	715623	5446646	21	NAD 27	94.9	02E/01		0.05	9.51	0.8	6.31	1.0	870.0	933.36	5.65	4.0	0.30	0.05	0.20	39.48	1.0	9.52	17.0	7.37	6.2	1.00	0.51	0.1	
107301	c	714286	5446925	21	NAD 27	97.1	02E/01		0.05	8.96	0.8	3.39	1.0	830.0	912.26	4.22	4.0	0.43	0.05	0.18	41.24	1.0	5.92	5.0	9.19	13.0	1.00	0.64	1.3	
107302	c	709265	5446895	21	NAD 27	103.5	02E/01		0.05	4.69	0.3	1.00	1.0	500.0	517.14	2.12	4.0	0.27	0.05	0.10	33.65	1.0	16.72	170.0	39.91	6.3	1.00	1.03	2.0	
107303	c	706412	5446819	21	NAD 27	138.8	02E/01		0.05	6.57	0.3	2.24	1.0	640.0	709.03	1.56	2.0	0.08	0.05	0.15	7.69	1.0	13.99	51.0	54.35	12.0	1.00	0.80	0.1	
107304	c	704094	5446780	21	NAD 27	135.1	02E/01		0.05	4.78	1.1	2.97	1.0	440.0	471.44	1.41	5.0	0.10	0.05	0.83	42.66	1.0	12.56	550.0	53.49	14.0	1.00	0.84	0.9	
107305	c	702069	5447150	21	NAD 27	153.1	02E/01		0.05	6.44	11.0	13.06	1.0	260.0	278.11	1.26	42.0	0.52	0.05	0.62	55.41	10.0	15.10	750.0	203.72	6.1	9.48	1.72	0.1	
107306	c	700163	5446763	21	NAD 27	140.2	02E/01		0.05	7.47	0.3	2.01	1.0	470.0	505.93	3.76	21.0	1.12	0.05	0.9	7.08	5.0	13.19	74.0	61.83	16.0	1.00	0.15	0.1	
107307	c	698174	5447243	21	NAD 27	133.5	02E/01		0.05	5.58	6.1	7.67	2.0	250.0	253.92	1.02	41.0	0.88	0.12	0.58	51.08	10.0	13.79	900.0	172.83	4.3	16.62	1.91	0.1	
107308	c	696466	5447709	21	NAD 27	124.0	02E/01		0.05	5.72	7.2	10.38	2.0	280.0	274.53	1.05	22.0	0.57	0.15	0.69	54.51	16.0	20.39	1180.0	191.59	4.1	3.63	2.02	1.4	
107309	c	691224	5446952	21	NAD 27	122.6	02E/01		0.05	5.32	16.0	17.22	5.0	280.0	285.58	1.18	26.0	0.67	0.05	0.85	66.05	23.0	25.32	830.0	206.06	4.4	30.49	2.03	0.9	
107310	c	688275	5446179	21	NAD 27	122.2	02E/01		0.05	4.96	5.1	6.64	1.0	290.0	290.81	1.02	2.0	0.89	0.05	0.60	89.71	1.0	9.15	130.0	37.96	1.8	1.00	1.57	2.5	
107311	c	717476	5449698	21	NAD 27	67.0	02E/01		0.05	8.74	0.3	3.71	1.0	820.0	954.42	2.89	9.0	0.63	0.05	0.70	128.20	1.0	9.79	5.0	10.57	6.0	1.00	3.63	2.4	
107312	c	718340	5451095	21	NAD 27	93.5	02E/01		0.05	9.53	0.3	5.09	1.0	670.0	793.84	4.20	9.0	1.14	0.05	0.27	176.34	1.0	8.67	36.0	27.63	6.2	1.00	4.71	0.1	
107313	c	716013	5451078	21	NAD 27	101.1	02E/01		0.05	8.86	0.8	4.05	1.0	790.0	898.60	4.19	5.0	1.10	0.05	0.37	107.94	1.0	10.34	39.0	10.09	5.2	1.00	2.68	3.4	
107314	c	713983	5450884	21	NAD 27	108.9	02E/01		0.05	5.41	3.6	4.50	2.0	310.0	308.84	4.04	13.0	0.57	0.05	0.89	52.93	10.0	13.33	450.0	88.60	8.5	9.04	2.82	1.6	
107315	c	712653	5451900	21	NAD 27	130.9	02E/01		0.05	5.52	1.4	3.11	1.0	400.0	439.65	2.20	9.0	0.50	0.05	0.12	43.42	1.0	11.38	400.0	45.39	10.0	1.00	1.35	0.1	
107316	c	711546	5451875	21	NAD 27	182.4	02E/01		0.05	6.21	0.3	2.13	1.0	130.0	142.21	1.23	4.0	0.32	0.05	0.20	89.71	1.0	9.15	130.0	37.96	1.8	1.00	1.57	2.5	
107317	c	710335	5450489	21	NAD 27	130.3	02E/01		0.05	6.22	0.3	2.18	1.0	610.0																



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm wt. %	Al2 ppm	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Ce2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
107347	c	702823	5456209	21	NAD 27	122.0	02E/01		0.05	6.31	14.0	14.73	1.0	300.0	300.36	1.22	54.0		0.45	0.11	59.0	41.74	5.0	12.86	710.0	183.12	4.3	10.42	1.20	1.4
107348	c	700558	5456217	21	NAD 27	99.0	02E/01		0.05	6.42	2.1	4.01	1.0	430.0	483.86	1.51	8.0		0.70	0.05	44.0	33.11	9.0	13.21	430.0	106.90	6.7	1.00	1.71	0.1
107349	c	698970	5455866	21	NAD 27	155.7	02E/01		0.05	6.14	3.1	6.48	2.0	370.0	421.75	1.55	12.0		0.32	0.05	77.0	54.42	9.0	16.31	870.0	112.17	5.9	11.61	2.03	0.1
107350	c	698377	5454176	21	NAD 27	109.3	02E/01		0.05	5.82	5.5	6.86	1.0	330.0	367.97	1.20	5.0		0.56	0.05	64.0	43.65	8.0	13.21	870.0	121.19	6.3	1.00	1.77	1.1
107351	c	697148	5454354	21	NAD 27	144.6	02E/01		0.05	5.15	2.4	3.65	3.0	320.0	370.71	1.31	4.0		0.25	0.05	95.0	54.59	3.0	7.97	1020.0	90.73	7.1	1.00	1.39	1.5
107352	c	696856	5452411	21	NAD 27	127.0	02E/01		0.05	7.19	3.5	5.00	2.0	480.0	510.46	1.93	3.0		0.37	0.05	37.0	24.76	7.0	12.72	760.0	112.17	8.1	1.00	1.34	0.1
107353	c	697891	5451388	21	NAD 27	128.0	02E/01		0.05	7.83	2.0	3.55	2.0	490.0	602.25	1.91	9.0		0.15	0.05	8.0	10.12	5.0	18.37	110.0	87.48	7.2	1.00	0.80	0.1
107354	c	695468	5449100	21	NAD 27	119.9	02E/01		0.05	4.26	2.4	3.44	3.0	320.0	329.27	1.05	1.0		0.08	0.05	74.0	38.91	3.0	7.71	1080.0	62.74	6.0	1.00	0.97	1.3
107355	bc	682352	5457121	21	NAD 27	30.5	02E/01		0.05	5.47	13.0	14.10	1.0	400.0	409.19	1.07	3.0		0.03	0.05	92.0	33.97	1.0	12.41	100.0	94.31	5.9	1.00	0.62	1.5
107356	c	687873	5429486	21	NAD 27	0.0	02D/16		0.05	4.58	10.0	8.99	5.0	280.0	224.23	1.07	2.0		0.47	0.05	62.0	42.50	9.0	12.38	280.0	67.76	4.2	5.79	1.85	0.9
107357	c	690321	5427487	21	NAD 27	107.0	02D/16		0.05	5.45	8.1	8.78	2.0	260.0	280.75	1.12	6.0		0.55	0.11	59.0	42.55	9.0	14.84	380.0	95.32	7.5	6.26	1.69	0.9
107358	c	689101	5423283	21	NAD 27	83.0	02D/16		0.30	6.13	2.0	3.25	1.0	310.0	342.28	1.21	1.0		0.29	0.05	63.0	45.14	5.0	14.02	170.0	64.35	2.0	1.00	1.56	0.1
107359	c	687093	5425654	21	NAD 27	56.0	02D/16		0.05	5.59	4.4	6.39	1.0	260.0	257.68	1.31	17.0		0.42	0.05	60.0	44.27	7.0	11.61	310.0	89.83	6.7	7.47	2.34	0.9
107360	c	701733	5425254	21	NAD 27	59.0	02D/16		0.05	4.96	34.0	32.97	1.0	210.0	210.42	1.54	12.0		0.25	0.10	68.0	59.24	18.0	21.48	180.0	64.48	5.5	24.09	2.43	0.1
107361	c	706025	5425417	21	NAD 27	84.0	02D/16		0.05	5.19	4.5	5.65	1.0	250.0	246.95	1.38	15.0		0.36	0.11	55.0	41.67	10.0	14.99	210.0	64.51	5.1	13.77	2.26	0.1
107363	c	711871	5406559	21	NAD 27	113.1	02D/16		0.05	5.85	0.8	2.45	1.0	270.0	262.25	1.26	5.0		0.29	0.05	160.0	25.62	6.0	14.33	45.0	38.35	4.6	1.00	0.55	1.6
107364	c	716291	5409972	21	NAD 27	124.2	02D/16		0.05	5.46	5.5	5.75	1.0	280.0	275.98	1.38	5.0		0.48	0.05	61.0	50.91	7.0	11.86	79.0	36.98	6.6	5.04	2.39	0.1
107365	c	719007	5408289	21	NAD 27	64.2	02D/16		0.05	5.00	2.3	2.78	1.0	260.0	278.56	1.21	4.0		0.78	0.05	28.0	18.65	1.0	9.04	45.0	18.81	5.1	1.00	0.62	0.1
107366	c	718416	5404690	21	NAD 27	89.1	02D/16		0.05	4.86	4.5	5.50	1.0	200.0	196.03	1.24	13.0		0.48	0.05	46.0	32.40	3.0	7.44	81.0	27.97	4.6	1.66	1.48	0.1
107367	c	717260	5405491	21	NAD 27	78.9	02D/16		0.05	5.70	4.4	5.93	1.0	180.0	184.96	2.69	64.0		0.47	0.05	29.0	21.56	1.0	5.81	70.0	25.95	4.3	2.11	1.65	0.7
107368	c	703178	5439738	21	NAD 27	94.2	02E/01		0.05	5.50	15.0	14.75	1.0	370.0	368.31	1.73	3.0		0.34	0.05	70.0	49.69	11.0	14.39	310.0	80.16	6.3	29.11	2.19	0.9
107375	c	687108	5419897	21	NAD 27	79.0	02E/01		0.05	4.83	5.5	6.73	3.0	250.0	242.16	1.89	2.0		0.86	0.05	63.0	50.64	18.0	18.80	1480.0	230.33	3.0	12.17	1.47	1.1
107376	c	682168	5447517	21	NAD 27	72.1	02E/02		0.05	5.22	6.4	7.53	12.0	290.0	296.39	1.17	1.0		0.92	0.05	70.0	48.56	25.0	22.89	1390.0	204.36	3.6	9.05	1.63	1.2
107377	c	685381	5419219	21	NAD 27	134.7	02D/16		0.05	6.10	2.1	3.95	1.0	360.0	364.44	1.08	5.0		0.54	0.05	36.0	21.51	6.0	13.40	79.0	55.82	3.1	1.00	0.80	0.1
107378	c	686709	5450990	21	NAD 27	92.2	02E/01		0.05	5.62	5.0	5.71	7.0	240.0	244.67	0.98	0.5		0.52	0.05	69.0	50.72	17.0	18.36	1140.0	137.59	2.5	6.68	1.57	0.9
107379	c	685207	5448025	21	NAD 27	93.1	02E/01		0.05	4.64	7.5	9.19	1.0	270.0	300.84	1.26	9.0		0.60	0.05	59.0	46.85	15.0	17.12	590.0	156.75	3.8	14.57	1.40	1.2
107379	c	708425	5439962	21	NAD 27	80.8	02E/01		0.05	6.09	19.0	18.06	1.0	390.0	383.63	1.79	9.0		0.21	0.05	90.0	49.64	5.0	10.57	180.0	58.25	1.0	1.00	1.32	0.1
107381	c	708809	5438503	21	NAD 27	82.7	02E/01		0.05	6.40	20.0	19.68	3.0	320.0	315.56	1.69	28.0		0.22	0.05	73.0	47.32	14.0	16.90	250.0	74.78	6.9	28.23	1.71	1.7
107382	c	707961	5439519	21	NAD 27	83.2	02E/01		0.05	5.32	21.0	17.92	1.0	550.0	516.97	2.03	2.0		0.26	0.05	75.0	53.65	13.0	15.24	220.0	66.84	6.6	29.86	2.02	1.4
107383	c	707251	5438887	21	NAD 27	79.0	02E/01		0.25	6.44	21.0	20.86	1.0	390.0	378.94	1.81	34.0		0.11	0.12	99.0	66.76	13.0	15.76	140.0	67.91	12.0	10.50	1.96	1.8
107384	c	706786	5437739	21	NAD 27	77.1	02E/01		0.05	7.31	20.0	18.74	1.0	450.0	420.12	2.26	11.0		0.24	0.05	84.0	59.05	21.0	20.53	280.0	92.06	10.0	29.18	2.17	0.1
107385	c	708042	5440481	21	NAD 27	71.1	02E/01		0.05	6.93	14.0	14.68	1.0	480.0	517.53	1.65	1.0		0.14	0.05	100.0	68.64	2.0	8.96	190.0	62.39	12.0	1.00	1.58	0.2
107386	bc	707166	5440331	21	NAD 27	104.4	02E/01		0.05	6.10	13.0	12.31	1.0	360.0	336.76	1.86	34.0		0.34	0.05	63.0	41.13	12.0	14.07	240.0	69.38	7.3	23.40	2.29	1.2
107387	c	706281	5439756	21	NAD 27	74.3	02E/01		0.15	6.08	8.8	10.25	1.0	370.0	340.00	1.71	26.0		0.19	0.05	61.0	37.14	7.0	11.16	180.0	60.19	6.6	7.06	1.71	0.1
107388	c	708834	5440650	21	NAD 27	76.9	02E/01		0.05	6.69	5.6	6.54	1.0	550.0	516.97	2.03	2.0		0.12	0.05	92.0	50.00	2.0	7.57	230.0	58.42	12.0	1.00	1.27	0.1
107389	c	709332	5441716	21	NAD 27	81.0	02E/02		0.05	5.81	49.0	45.57	1.0	300.0	310.49	1.71	12.0		0.38	0.13	86.0	55.67	16.0	17.91	300.0	80.10	5.2	27.21	2.10	1.5
107390	c	709966	5442271	21	NAD 27	0.0	02E/02		0.05	6.31	16.0	15.40	4.0	320.0	304.49	1.72	17.0		0.33	0.05	77.0	47.71	10.0	15.39	340.0	72.33	8.7	29.59	1.96	1.1
107391	bc	710368	5443221	21	NAD 27	0.0	02E/02		0.13	5.89	33.0	30.31	2.0	370.0	369.50	2.05	16.0		0.27	0.05	82.0	58.56	13.0	17.72	200.0	65.40	7.5	30.51	1.98	0.1
107392	c	672526	5433149	21	NAD 27	0.0	02E/02		0.05	6.91	56.4	52.21	2.0	380.0	391.97	2.65	12.0		0.24	0.11	75.0	54.19	7.0	14.04	150.0	63.92	7.4	24.81	2.73	0.1
107393	c	672810	5431452	21	NAD 27	77.7	02E/02		0.10	5.50	40.0	33.60	10.0	280.0	251.85	1.55	4.0		0.60	0.19	88.0	70.19	29.0	27.32	570.0	135.13	4.1	58.80	2.55	1.0
107394	c	670957	5433756	21	NAD 27	0.0	02E/02		0.05	6.41	67.5	57.27	5.0	350.0	331.26	2.69	7.0		0.63	0.24	120.0	95.15	28.0	30.36	440.0	117.25	7.9	37.06	2.79	0.1
107395	c	671159	5432922	21	NAD 27	81.0	02E/02		0.05	6.12	55.1	45.81	1.0	270.0	254.57	1.65	6.0		1.26	0.33	96.0	71.02	34.0	31.92	740.0	188.60	4.6	74.05	4.72	2.2
107396	c	670508	5432337	21	NAD 27	80.7	02E/02		0.05	6.18	72.2	60.55	22.0	250.0	259.79	1.78	9.0		0.93	0.26	120.0	88.60	36.0	34.59	1390.0	2				



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm wt. %	As1 ppm	As2 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
107814	c	711642	5437866	21	NAD 27	66.0	02E/01		0.05	6.27	17.0	16.44	1.2	29.0	0.18	0.11	0.16	0.11	54.0	37.88	5.0	9.17	180.0	66.32	5.3	20.29	1.59	1.0
107815	c	709147	5436912	21	NAD 27	93.4	02E/01		0.21	5.77	21.0	20.79	1.52	53.0	0.24	0.12	0.17	0.12	67.0	50.41	14.0	16.17	280.0	83.19	6.8	21.18	1.22	1.7
107816	c	706421	5435342	21	NAD 27	89.9	02E/01		0.05	5.32	14.0	13.64	1.00	40.0	0.27	0.05	0.30	0.13	84.0	53.68	12.0	13.27	230.0	60.57	5.0	22.73	2.27	1.0
107817	c	705348	5438766	21	NAD 27	72.1	02E/01		0.05	5.50	16.0	16.00	1.00	33.0	0.30	0.13	0.17	0.10	71.0	52.08	9.0	12.42	300.0	81.16	5.1	22.65	2.19	1.0
107818	c	7042871	5439681	21	NAD 27	83.4	02E/01		0.05	7.22	21.0	21.09	1.00	44.0	0.30	0.05	0.40	0.30	78.0	55.35	11.0	14.22	420.0	126.45	8.7	31.11	1.40	0.1
107819	c	704725	5442213	21	NAD 27	79.5	02E/01		0.05	5.90	16.0	14.23	1.00	48.0	0.30	0.05	0.40	0.30	78.0	55.35	6.0	13.36	360.0	81.77	10.0	10.0	1.65	0.1
107820	bc	702543	5440705	21	NAD 27	86.5	02E/01		0.05	6.73	6.0	10.15	1.00	51.0	0.21	0.05	0.21	0.05	95.0	60.30	1.0	10.33	300.0	69.57	21.0	1.00	1.24	0.1
107821	bc	699208	5438809	21	NAD 27	27.6	02E/01		0.05	4.38	4.3	5.69	1.00	23.0	0.26	0.05	0.26	0.05	60.0	35.31	2.0	8.65	610.0	57.10	4.0	1.00	1.04	1.4
107822	c	697444	5440805	21	NAD 27	102.1	02E/01		0.05	5.20	8.9	8.35	9.0	32.0	0.53	0.05	0.53	0.05	54.0	44.42	15.0	16.54	1090.0	169.22	4.1	11.38	1.61	1.2
107823	bc	714043	5442818	21	NAD 27	78.9	02E/01		0.05	5.80	27.0	25.11	1.00	33.0	0.29	0.05	0.29	0.05	57.0	44.81	15.0	11.91	210.0	65.68	6.0	15.65	2.53	0.1
107824	c	712754	5440288	21	NAD 27	69.0	02E/01		0.18	5.77	91.6	79.79	7.0	41.0	0.20	0.23	0.20	0.23	76.0	55.31	13.0	16.32	220.0	72.72	8.3	31.01	1.97	0.1
107826	c	708566	5444747	21	NAD 27	63.9	02E/01		0.05	4.95	6.0	6.49	1.00	29.0	0.45	0.05	0.45	0.05	77.0	51.51	12.0	15.67	210.0	61.95	5.9	9.57	2.18	1.7
107827	c	706026	5445463	21	NAD 27	114.3	02E/01		0.05	5.95	4.0	5.01	1.00	45.0	0.50	0.05	0.50	0.05	77.0	64.05	15.0	18.06	350.0	103.03	7.8	17.39	2.83	1.1
107828	bc	704177	5445336	21	NAD 27	126.0	02E/01		0.05	7.47	5.1	6.09	2.00	53.0	0.40	0.05	0.40	0.05	70.0	57.14	13.0	17.83	300.0	117.26	19.0	13.28	1.49	0.1
107829	c	702326	5444808	21	NAD 27	121.3	02E/01		0.05	5.68	3.9	5.21	3.00	36.0	0.67	0.05	0.67	0.05	63.0	45.81	13.0	15.08	840.0	154.69	6.8	12.40	1.81	1.4
107830	c	700502	5444632	21	NAD 27	98.4	02E/01		0.05	5.21	3.2	4.09	1.00	36.0	0.47	0.05	0.47	0.05	51.0	40.40	8.0	12.94	490.0	86.32	4.7	8.81	1.94	1.0
107831	c	699190	5445051	21	NAD 27	142.4	02E/01		0.05	5.15	3.1	3.92	1.00	30.0	0.58	0.05	0.58	0.05	64.0	44.27	8.0	20.86	110.0	144.84	4.3	4.37	1.08	1.4
107832	c	697029	5444938	21	NAD 27	128.5	02E/01		0.05	5.45	13.0	12.66	3.00	32.0	0.68	0.05	0.68	0.05	81.0	61.88	22.0	20.86	120.0	200.48	4.1	26.00	2.23	2.0
107833	c	694965	5445259	21	NAD 27	103.5	02E/01		0.05	5.78	7.5	9.76	3.00	28.0	0.72	0.12	0.72	0.12	78.0	52.63	13.0	14.33	940.0	162.20	4.0	25.02	2.50	1.6
107834	c	692896	5443081	21	NAD 27	132.4	02E/01		0.05	5.44	21.0	19.79	6.00	31.0	0.84	0.05	0.84	0.05	87.0	61.73	28.0	26.05	1000.0	185.11	4.5	31.75	1.95	0.1
107835	c	692485	5445156	21	NAD 27	121.5	02E/01		0.05	5.18	5.7	6.47	4.00	28.0	0.92	0.11	0.92	0.11	82.0	54.29	15.0	15.99	1540.0	196.87	3.7	13.18	1.66	2.0
107836	c	689260	5444721	21	NAD 27	113.3	02E/01		0.05	5.08	13.0	13.20	8.00	29.0	0.64	0.05	0.64	0.05	81.0	56.91	16.0	15.96	1240.0	163.66	3.6	9.08	1.34	1.5
107837	c	718564	5447691	21	NAD 27	91.6	02E/01		0.05	5.64	3.0	4.02	1.00	33.0	0.44	0.05	0.44	0.05	70.0	53.67	8.0	12.82	290.0	73.63	7.3	11.84	2.49	1.1
107838	c	716243	5448438	21	NAD 27	83.1	02E/01		0.05	5.05	2.5	2.97	1.00	34.0	0.59	0.05	0.59	0.05	78.0	48.50	7.0	10.78	280.0	56.07	5.3	7.99	2.40	0.1
107839	c	714239	5449121	21	NAD 27	113.9	02E/01		0.05	5.74	3.5	4.82	1.00	31.0	0.47	0.05	0.47	0.05	59.0	45.22	11.0	13.95	370.0	94.70	9.0	14.57	2.31	0.1
107840	c	709609	5448684	21	NAD 27	92.3	02E/01		0.05	5.81	4.2	5.84	3.00	26.0	0.45	0.05	0.45	0.05	110.0	65.75	9.0	14.01	380.0	92.21	6.3	16.81	2.25	0.1
107841	c	707451	5448764	21	NAD 27	93.8	02E/01		0.05	5.40	5.1	5.01	1.00	28.0	0.48	0.05	0.48	0.05	55.0	41.31	8.0	12.02	290.0	81.14	8.8	9.98	1.49	0.1
107842	c	707969	5449149	21	NAD 27	109.9	02E/01		0.05	5.33	10.0	9.27	4.00	37.0	0.63	0.05	0.63	0.05	87.0	56.09	20.0	18.93	610.0	115.87	8.0	22.63	2.88	0.1
107843	c	718413	5453458	21	NAD 27	78.2	02E/01		0.05	5.61	4.0	5.18	1.00	33.0	0.51	0.05	0.51	0.05	86.0	53.31	17.0	19.54	880.0	164.93	3.0	15.23	1.17	0.1
107844	c	700559	5449173	21	NAD 27	123.1	02E/01		0.05	5.12	6.1	6.19	1.00	27.0	0.30	0.40	0.30	0.40	57.0	33.17	20.0	11.58	520.0	172.19	10.0	7.74	0.92	0.1
107845	c	699072	5449121	21	NAD 27	122.8	02E/01		0.05	5.06	3.9	5.21	3.00	36.0	0.48	0.05	0.48	0.05	78.0	52.09	15.0	15.94	570.0	160.04	4.9	22.13	1.45	0.1
107846	c	697540	5450027	21	NAD 27	114.4	02E/01		0.05	5.01	3.6	3.90	1.00	48.0	0.36	0.05	0.36	0.05	66.0	34.40	7.0	8.88	940.0	85.71	11.0	1.00	0.23	0.1
107847	bc	689427	5447052	21	NAD 27	111.7	02E/01		0.05	5.21	6.7	9.28	1.00	26.0	0.23	0.05	0.23	0.05	75.0	44.28	7.0	11.04	380.0	89.22	5.0	2.11	0.93	0.1
107848	c	718769	5449149	21	NAD 27	105.2	02E/01		0.16	5.12	14.0	14.25	3.00	23.0	0.50	0.05	0.50	0.05	65.0	47.58	17.0	19.31	980.0	164.93	3.0	15.23	1.17	0.1
107849	c	718413	5453458	21	NAD 27	98.7	02E/01		0.05	5.61	4.0	5.18	1.00	33.0	0.51	0.05	0.51	0.05	86.0	53.31	17.0	19.54	880.0	164.93	3.0	15.23	1.17	0.1
107850	c	716445	5453528	21	NAD 27	92.7	02E/01		0.05	5.14	5.0	5.07	1.00	36.0	0.57	0.05	0.57	0.05	86.0	50.05	10.0	12.31	680.0	110.37	6.9	6.35	1.96	0.1
107851	c	714663	5454097	21	NAD 27	101.9	02E/01		0.05	5.78	4.7	5.12	1.00	35.0	0.49	0.05	0.49	0.05	78.0	48.05	9.0	11.67	310.0	83.05	8.5	7.59	1.50	1.8
107852	c	712556	5454188	21	NAD 27	108.1	02E/01		0.05	4.26	1.7	2.18	1.00	25.0	0.69	0.05	0.69	0.05	88.0	41.75	7.0	8.72	280.0	43.39	4.4	7.01	2.01	1.5
107853	c	710611	5453801	21	NAD 27	114.3	02E/01		0.05	5.68	5.8	6.29	1.00	38.0	0.59	0.05	0.59	0.05	76.0	49.46	15.0	15.94	500.0	115.38	8.6	18.31	1.78	1.2
107854	bc	703280	5452059	21	NAD 27	115.1	02E/01		0.05	5.86	3.3	4.13	1.00	35.0	0.43	0.05	0.43	0.05	79.0	39.02	8.0	12.91	350.0	96.78	17.0	12.40	1.47	1.2
107855	bc	708561	5454251	21	NAD 27	123.3	02E/01		0.05	6.29	15.0	14.92	1.00	38.0	0.65	0.05	0.65	0.05	72.0	46.20	12.0	15.32	670.0	138.33	8.6	15.67	1.72	1.4
107856	c	707661	5452148	21	NAD 27	115.8	02E/01		0.05	5.87	3.3	4.44	1.00	38.0	0.67	0.05	0.67	0.05	76.0	43.69	13.0	15.59	570.0	115.67	9.0	6.74	1.35	0.1
107857	bc	706761	5454203	21	NAD 27	88.3	02E/01		0.05	7.56	2.1	2.81	1.00	56.0	0.63	0.05	0.63	0.05	62.0	35.93	7.0	16.45	290.0	84.04	12.0	1.66	0.73	0.1
107858	c	705051	5454140	21	NAD 27	109.2	02E/01		0.05	10.62	0.9	3.36	1.00	71.0	0.19	0.05	0.19	0.05	120.0	115.93	20.0	29.49	150.0	110.95	4.4	34.47	2.76	0.1
107859	c	703049	5454333	21	NAD 27	113.2	02E/01		0.05	8.28	8.6	9.49	1.00	59.0	0.24	0.05	0.24	0.05	78.0	49.95	16.0	19.95	330.0	155.68	17.0	32.64	1.34	0.1
107860	c	7013																										



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm wt. %	Al2 ppm	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
107889	c	695425	5452579	21	NAD 27	127.4	02E/01			0.05	5.37	9.3	9.41	7.0	310.0	300.77	1.33	22.0	0.60	0.05	0.87	120.0	75.0	49.84	21.0	18.96	920.0	148.92	4.3	19.35	1.65	1.0
107890	c	695405	5450985	21	NAD 27	127.7	02E/01			0.05	5.41	8.8	9.81	6.0	250.0	244.02	1.25	22.0	0.87	0.10	1.03	120.0	68.44	19.0	18.75	1380.0	226.63	6.4	14.85	2.46	1.9	
107891	c	686855	5455697	21	NAD 27	81.1	02D/01			0.05	5.53	32.0	29.69	6.0	320.0	320.93	1.49	3.0	0.60	0.22	0.74	120.0	46.58	33.0	29.33	900.0	175.97	4.0	49.02	2.08	1.1	
107892	c	685110	5423385	21	NAD 27	148.9	02D/01			0.05	6.70	20.0	19.61	4.0	360.0	374.51	2.02	8.0	0.49	0.05	0.80	68.0	68.0	33.0	23.72	450.0	130.00	5.9	28.87	1.74	0.1	
107893	c	685938	5420628	21	NAD 27	113.7	02D/01			0.05	6.81	4.4	5.39	1.0	440.0	403.68	2.22	4.0	0.28	0.05	0.60	37.15	6.0	12.44	220.0	77.48	9.0	21.55	1.68	1.0		
107894	c	692305	5423124	21	NAD 27	64.6	02D/16			0.35	54.9	13.0	12.82	2.0	290.0	301.62	1.91	9.0	0.56	0.12	0.92	60.0	63.75	23.0	25.07	640.0	101.89	8.0	21.55	1.68	1.0	
107895	c	698000	5421800	21	NAD 27	0.0	02D/16			0.05	5.51	54.4	48.29	1.0	360.0	354.03	2.25	2.0	0.45	0.11	1.00	100.0	70.36	23.0	22.81	250.0	68.73	6.2	38.99	3.67	1.7	
107896	c	700084	5421557	21	NAD 27	76.3	02D/16			0.05	5.05	9.4	9.31	1.0	280.0	267.24	1.80	7.0	0.47	0.05	0.61	60.0	40.41	8.0	12.86	270.0	68.47	5.1	11.82	1.61	0.1	
107898	c	707473	5420621	21	NAD 27	0.0	02D/16			0.05	5.05	2.3	3.20	1.0	290.0	294.09	1.53	3.0	0.41	0.05	0.40	37.47	7.0	9.50	92.0	37.11	4.9	14.5	1.00	1.0	1.0	
107899	c	691392	5411939	21	NAD 27	168.2	02D/16			0.05	4.71	0.3	1.00	1.0	330.0	323.45	2.61	5.0	0.39	0.05	0.80	25.83	1.0	5.86	46.0	12.49	6.3	1.00	0.23	0.1	0.1	
107900	c	713841	5408449	21	NAD 27	24.8	02D/16			0.05	5.42	3.6	4.61	1.0	290.0	284.89	3.28	7.0	0.45	0.05	0.58	33.91	5.0	7.81	75.0	36.37	5.9	2.97	1.43	0.1	0.1	
107901	c	718862	5410080	21	NAD 27	72.4	02D/16			0.05	4.95	3.6	6.92	1.0	240.0	225.37	3.19	30.0	0.56	0.05	0.40	32.72	3.0	6.39	78.0	29.59	4.1	5.65	1.91	0.1	0.1	
107902	c	718364	5407038	21	NAD 27	48.5	02D/16			0.05	5.47	6.2	6.82	1.0	270.0	270.00	3.40	9.0	0.44	0.05	0.53	31.57	5.0	8.51	83.0	36.01	5.6	6.56	1.29	0.1	0.1	
107903	c	714764	5408040	21	NAD 27	199.8	02D/16			0.05	4.82	3.8	3.98	1.0	280.0	258.64	3.62	7.0	0.52	0.05	0.53	35.76	4.0	6.98	70.0	27.89	5.0	4.70	1.89	0.9	0.9	
117001	c	736004	5449100	21	NAD 27	114.6	02F/04			6.49	18.0	15.66	4.0	270.0	249.47	3.22	50.0	0.71	0.15	0.55	62.0	42.57	12.0	13.90	520.0	98.75	6.8	25.50	2.16	0.9	0.9	
117002	c	736930	5449018	21	NAD 27	119.5	02F/04			7.64	1.8	1.00	0.5	470.0	477.26	5.65	18.0	0.63	0.05	0.60	33.66	1.0	9.06	150.0	25.75	12.0	1.01	1.35	1.0	1.0	1.0	
117003	c	737959	5448981	21	NAD 27	73.4	02F/04			6.37	0.9	1.00	0.5	600.0	668.87	4.50	39.0	0.86	0.05	0.57	29.39	1.0	12.63	130.0	21.58	8.1	1.00	1.57	1.0	1.0	1.0	
117004	c	7449415	5449415	21	NAD 27	120.2	02F/04			6.15	0.6	1.00	0.5	500.0	484.95	4.14	13.0	0.58	0.05	0.89	32.94	1.0	9.56	110.0	21.77	14.0	1.46	1.12	1.2	1.2	1.2	
117005	c	740182	5449219	21	NAD 27	96.3	02F/04			7.69	1.4	1.00	0.5	480.0	506.74	4.44	36.0	0.42	0.13	0.79	22.59	1.0	7.53	95.0	24.60	11.0	1.00	0.79	0.9	0.9	0.9	
117006	c	739949	5449799	21	NAD 27	137.1	02F/04			6.82	0.6	1.00	0.5	640.0	638.08	4.30	5.0	0.40	0.05	1.00	30.40	1.0	10.59	100.0	22.99	9.5	1.11	1.66	0.9	0.9	0.9	
117007	c	740826	5450342	21	NAD 27	104.2	02F/04			10.37	2.8	2.01	0.5	290.0	298.85	14.80	160.0	0.28	0.22	0.44	38.80	11.0	13.34	96.0	63.29	13.0	8.87	1.50	0.6	0.6	0.6	
117008	c	741943	5450108	21	NAD 27	73.4	02F/04			8.20	0.6	1.00	0.5	470.0	477.26	5.65	18.0	0.63	0.05	0.60	33.66	1.0	9.06	150.0	25.75	12.0	1.01	1.35	1.0	1.0	1.0	
117009	c	743225	5451401	21	NAD 27	53.9	02F/04			8.76	0.3	1.00	0.5	440.0	491.70	5.28	13.0	0.67	0.05	0.20	6.95	1.0	8.61	79.0	7.63	6.8	1.00	3.59	1.1	1.1	1.1	
117010	c	744281	5451523	21	NAD 27	77.6	02F/04			6.32	0.9	1.00	0.5	690.0	677.95	8.66	11.0	0.83	0.05	1.00	39.71	1.0	11.25	270.0	19.82	12.0	1.02	1.47	1.0	1.0	1.0	
117011	c	745238	5451580	21	NAD 27	88.4	02F/04			7.27	1.3	1.00	0.5	490.0	494.76	4.69	7.0	0.49	0.05	0.66	40.61	1.0	8.51	210.0	27.56	16.0	1.00	1.31	0.9	0.9	0.9	
117012	c	746529	5451310	21	NAD 27	82.1	02F/04			6.33	4.5	4.42	0.5	420.0	407.45	4.97	9.0	0.67	0.05	1.30	91.71	8.0	11.06	320.0	61.21	6.9	9.16	3.69	1.4	1.4	1.4	
117013	c	747423	5451089	21	NAD 27	79.0	02F/04			7.46	2.8	2.83	0.5	470.0	401.79	5.84	25.0	0.64	0.14	1.00	65.19	10.0	10.33	210.0	54.72	8.1	6.34	2.94	1.1	1.1	1.1	
117014	c	725396	5439050	21	NAD 27	100.6	02F/04			6.08	30.0	24.66	8.0	470.0	454.66	2.53	15.0	0.29	0.15	0.98	65.02	14.0	16.75	170.0	61.47	8.4	26.96	2.47	1.0	1.0	1.0	
117015	c	724690	5440239	21	NAD 27	144.3	02F/04			5.50	11.0	9.45	0.5	280.0	254.25	1.55	104.0	0.32	0.13	0.61	45.86	8.0	9.72	270.0	72.69	4.3	10.29	2.46	1.0	1.0	1.0	
117016	c	710898	5447327	21	NAD 27	53.1	02E/08			6.73	20.0	16.53	0.5	480.0	456.46	2.33	8.0	0.75	0.23	83.0	57.47	23.0	21.03	820.0	154.50	7.2	33.90	2.82	1.2	1.2	1.2	
117017	c	708516	5475043	21	NAD 27	84.5	02E/08			6.82	25.0	20.69	3.0	250.0	249.31	1.18	60.0	0.86	0.20	59.0	36.98	12.0	12.11	1120.0	132.81	3.7	15.52	2.68	1.1	1.1	1.1	
117018	c	711802	5475768	21	NAD 27	67.5	02E/08			7.69	1.8	25.46	2.0	380.0	390.58	2.68	2.0	1.86	0.29	51.0	24.75	1.0	22.59	130.0	107.57	10.0	12.96	2.65	1.0	1.0	1.0	
117019	c	711506	5480843	21	NAD 27	70.9	02E/08			6.22	19.0	1.00	1.0	11.0	740.0	350.36	5.22	6.0	0.77	0.05	0.82	35.14	19.0	7.47	65.0	31.61	1.1	1.00	1.21	1.4	1.4	1.4
117020	c	711221	5479833	21	NAD 27	99.2	02E/08			1.37	28.0	23.54	2.0	310.0	303.63	2.04	34.0	1.37	0.21	55.0	45.08	16.0	17.19	340.0	136.46	3.8	27.19	2.83	0.9	0.9	0.9	
117021	c	710828	5479083	21	NAD 27	106.4	02E/08			6.73	14.0	11.72	0.5	400.0	429.61	2.92	32.0	1.65	0.18	34.0	27.04	12.0	13.48	240.0	99.39	3.4	13.06	1.97	1.0	1.0	1.0	
117022	bc to c	710696	5477484	21	NAD 27	101.7	02E/08			8.02	61.3	52.80	2.0	250.0	243.07	2.16	53.0	0.82	0.42	52.0	44.30	26.0	24.18	660.0	206.46	6.4	61.52	2.66	0.9	0.9	0.9	
117023	c	697323	5469433	21	NAD 27	76.3	02E/08			7.33	33.0	29.22	2.0	240.0	246.40	1.64	56.0	1.38	0.23	58.0	44.00	22.0	19.62	570.0	165.20	4.1	28.12	3.02	1.2	1.2	1.2	
117024	c	709728	5475910	21	NAD 27	87.3	02E/08			5.67	19.0	16.68	0.5	230.0	237.92	1.61	27.0	1.03	0.20	47.0	32.08	17.0	16.57	650.0	161.77	4.1	18.29	1.78	1.0	1.0	1.0	
117025	c	710048	5474788	21	NAD 27	62.0	02E/08			6.14	55.0	44.75	0.5	360.0	340.83	1.93	9.0	0.77	0.28	69.0	46.45	36.0	28.11	190.0	136.68	6.6	33.47	2.60	1.3	1.3	1.3	
117026	c	695585	5468667	21	NAD 27	0.0	02E/08			7.75	74.1	65.83	3.0	350.0	363.13	1.70	53.0	0.19	0.35	77.0	55.44	10.0	18.77	480.0	118.26	5.2	37.92	2.65	1.2	1.2	1.2	
117028	c	696500	5468782	21	NAD 27	71.3	02E/08			7.22	65.4	58.37	12.0	350.0	383.78	1.81	24.0	0.23	0.35	90.0	62.36	16.0	15.72	540.0	123.55	6.3	33.89	2.62	1.2	1.2	1.2	
117029	c	697323	5469433	21	NAD 27	102.7	02E/08			8.11	32.0	28.52	2.0	570.0	552.66	2.01	23.0	0.15	0.33	14												



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppm	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
117062	c	693752	5462725	21	NAD 27	92.7	02E/08			6.41	31.0	25.23	0.5	320.0	319.37	1.33	17.0		0.58	0.20	79.0	62.51	34.0	27.39	1260.0	248.16	4.0	52.35	1.93	1.2
117063	c	692661	5462698	21	NAD 27	100.4	02E/08			7.87	66.4	56.76	0.5	1300.0	1302.28	2.61	6.0		0.10	0.31	100.0	53.66	22.0	19.63	290.0	126.08	6.5	52.90	1.75	1.4
117064	c	691732	5462118	21	NAD 27	103.4	02E/08			6.52	27.0	23.04	5.0	380.0	331.72	1.45	3.0		1.83	0.28	77.0	61.27	34.0	33.02	880.0	244.62	3.6	42.07	4.41	1.7
117065	c	690491	5461657	21	NAD 27	86.2	02E/08			5.37	100.0	78.53	13.0	280.0	259.92	1.18	6.0		0.68	0.34	92.0	61.27	37.0	27.60	1960.0	199.17	2.9	59.99	2.39	1.4
117066	c	689869	5460831	21	NAD 27	108.0	02E/08			6.29	34.0	28.42	5.0	360.0	350.32	1.63	13.0		0.29	0.25	99.0	67.63	26.0	21.81	630.0	167.67	4.3	38.71	2.24	1.1
117067	c	689499	5459735	21	NAD 27	116.3	02E/08			5.91	9.4	8.66	6.0	240.0	278.89	1.12	9.0		0.38	0.14	76.0	55.07	11.0	11.23	730.0	133.75	4.5	9.85	1.36	1.0
117068	c	689097	5458878	21	NAD 27	125.9	02E/08			5.91	10.0	8.79	2.0	290.0	295.22	1.18	11.0		0.46	0.14	70.0	53.64	15.0	14.81	820.0	154.22	4.3	9.81	1.61	1.0
117069	c	688482	5457945	21	NAD 27	109.0	02E/01			7.17	67.0	58.91	2.0	350.0	355.61	1.55	30.0		0.18	0.33	84.0	53.34	25.0	18.92	350.0	123.32	4.5	42.02	1.73	1.3
117070	c	683693	5459049	21	NAD 27	97.0	02E/08			6.30	27.0	23.28	4.0	340.0	328.55	1.49	2.0		0.71	0.22	80.0	64.69	35.0	28.20	970.0	219.04	4.1	42.44	2.70	1.4
117071	c	705030	5472319	21	NAD 27	118.1	02E/08			6.57	38.0	30.70	3.0	360.0	343.36	1.68	18.0		0.52	0.22	110.0	65.59	31.0	25.95	610.0	127.03	4.3	31.54	3.40	1.4
117072	c	703956	5471921	21	NAD 27	91.6	02E/08			7.08	39.0	33.80	3.0	380.0	381.30	1.67	19.0		0.35	0.25	85.0	55.86	20.0	18.17	470.0	124.32	4.6	25.29	2.62	1.2
117073	c	706176	5473232	21	NAD 27	102.5	02E/08			6.36	8.6	7.70	2.0	400.0	426.92	1.63	13.0		0.36	0.15	65.0	40.32	22.0	22.80	430.0	113.68	6.5	5.74	2.03	0.9
117074	c	706853	5473782	21	NAD 27	89.1	02E/08			6.51	25.0	24.54	3.0	310.0	347.80	1.35	30.0		0.89	0.24	55.0	37.86	31.0	31.28	560.0	163.45	6.5	10.26	2.31	0.9
117075	c	707701	5474349	21	NAD 27	90.3	02E/08			6.38	27.0	23.74	3.0	350.0	359.81	1.48	10.0		0.95	0.22	78.0	52.17	24.0	23.20	790.0	205.99	4.4	42.57	2.74	1.3
117076	c	698095	5472550	21	NAD 27	78.8	02E/08			7.26	19.0	17.92	0.5	450.0	474.11	1.50	36.0		0.95	0.14	96.0	37.27	17.0	22.78	340.0	154.09	6.7	14.25	2.63	1.0
117077	c	696487	5477469	21	NAD 27	124.2	02E/08			6.52	1.7	1.00	0.5	340.0	331.58	0.59	12.0		0.38	0.12	35.0	18.15	1.0	14.20	100.0	39.01	3.8	1.00	1.12	0.6
117078	c	688202	5474298	21	NAD 27	74.5	02E/08			7.69	49.0	43.06	5.0	380.0	406.59	1.95	27.0		0.75	0.16	100.0	67.79	28.0	27.42	180.0	109.42	6.5	49.65	3.36	1.0
117084	c	686034	5476084	21	NAD 27	96.3	02E/08			5.89	30.0	27.99	0.5	390.0	382.96	1.39	5.0		1.59	0.23	61.0	53.45	31.0	31.05	380.0	182.27	3.7	63.44	4.03	1.1
117079	c	687620	5473723	21	NAD 27	62.7	02E/08			8.94	30.0	28.19	0.5	450.0	504.00	2.47	59.0		3.71	0.05	31.0	43.32	50.0	55.04	810.0	653.92	3.2	14.19	3.38	1.4
117087	c	688169	5469424	21	NAD 27	69.4	02E/08			5.26	5.7	4.99	0.5	96.0	113.49	0.57	21.0		0.17	0.05	57.0	55.58	13.0	20.60	130.0	128.11	9.4	15.47	3.84	1.1
117080	c	693152	5477009	21	NAD 27	72.7	02E/08			6.99	27.0	23.50	2.0	360.0	374.28	1.19	37.0		1.26	0.13	50.0	40.89	17.0	20.26	230.0	174.07	5.5	57.35	2.54	1.0
117081	c	692397	5477774	21	NAD 27	100.7	02E/08			6.80	20.0	17.63	2.0	340.0	343.92	1.43	22.0		0.31	0.05	73.0	53.66	19.0	20.03	250.0	143.20	4.8	48.23	2.28	1.2
117083	c	690861	5477565	21	NAD 27	43.5	02E/08			5.99	1.8	1.00	0.5	150.0	148.65	0.55	8.0		3.41	0.05	22.0	35.17	75.0	64.56	960.0	690.80	12.0	56.29	3.11	1.5
117085	c	688202	5474298	21	NAD 27	74.5	02E/08			7.69	49.0	43.06	5.0	380.0	406.59	1.95	27.0		0.75	0.16	100.0	67.79	28.0	27.42	180.0	109.42	6.5	49.65	3.36	1.0
117086	c	688092	5473399	21	NAD 27	96.3	02E/08			5.89	30.0	27.99	0.5	390.0	382.96	1.39	5.0		0.66	0.16	100.0	67.79	32.0	24.89	1540.0	203.38	3.6	59.10	2.72	1.0
117087	c	687620	5473723	21	NAD 27	62.7	02E/08			8.94	30.0	28.19	0.5	450.0	504.00	2.47	59.0		0.17	0.05	57.0	55.58	13.0	20.60	130.0	128.11	9.4	15.47	3.84	1.1
117088	c	688169	5469424	21	NAD 27	69.4	02E/08			5.26	5.7	4.99	0.5	96.0	113.49	0.57	21.0		0.17	0.05	57.0	55.58	13.0	20.60	130.0	128.11	9.4	15.47	3.84	1.1
117089	c	710899	5473898	21	NAD 27	68.4	02E/08			6.26	31.0	26.30	3.0	290.0	261.62	3.83	31.0		0.73	0.12	63.0	37.07	17.0	14.89	830.0	112.63	11.0	21.75	1.82	0.9
117089	c	715958	5478520	21	NAD 27	52.6	02E/08			7.23	13.0	11.28	0.5	390.0	360.32	3.57	26.0		0.70	0.13	76.0	43.19	11.0	12.07	400.0	95.23	6.9	15.56	2.02	1.0
117090	c	720051	5480996	21	NAD 27	71.2	02E/05			7.49	18.0	15.24	5.0	280.0	260.32	2.85	58.0		0.90	0.05	44.0	47.80	10.0	9.77	360.0	97.75	5.3	11.19	1.72	0.8
117091	c	703763	5468923	21	NAD 27	74.7	02E/08			5.95	62.9	48.93	15.0	430.0	383.97	1.39	5.0		0.22	0.34	48.0	49.20	35.0	34.57	1000.0	169.15	3.9	51.32	3.25	1.2
117092	c	706513	5467704	21	NAD 27	92.3	02E/08			6.97	161.0	147.68	2.0	260.0	260.54	0.82	7.0		0.48	0.28	79.0	69.47	10.0	10.67	1780.0	1394.80	2.4	98.54	2.11	0.8
117098	c	702949	5469235	21	NAD 27	84.5	02E/08			6.85	63.8	51.12	7.0	380.0	358.02	1.62	7.0		0.88	0.16	110.0	72.22	35.0	26.24	1280.0	296.08	3.8	68.09	2.89	1.5
117100	c	701941	5470513	21	NAD 27	-64.8	02E/08			6.26	13.0	12.62	0.5	400.0	450.62	1.66	20.0		0.32	0.21	73.0	52.39	15.0	15.93	450.0	124.11	5.2	14.15	2.41	1.1
117101	c	706253	5464783	21	NAD 27	85.9	02E/08			7.47	11.0	10.03	0.5	360.0	377.61	2.14	54.0		0.86	0.05	63.0	42.29	16.0	16.19	550.0	133.84	8.9	20.43	1.74	1.0
117102	c	705529	5463484	21	NAD 27	108.4	02E/08			7.11	18.0	14.66	2.0	340.0	317.91	2.50	20.0		0.86	0.05	73.0	37.47	25.0	22.60	900.0	132.60	8.3	23.98	2.09	0.9
117103	c	705905	5464247	21	NAD 27	82.0	02E/08			8.06	45.0	40.52	3.0	430.0	462.12	2.46	44.0		0.43	0.05	88.0	78.53	12.0	17.78	520.0	121.21	7.0	69.18	4.82	1.7
117096	c	703950	5467768	21	NAD 27	94.6	02E/08			6.97	103.0	91.81	5.0	350.0	343.91	1.92	10.0		0.48	0.28	79.0	69.47	10.0	10.67	1780.0	1394.80	2.4	98.54	2.11	0.8
117097	c	703051	5466767	21	NAD 27	92.3	02E/08			5.97	161.0	147.68	2.0	260.0	260.54	0.82	7.0		0.22	0.34	48.0	49.20	35.0	34.57	1000.0	169.15	3.9	51.32	3.25	1.2
117104	c	699880	5463421	21	NAD 27	113.1	02E/08			6.53	6.3	5.92	2.0	410.0	410.90	1.41	6.0		0.62	0.05	110.0	69.25	14.0	12.82	1850.0	197.95	4.5	10.93	1.90	1.5
117105	c	699880	5464252	21	NAD 27	93.3	02E/08			6.29	39.0	31.53	34.0	440.0	414.21	1.29	11.0		0.50	0.05	88.0	55.31	28.0	23.03	1430.0	205.96	3.5	62.93	2.49	1.3
117106	c	695526	5473740	21	NAD 27	7.0	02E/08			7.52	52.2	44.82	1.0	830.0	830.54	1.96	38.0		0.52	0.29	73.0	65.22	37.0	28.53	250.0	173.63	6.7	72.06	4.25	1.2
117107	c	695363	5472990	21	NAD 27	0.0	02E/08			6.95	42.0	41.98	4.0	780.0	797.28	1.44	77.0		0.32	0.22	51.0	40.34	15.0	15.96	200.0	129.23	6.0	57.19	2.34	0.8
117108	c	694820	54																											



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppm	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
117137	c	698217	5461127	21	NAD 27	127.6	02E/08				6.03	21.0	17.60	5.0	300.0	283.95	1.13	29.0	0.72	0.05	85.0	52.78	26.0	23.06	1790.0	286.67	4.1	22.73	2.23	1.1	
117138	c	698972	5461524	21	NAD 27	150.0	02E/08				6.63	25.0	21.73	3.0	330.0	333.11	1.14	47.0	0.84	0.05	73.0	51.27	20.0	16.57	1890.0	288.28	4.8	23.16	1.81	1.2	
117140	c	699159	5462546	21	NAD 27	99.7	02E/08				6.19	21.0	19.24	3.0	440.0	444.83	1.36	18.0	0.70	0.12	72.0	55.17	43.0	36.37	2040.0	298.21	5.7	17.22	2.02	1.1	
117141	bc to c	699768	5465608	21	NAD 27	81.0	02E/08				6.33	41.0	35.98	2.0	350.0	344.80	1.81	17.0	0.74	0.05	88.0	60.75	49.0	41.26	1910.0	323.71	7.7	34.28	3.16	1.7	
117142	bc to c	699570	5466628	21	NAD 27	95.1	02E/08				6.38	46.0	41.62	4.0	310.0	308.09	1.86	75.0	0.25	0.05	75.0	47.00	24.0	22.58	530.0	176.86	6.3	28.57	1.87	1.1	
117143	c	734330	5452853	21	NAD 27	73.2	02F/04				9.44	8.0	1.00	0.5	600.0	624.64	5.62	6.0	1.55	0.11	180.0	45.19	1.0	6.62	50.0	18.50	6.7	2.88	1.39	1.0	
117144	c	733226	5452458	21	NAD 27	152.1	02F/04				5.63	2.9	2.63	0.5	420.0	362.24	4.78	32.0	0.55	0.05	92.0	62.77	6.0	8.51	190.0	41.59	5.3	8.36	2.94	0.9	
117145	c	732496	5452543	21	NAD 27	152.7	02F/04				5.74	3.9	3.85	0.5	380.0	357.21	3.07	23.0	0.54	0.05	110.0	67.38	6.0	9.31	370.0	62.67	5.6	4.18	3.43	1.5	
117146	c	731787	5452489	21	NAD 27	150.5	02F/04				4.97	2.1	2.22	0.5	380.0	344.63	3.14	20.0	0.54	0.05	81.0	50.47	4.0	6.27	160.0	30.37	3.4	4.07	2.59	0.9	
117147	c	731079	5451840	21	NAD 27	122.8	02F/04				6.07	1.9	2.16	0.5	560.0	531.44	2.84	11.0	0.51	0.05	110.0	71.88	2.0	6.12	150.0	24.79	3.7	3.61	2.69	1.0	
117148	c	730086	5451471	21	NAD 27	107.1	02F/04				6.11	2.1	2.21	0.5	560.0	510.20	2.96	16.0	0.60	0.05	120.0	64.42	4.0	7.43	210.0	26.33	3.9	4.41	3.57	1.2	
117149	c	729180	5450883	21	NAD 27	106.0	02F/04				5.41	3.1	3.12	0.5	400.0	363.75	3.06	13.0	0.76	0.05	130.0	77.78	9.0	10.98	300.0	43.15	3.4	5.80	5.96	1.4	
117150	c	729329	5449909	21	NAD 27	90.3	02F/04				7.13	2.0	1.00	0.5	390.0	365.67	5.44	8.0	0.76	0.05	84.0	50.95	9.0	10.50	160.0	36.45	11.0	18.03	3.48	1.1	
117151	c	728872	5448374	21	NAD 27	106.1	02F/04				7.32	4.2	4.08	0.5	350.0	366.67	3.69	33.0	0.44	0.05	100.0	61.24	9.0	11.82	310.0	82.43	8.0	17.42	2.33	1.0	
117152	c	730022	5447788	21	NAD 27	116.9	02F/04				6.94	2.6	2.64	0.5	370.0	371.71	8.19	9.0	0.69	0.05	94.0	65.97	7.0	9.80	180.0	43.44	7.7	12.32	4.13	1.3	
117153	c	722532	5450526	21	NAD 27	99.6	02F/04				6.21	3.6	3.74	0.5	370.0	376.03	2.67	50.0	0.43	0.05	74.0	48.18	3.0	8.62	290.0	53.83	9.4	1.62	1.91	0.9	
117154	c	723623	5450645	21	NAD 27	108.1	02F/04				7.01	6.3	5.61	0.5	380.0	387.81	2.82	21.0	0.40	0.05	82.0	58.84	11.0	13.41	410.0	102.82	9.0	16.05	2.58	1.2	
117155	bc	724325	5448856	21	NAD 27	112.1	02F/04				7.31	7.2	6.89	0.5	370.0	373.77	2.72	57.0	0.43	0.05	87.0	60.31	12.0	13.52	330.0	101.95	7.8	12.89	2.80	0.9	
117156	c	724975	5449319	21	NAD 27	114.1	02F/04				4.98	2.7	2.80	0.5	310.0	286.07	2.98	19.0	0.47	0.05	87.0	51.52	5.0	8.13	240.0	40.39	3.9	4.29	2.69	1.0	
117157	c	727165	5445338	21	NAD 27	130.4	02F/04				6.93	5.6	5.33	0.5	430.0	415.16	3.32	57.0	0.51	0.05	100.0	75.58	10.0	12.53	210.0	69.35	6.9	16.10	4.36	1.2	
117158	c	730542	5448874	21	NAD 27	105.6	02F/04				6.50	1.4	1.00	0.5	390.0	359.68	5.39	4.0	0.92	0.05	95.0	57.95	6.0	8.30	150.0	34.27	8.1	12.85	4.07	1.0	
117159	c	744726	5449877	21	NAD 27	56.4	02F/04				6.34	2.9	2.89	0.5	480.0	444.68	5.47	2.0	0.81	0.05	93.0	64.91	8.0	9.82	220.0	45.90	8.1	12.10	4.25	1.1	
117161	c	687291	5458435	21	NAD 27	157.2	02E/08				6.46	22.0	19.13	4.0	240.0	233.77	1.14	67.0	0.38	0.05	80.0	55.27	13.0	13.54	820.0	190.16	4.4	17.74	1.89	1.0	
117162	c	686353	5464288	21	NAD 27	103.0	02E/08				6.54	23.0	19.22	4.0	320.0	305.17	1.47	4.0	0.20	0.05	100.0	66.65	14.0	15.25	320.0	90.56	3.6	35.10	2.22	1.4	
117163	c	691275	5466955	21	NAD 27	96.7	02E/08				6.72	8.0	7.36	1.0	370.0	373.86	1.51	9.0	0.19	0.05	99.0	70.59	9.0	11.85	450.0	109.38	5.4	7.83	1.88	1.2	
117164	c	690745	5466172	21	NAD 27	112.0	02E/08				6.64	35.0	28.62	2.0	390.0	373.40	1.83	2.0	0.25	0.19	100.0	61.39	24.0	22.32	280.0	109.60	4.8	39.09	2.80	1.6	
117165	c	691978	5463371	21	NAD 27	81.9	02E/08				6.24	91.8	76.80	2.0	280.0	280.74	1.38	10.0	0.33	0.18	95.0	56.03	14.0	14.26	470.0	125.70	6.4	20.97	1.77	1.3	
117166	c	692866	5467488	21	NAD 27	79.7	02E/08				6.77	17.0	12.64	3.0	400.0	367.88	1.63	8.0	0.26	0.14	110.0	60.02	22.0	21.11	630.0	119.20	4.5	20.91	2.10	1.0	
117167	c	693133	5466498	21	NAD 27	101.3	02E/08				7.11	27.0	23.43	2.0	290.0	297.59	1.39	49.0	0.22	0.13	77.0	47.14	17.0	15.44	560.0	149.10	3.8	27.15	1.62	1.5	
117168	c	692800	5465406	21	NAD 27	99.5	02E/08				7.29	49.0	39.77	2.0	410.0	396.83	1.78	26.0	0.16	0.18	94.0	58.07	23.0	20.69	430.0	131.00	5.4	44.42	2.32	1.4	
117169	c	691949	5465197	21	NAD 27	80.9	02E/08				7.25	218.0	175.30	2.0	410.0	409.76	1.84	11.0	0.16	0.42	89.0	58.81	26.0	22.93	450.0	120.45	6.4	42.09	2.13	1.2	
117170	c	725299	5434967	21	NAD 27	174.2	02F/04				5.85	17.0	13.75	2.0	340.0	344.41	1.67	53.0	0.24	0.11	70.0	45.39	11.0	13.71	220.0	72.55	7.3	17.09	2.07	1.1	
117171	c	728963	5438503	21	NAD 27	158.7	02F/04				4.76	18.0	14.65	0.5	290.0	278.39	2.45	44.0	0.38	0.05	64.0	36.85	6.0	9.74	190.0	49.83	5.7	11.20	1.83	0.9	
117172	c	729390	5435290	21	NAD 27	128.4	02F/04				4.67	17.0	12.84	2.0	280.0	257.89	3.06	26.0	0.41	0.11	87.0	55.53	7.0	10.44	150.0	44.85	7.7	16.01	2.10	1.0	
117173	bc	728813	5435237	21	NAD 27	67.8	02F/04				4.31	27.0	21.26	0.5	270.0	247.53	1.85	30.0	0.52	0.05	57.0	39.05	9.0	11.28	240.0	57.71	5.4	15.39	2.34	1.1	
117174	c	727464	5434398	21	NAD 27	68.8	02F/04				7.17	20.0	15.27	0.5	310.0	292.28	1.97	19.0	0.38	0.11	100.0	63.81	16.0	17.33	300.0	78.02	7.4	30.80	2.11	1.0	
117175	c	684136	5459814	21	NAD 27	95.7	02E/08				5.95	17.0	14.61	3.0	380.0	398.07	1.34	26.0	0.21	0.05	88.0	48.17	7.0	9.34	450.0	102.83	4.7	14.25	1.18	1.0	
117176	c	693500	5470601	21	NAD 27	73.6	02E/08				6.09	27.0	22.66	2.0	330.0	342.76	1.40	40.0	0.28	0.12	74.0	44.53	11.0	13.47	430.0	124.13	4.3	23.41	2.01	1.2	
117177	c	705562	5474089	21	NAD 27	116.9	02E/08				6.93	29.0	22.55	2.0	420.0	397.86	1.88	10.0	0.82	0.16	92.0	59.58	29.0	26.80	520.0	134.53	5.0	41.12	2.88	1.4	
117178	c	738911	5446832	21	NAD 27	109.9	02F/04				6.14	2.7	1.00	0.5	370.0	379.68	6.40	32.0	0.86	0.05	94.0	49.25	6.0	9.01	210.0	42.71	8.4	6.10	3.07	1.3	
117180	c	738392	5445866	21	NAD 27	87.5	02F/04				7.77	5.1	4.11	0.5	480.0	486.80	7.26	11.0	0.78	0.11	90.0	57.54	9.0	12.65	130.0	39.61	8.0	21.53	3.92	1.1	
117181	bc	683894	5461080	21	NAD 27	73.0	02E/08				6.18	18.0	14.97	0.5	420.0	459.47	1.84	16.0	0.05	0.14	89.0	50.35	10.0	11.06	180.0	122.94	8.4	20.29	1.22	1.5	
117182	c	685871	5459511	21	NAD 27	114.6	02E/08				6.32	41.0	34.68	4.0	290.0	286.80	1.49	25.0	0.38	0.05	97.0	60.60	20.0	19.47	480.0	129.51	4.3	37.99	2.71	1.2	
117183	c	685872	5459506	21	NAD 27	108.8	02E/08				7.09																				



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Cs1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Ce2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
117213	c	711413	5459595	21	NAD 27	136.6	02E/08			6.31	4.3	3.39	0.5	340.0	308.81	2.71	29.0		0.45	0.05	0.740	42.97	1.0	10.63	340.0	65.10	6.0	14.26	2.39	1.0
117214	c	713156	5460169	21	NAD 27	127.2	02E/08			6.30	4.3	1.00	0.5	320.0	311.21	3.66	3.0		0.31	0.05	64.0	21.64	1.0	4.83	300.0	15.75	5.6	1.17	1.16	0.7
117215	bc	711585	5460000	21	NAD 27	114.4	02E/08			5.73	3.6	4.24	0.5	400.0	407.91	1.89	44.0		0.48	0.05	140.0	32.88	3.0	9.39	320.0	40.11	7.9	2.68	1.56	1.5
117216	c	711732	5460880	21	NAD 27	96.5	02E/08			7.88	0.6	1.00	0.5	860.0	872.29	2.72	5.0		0.82	0.05	230.0	42.08	1.0	8.23	130.0	12.27	4.8	1.42	1.59	1.6
117217	bc	711980	5460468	21	NAD 27	94.5	02F/05			7.23	7.1	6.48	0.5	440.0	497.66	2.80	15.0		0.39	0.05	120.0	69.04	6.0	11.43	300.0	56.83	6.9	6.59	1.98	1.0
117218	c	725197	5460869	21	NAD 27	90.1	02F/05			9.46	0.3	1.00	0.5	620.0	676.74	6.26	3.0		1.48	0.14	210.0	104.80	4.0	13.62	48.0	33.91	4.1	2.92	1.68	1.5
117219	bc	709787	5481262	21	NAD 27	87.0	02E/08			8.75	7.4	6.25	0.5	480.0	454.66	2.76	8.0		1.43	0.20	315.0	96.14	4.0	18.21	81.0	61.07	2.7	1.65	10.68	1.7
117220	c	712132	5479709	21	NAD 27	54.0	02E/08			7.09	14.0	11.54	0.5	380.0	407.43	1.45	19.0		1.82	0.11	46.0	35.04	12.0	19.09	350.0	133.34	7.9	4.75	2.21	1.0
117222	bc	712511	5479153	21	NAD 27	95.9	02E/08			6.08	0.5	1.00	0.5	340.0	353.08	3.71	7.0		0.60	0.10	93.0	45.64	1.0	6.12	220.0	30.78	6.2	1.00	1.52	1.0
117223	bc	715141	5475525	21	NAD 27	73.8	02E/08			8.34	0.3	1.00	0.5	330.0	372.77	4.98	8.0		0.69	0.10	74.0	45.90	1.0	3.20	23.0	6.56	8.1	1.06	1.48	0.3
117224	c	714835	5474016	21	NAD 27	80.4	02E/08			6.13	3.6	2.92	0.5	270.0	261.15	3.78	17.0		0.63	0.05	45.0	22.95	2.0	4.50	320.0	35.16	7.5	1.18	0.77	0.8
117225	c	711723	5471953	21	NAD 27	103.0	02E/08			9.43	0.9	1.00	0.5	290.0	280.22	3.99	8.0		0.58	0.05	62.0	24.61	1.0	5.54	290.0	30.96	10.0	1.00	0.80	1.1
117226	bc	715680	5471806	21	NAD 27	94.5	02E/08			8.21	0.3	1.00	0.5	220.0	236.58	6.11	4.0		0.52	0.05	38.0	20.55	1.0	1.26	62.0	7.30	12.0	1.00	0.65	0.6
117227	bc	713831	5472276	21	NAD 27	101.4	02E/08			5.74	0.3	1.00	1.0	220.0	223.40	4.41	5.0		0.54	0.05	62.0	30.63	1.0	3.06	220.0	20.35	6.3	1.00	0.92	0.5
117228	c	712496	5470894	21	NAD 27	99.4	02E/08			6.70	14.0	11.02	0.5	300.0	297.97	2.25	56.0		0.76	0.05	46.0	29.71	11.0	13.35	490.0	22.52	7.2	17.61	1.49	0.8
117229	c	711007	5467941	21	NAD 27	93.3	02E/08			5.65	0.3	1.00	0.5	320.0	316.49	3.25	2.0		0.45	0.05	82.0	38.19	1.0	4.40	300.0	125.52	7.2	17.61	1.49	0.8
117230	c	715035	5468035	21	NAD 27	73.8	02E/08			6.04	4.7	4.71	0.5	330.0	321.56	2.99	45.0		0.58	0.11	120.0	85.71	8.0	9.90	440.0	89.36	3.6	5.00	3.26	1.4
117231	c	711923	5458204	21	NAD 27	102.3	02F/04			7.57	0.3	1.00	0.5	610.0	636.75	5.84	10.0		0.61	0.05	57.0	40.04	1.0	4.95	130.0	14.56	10.0	1.18	1.42	0.5
117232	c	723141	5458457	21	NAD 27	99.2	02F/04			9.43	0.6	1.00	0.5	1700.0	1696.89	2.26	4.0		0.64	0.05	110.0	48.46	1.0	7.52	51.0	24.59	7.0	1.83	1.20	1.3
117233	c	723578	5459352	21	NAD 27	105.1	02F/04			7.89	59.9	51.88	0.5	420.0	442.98	3.60	11.0		0.48	0.05	120.0	89.99	11.0	16.27	300.0	79.46	6.1	13.14	2.58	1.1
117234	c	725678	5468704	21	NAD 27	105.1	02F/04			7.55	4.6	3.84	0.5	260.0	283.64	2.85	115.0		0.44	0.05	93.0	76.07	9.0	11.32	300.0	75.27	3.9	5.73	2.30	1.3
117235	c	727869	5459210	21	NAD 27	110.8	02F/04			5.87	3.5	3.62	0.5	430.0	453.49	2.52	38.0		0.55	0.12	82.0	53.62	2.0	12.41	270.0	44.61	6.8	1.58	1.51	0.8
117236	c	727859	5459214	21	NAD 27	109.4	02F/04			6.04	4.7	4.71	0.5	330.0	321.56	2.99	45.0		0.58	0.11	120.0	85.71	8.0	9.90	440.0	89.36	3.6	5.00	3.26	1.4
117237	c	732231	5459001	21	NAD 27	123.2	02F/04			6.98	0.7	1.00	0.5	610.0	636.75	5.84	10.0		0.61	0.05	57.0	40.04	1.0	4.95	130.0	14.56	10.0	1.18	1.42	0.5
117238	bc	735027	5459352	21	NAD 27	111.9	02F/04			8.35	1.4	2.13	0.5	470.0	491.28	4.78	48.0		0.44	0.14	120.0	137.16	7.0	15.61	35.0	27.83	7.4	9.79	5.14	0.3
117239	c	735758	5459505	21	NAD 27	86.1	02F/04			5.96	0.9	1.00	0.5	470.0	498.47	3.23	20.0		0.53	0.05	120.0	75.10	3.0	10.78	290.0	23.38	6.1	1.13	2.29	0.8
117240	c	737578	5459505	21	NAD 27	87.7	02F/04			8.11	3.4	3.78	0.5	320.0	370.62	2.74	88.0		0.39	0.17	130.0	97.57	4.0	9.49	200.0	43.17	4.3	2.39	4.84	1.7
117241	c	735666	5457117	21	NAD 27	128.2	02F/04			8.53	5.2	5.15	0.5	270.0	295.72	2.70	112.0		0.31	0.20	74.0	66.34	12.0	16.45	210.0	78.82	5.3	18.20	2.63	1.1
117242	c	733312	5457310	21	NAD 27	123.9	02F/04			5.98	4.1	4.24	0.5	300.0	344.21	2.07	147.0		0.39	0.05	81.0	45.19	6.0	8.75	380.0	63.97	6.2	1.16	1.67	0.7
117243	c	730981	5457422	21	NAD 27	127.5	02F/04			6.04	0.5	1.00	0.5	410.0	421.27	2.45	11.0		0.34	0.05	75.0	42.46	1.0	6.84	400.0	36.26	8.7	1.00	1.35	1.2
117244	c	728640	5456920	21	NAD 27	120.2	02F/04			6.39	0.6	1.00	0.5	490.0	546.82	3.97	16.0		0.33	0.05	74.0	43.26	1.0	9.21	250.0	24.71	6.6	1.51	1.29	0.6
117245	c	726108	5456281	21	NAD 27	96.9	02F/04			8.01	4.7	4.90	0.5	340.0	348.78	2.64	24.0		0.44	0.17	98.0	50.56	5.0	9.46	270.0	73.95	5.5	5.37	2.34	1.2
117246	c	723591	5456856	21	NAD 27	102.8	02F/04			8.04	6.7	7.10	0.5	260.0	282.86	2.27	60.0		0.33	0.18	65.0	45.76	7.0	9.60	360.0	134.86	5.4	3.78	2.11	1.1
117247	c	720265	5457382	21	NAD 27	95.9	02F/04			5.46	5.5	4.68	0.5	360.0	349.87	2.22	36.0		0.49	0.11	65.0	32.51	4.0	9.23	310.0	63.79	6.2	3.31	1.29	0.7
117248	c	720742	5454614	21	NAD 27	98.9	02F/04			6.98	3.7	3.61	0.5	380.0	366.24	2.59	59.0		0.46	0.12	91.0	72.87	7.0	11.53	230.0	66.31	5.0	7.22	2.58	0.3
117249	c	722459	5454146	21	NAD 27	103.9	02F/04			5.27	0.9	1.00	0.4	390.0	414.05	2.24	16.0		0.29	0.05	83.0	48.73	1.0	7.64	330.0	37.14	8.6	1.00	1.55	0.6
117250	c	724940	5454326	21	NAD 27	111.3	02F/04			5.43	0.3	1.00	0.5	900.0	946.60	1.76	3.0		0.42	0.11	150.0	45.02	1.0	9.81	200.0	10.53	3.6	1.00	1.36	1.1
117251	c	727033	5454824	21	NAD 27	111.1	02F/04			7.45	3.8	3.65	0.5	300.0	320.38	2.40	63.0		0.27	0.05	150.0	58.36	5.0	9.46	270.0	73.95	5.5	5.37	2.34	1.2
117252	c	729402	5454640	21	NAD 27	111.6	02F/04			4.59	1.2	1.00	0.5	420.0	433.02	2.01	6.0		0.26	0.05	150.0	59.94	1.0	8.35	390.0	18.60	5.9	1.00	1.96	1.5
117253	c	730361	5455593	21	NAD 27	107.9	02F/04			6.35	9.3	8.20	0.5	370.0	358.54	2.67	25.0		0.55	0.13	130.0	79.63	7.0	10.63	410.0	80.99	4.9	6.10	3.21	1.2
117254	c	720921	5475935	21	NAD 27	56.7	02F/05			7.48	4.4	4.38	0.5	380.0	396.59	3.46	46.0		0.87	0.11	62.0	49.61	7.0	8.63	270.0	65.26	4.6	5.20	2.95	1.1
117255	bc	719174	5477026	21	NAD 27	74.4	02F/05			6.61	5.0	4.88	0.5	220.0	264.97	3.69	123.0		0.49	0.13	50.0	43.20	8.0	6.86	210.0	69.13	5.7	6.83	1.68	1.0
117256	bc	720808	5476924	21	NAD 27	79.6	02F/05			7.66	3.2	2.79	0.5	480.0	514.66	3.32	22.0		1.17	0.11	52.0	36.68	3.0	11.79	23.0	8.60	4.0	1.00	5.21	1.3
117257	c	723095	5477390	21	NAD 27	68.8	02F/05			9.48	0.3	1.00	0.5	530.0	562.55	6.61	18.0		1.48	0.12	22.0	22.32	2.0	7.21	14.					



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Ce2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm
117290	c	720234	5452561	21	NAD 27	109.3	02F/04			7.43	6.2	5.72	0.5	300.0	281.84	2.58	34.0	0.42	0.12	110.0	55.62	9.0	11.20	490.0	113.90	6.4	7.50	3.28	1.5
117291	c	719702	5448725	21	NAD 27	124.6	02F/04			8.16	12.0	9.11	0.5	380.0	335.58	2.86	12.0	0.33	0.15	85.0	36.30	13.0	12.49	360.0	103.07	9.1	8.86	1.91	1.0
117292	c	720043	5447153	21	NAD 27	123.9	02F/04			6.51	5.0	3.73	0.5	310.0	278.82	2.46	15.0	0.31	0.12	71.0	31.74	8.0	10.55	300.0	76.00	7.9	9.32	1.93	0.3
117293	c	721501	5442618	21	NAD 27	129.1	02F/04			6.23	16.0	14.70	3.0	310.0	283.35	1.37	61.0	0.21	0.12	69.0	28.45	4.0	9.72	240.0	70.46	7.2	8.18	2.21	0.3
117294	c	724696	5442823	21	NAD 27	117.3	02F/04			4.14	1.7	1.00	0.5	490.0	424.56	1.55	5.0	0.23	0.05	130.0	20.55	3.0	8.67	120.0	30.43	3.3	1.59	1.24	1.3
117295	c	727622	5442901	21	NAD 27	121.0	02F/04			6.54	17.0	14.19	0.5	370.0	311.50	2.23	44.0	0.35	0.14	78.0	37.31	8.0	10.55	240.0	52.96	4.9	11.90	2.32	0.3
117296	c	726318	5441235	21	NAD 27	82.8	02F/04			6.62	0.3	1.00	0.5	390.0	349.89	6.22	2.0	0.53	0.05	61.0	13.54	1.0	2.83	53.0	8.11	7.9	1.00	0.94	0.3
117297	c	730127	5443180	21	NAD 27	219.3	02F/04			6.74	21.0	19.44	0.5	280.0	241.59	4.19	111.0	0.32	0.14	63.0	33.06	4.0	8.04	200.0	55.07	10.0	10.83	2.62	1.2
117298	c	729550	5444261	21	NAD 27	262.7	02F/04			5.47	22.0	18.44	0.5	360.0	293.11	2.59	3.0	0.42	0.16	82.0	38.71	9.0	10.51	290.0	45.49	5.0	15.13	2.49	1.1
117299	c	731153	5445781	21	NAD 27	220.4	02F/04			5.82	7.7	7.60	0.5	360.0	328.92	2.29	54.0	0.39	0.12	78.0	41.48	7.0	9.57	220.0	49.23	5.9	10.90	2.56	0.9
117301	c	733846	5447180	21	NAD 27	221.2	02F/04			6.91	1.1	1.00	0.5	280.0	288.80	4.32	39.0	0.22	0.05	49.0	13.47	1.0	3.75	200.0	15.28	9.3	1.97	0.92	0.3
117302	c	744726	5447418	21	NAD 27	90.9	02F/04			7.07	1.5	3.09	0.5	330.0	296.96	3.60	114.0	0.30	0.11	72.0	37.76	2.0	7.56	120.0	22.95	5.8	2.68	1.78	0.3
117303	c	744145	5446126	21	NAD 27	88.7	02F/04			6.91	2.0	1.00	0.5	490.0	426.90	5.30	21.0	0.55	0.05	79.0	29.17	6.0	7.44	140.0	28.38	6.7	3.83	2.63	1.1
117304	c	741613	5439602	21	NAD 27	154.8	02F/04			6.80	3.7	5.98	0.5	230.0	253.57	2.91	141.0	0.32	0.05	69.0	33.20	4.0	8.58	130.0	46.91	7.9	5.41	2.05	0.3
117305	c	739644	5440544	21	NAD 27	116.0	02F/04			5.59	48.0	40.98	0.5	290.0	273.40	3.46	56.0	0.37	0.19	130.0	90.24	4.0	8.24	160.0	48.23	8.4	4.90	5.88	1.4
117306	c	737168	5440862	21	NAD 27	95.6	02F/04			7.3	6.70	4.70	0.5	240.0	323.11	2.56	41.0	0.25	0.05	67.0	19.43	1.0	7.77	160.0	38.28	7.0	2.58	1.42	0.7
117307	c	733846	5439961	21	NAD 27	140.4	02F/04			4.75	12.0	9.53	2.0	280.0	250.07	2.17	22.0	0.43	0.05	87.0	34.87	6.0	9.94	300.0	41.67	6.1	4.40	2.63	1.2
117308	c	733924	5438460	21	NAD 27	63.9	02F/04			5.33	12.0	10.77	0.5	290.0	235.84	3.00	58.0	0.30	0.05	63.0	30.60	5.0	8.19	160.0	47.37	5.8	11.40	1.80	0.9
117309	c	733692	5436313	21	NAD 27	114.5	02F/04			5.33	0.5	1.00	2.0	390.0	374.50	1.82	8.0	0.59	0.05	120.0	28.20	3.0	11.71	100.0	79.92	15.0	1.00	0.85	1.0
117310	c	722441	5436021	21	NAD 27	113.9	02F/04			7.31	28.0	23.78	7.0	200.0	1950.49	2.57	8.0	0.03	0.05	32.0	9.90	3.0	11.71	100.0	79.92	15.0	4.94	0.54	0.3
117311	c	722443	5436023	21	NAD 27	116.5	02F/04			3.38	0.3	1.00	1.0	360.0	330.92	0.54	2.0	0.06	0.05	8.0	2.17	1.0	9.51	47.0	36.72	2.9	1.00	0.74	0.3
117312	c	721005	5434415	21	NAD 27	83.4	02F/04			6.80	8.4	8.09	0.5	630.0	606.62	2.18	37.0	0.32	0.05	82.0	61.05	10.0	14.36	120.0	71.78	10.0	34.77	2.79	0.8
117313	c	721153	5433748	21	NAD 27	92.0	02F/04			4.30	8.4	6.47	2.0	210.0	184.69	1.81	4.0	0.29	0.05	48.0	29.09	8.0	9.71	280.0	61.29	6.2	10.23	1.38	0.3
117314	c	730270	5432644	21	NAD 27	131.4	02F/04			6.60	6.2	6.97	0.5	280.0	298.55	2.22	58.0	0.24	0.05	69.0	42.20	9.0	12.08	170.0	78.40	6.3	16.80	1.76	0.9
117315	c	732396	5433030	21	NAD 27	130.1	02F/04			5.40	6.5	5.34	0.5	330.0	282.00	2.32	21.0	0.30	0.05	65.0	42.85	8.0	10.40	170.0	63.23	5.5	13.46	1.93	1.1
117316	c	734519	5433107	21	NAD 27	122.4	02F/04			5.69	13.0	11.15	0.5	320.0	289.90	2.17	45.0	0.37	0.05	72.0	45.25	11.0	12.71	240.0	74.49	5.9	23.74	1.91	0.7
117317	c	736375	5433705	21	NAD 27	59.1	02F/04			5.52	14.0	11.66	2.0	300.0	278.67	2.06	13.0	0.37	0.05	80.0	55.57	7.0	10.04	170.0	53.46	5.5	10.79	2.70	1.3
117318	bc	735364	5436179	21	NAD 27	121.3	02F/04			4.63	1.8	1.00	1.0	500.0	494.08	1.60	4.0	0.25	0.05	86.0	19.28	1.0	8.37	170.0	34.28	6.9	1.77	0.71	1.1
117319	c	718818	5464959	21	NAD 27	95.8	02F/05			6.38	0.3	1.00	0.5	770.0	731.91	1.87	11.0	0.56	0.05	170.0	31.68	1.0	5.73	180.0	13.25	3.6	1.46	0.88	1.3
117320	c	718819	5464955	21	NAD 27	94.0	02F/05			7.56	0.3	2.62	0.5	1300.0	1257.65	2.96	14.0	0.23	0.05	70.0	36.40	8.0	18.93	24.0	25.53	3.3	4.37	0.89	1.2
117321	c	728742	5465556	21	NAD 27	91.6	02F/05			5.78	0.3	1.00	1.0	690.0	620.03	5.71	5.0	0.18	0.05	40.0	16.71	1.0	4.97	81.0	9.26	6.7	1.01	0.55	0.3
117322	c	730033	5463108	21	NAD 27	104.4	02F/05			6.11	0.3	1.00	1.0	410.0	406.96	3.66	30.0	0.41	0.05	88.0	41.23	3.0	7.51	82.0	16.32	6.3	1.13	1.20	0.3
117323	c	732252	5461469	21	NAD 27	106.2	02F/05			8.67	0.3	2.23	0.5	290.0	293.38	3.50	85.0	0.35	0.11	120.0	73.69	5.0	9.20	58.0	27.69	6.5	18.50	2.69	0.3
117325	c	733102	5463485	21	NAD 27	89.2	02F/05			7.11	0.3	1.00	0.5	540.0	495.22	3.31	6.0	0.27	0.05	72.0	24.08	1.0	5.74	230.0	10.53	6.5	1.00	0.63	0.3
117326	c	735209	5461525	21	NAD 27	102.3	02F/05			5.31	0.3	1.00	0.5	650.0	637.94	5.40	14.0	0.44	0.05	190.0	54.80	1.0	8.17	56.0	10.39	8.7	1.00	1.19	1.1
117327	c	736554	5463437	21	NAD 27	105.2	02F/05			5.32	0.3	1.00	0.5	470.0	430.06	2.69	27.0	0.45	0.05	92.0	43.92	3.0	7.88	190.0	27.87	7.0	1.70	1.28	0.9
117328	c	739825	5463154	21	NAD 27	92.2	02F/05			6.42	3.4	2.96	0.5	340.0	300.48	2.63	143.0	0.48	0.05	92.0	50.98	2.0	6.37	210.0	46.54	3.4	3.41	2.99	0.8
117329	c	743053	5463009	21	NAD 27	65.5	02F/05			6.32	0.3	1.00	0.5	590.0	555.40	3.60	26.0	0.80	0.05	110.0	55.02	1.0	7.83	170.0	18.81	8.4	1.00	1.88	0.6
117330	c	732571	5435193	21	NAD 27	88.4	02F/04			4.53	0.8	1.00	0.5	340.0	340.64	1.19	6.0	0.50	0.05	240.0	42.13	1.0	8.30	99.0	22.72	4.0	1.97	1.35	2.4
117331	c	738002	5437933	21	NAD 27	86.9	02F/04			4.50	10.0	8.41	0.5	350.0	302.28	2.14	23.0	0.29	0.05	61.0	23.86	2.0	10.08	270.0	37.40	8.0	1.49	0.92	0.7
117332	c	739550	5438822	21	NAD 27	88.2	02F/04			3.75	0.3	1.00	0.5	250.0	234.58	2.32	6.0	0.37	0.05	50.0	17.02	1.0	5.95	100.0	13.64	3.4	1.00	0.56	0.6
117333	c	741334	5437595	21	NAD 27	73.0	02F/04			4.98	0.3	1.00	0.5	310.0	274.10	3.11	18.0	0.10	0.05	81.0	51.42	5.0	11.28	120.0	81.69	5.8	21.28	1.47	1.2
117334	c	743421	5439570	21	NAD 27	86.5	02F/04			8.44	341.0	331.87	0.5	210.0	247.41	2.42	76.0	0.04	0.05	68.0	50.85	36.0	32.56	160.0	127.85	8.6	29.45	1.77	1.6
117335	c	744155	5436596	21	NAD 27	55.9	02F/04			3.94	7.9	6.89	4.0	250.0	227.53	1.55	78.0	0.20	0.05	42.0	25.43	1.0	7.41	150.0	31.29	5.5	1.00	0.89	0.7
117336	c	745977	5437235	21	NAD 27	95.0	02F/04			5.42	7.7	7.32	0.5	200.0															



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Ce2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
117366	c	681140	5402397	21	NAD 27	205.7	02D/15			6.54	8.4	7.35	0.5	190.0	184.57	4.83	31.0		0.26	0.05	38.0	31.05	3.0	5.98	93.0	47.31	6.4	3.64	3.53	1.40	0.6
117367	c	671771	5418704	21	NAD 27	204.2	02D/15			6.44	1.7	1.00	0.5	280.0	277.21	4.63	23.0		0.42	0.05	80.0	31.97	4.0	8.20	130.0	50.42	8.2	6.01	1.40	1.1	0.1
117368	c	715819	5465318	21	NAD 27	131.0	02E/08			5.43	5.3	4.30	0.5	270.0	235.52	2.55	31.0		0.54	0.05	55.0	35.59	6.0	7.14	390.0	81.29	6.1	9.64	1.53	1.0	0.8
117369	bc	711804	5464236	21	NAD 27	111.3	02E/08			6.55	0.3	1.00	0.5	470.0	472.38	3.09	3.0		0.29	0.05	66.0	26.13	1.0	4.64	200.0	16.08	6.2	1.00	0.88	0.8	1.0
117370	c	725952	5431823	21	NAD 27	55.2	02C/13			3.79	5.8	4.87	3.0	220.0	202.37	2.21	5.0		0.66	0.05	67.0	54.84	9.0	12.35	260.0	59.55	37	17.80	3.30	1.3	0.3
117371	bc	725919	5432506	21	NAD 27	43.9	02F/04			6.41	5.0	4.19	0.5	180.0	174.89	2.06	45.0		0.29	0.05	37.0	29.13	7.0	10.09	400.0	77.32	3.9	9.70	1.34	0.9	1.7
117372		747435	5440925	21	NAD 27	38.4	02F/04			9.15	0.7	1.00	0.5	240.0	274.53	7.38	28.0		1.14	0.15	15.0	7.36	1.0	9.30	5.0	5.36	4.0	1.08	0.61	0.3	0.3
117373		750378	5440895	21	NAD 27	73.4	02F/04			10.06	0.3	1.00	0.5	960.0	962.12	3.23	9.0		2.85	0.05	25.0	27.85	3.0	8.40	11.0	15.09	0.9	1.26	1.92	0.8	1.0
117374		745719	5448977	21	NAD 27	50.7	02F/04			9.01	0.9	1.00	0.5	520.0	562.74	6.21	18.0		0.96	0.05	170.0	46.62	1.0	9.14	19.0	13.13	12.0	4.54	1.82	2.1	2.1
117375	c	731926	5441543	21	NAD 27	146.8	02E/01			6.19	12.0	10.53	0.5	280.0	290.36	4.32	68.0		0.33	0.05	58.0	43.31	5.0	8.56	170.0	52.67	8.1	7.91	1.59	0.8	1.0
117376	c	688888	5457211	21	NAD 27	115.8	02E/01			6.31	67.2	55.84	12.0	340.0	328.98	1.46	10.0		0.77	0.05	75.0	63.32	4.0	37.23	1870.0	292.60	3.6	66.74	2.39	1.2	1.3
117377	bc	746386	5450482	21	NAD 27	66.6	02F/04			6.66	1.5	1.00	0.5	410.0	450.30	4.83	52.0		0.59	0.05	68.0	40.31	2.0	7.22	130.0	31.37	7.6	6.76	1.98	0.8	0.4
117378		749191	5450679	21	NAD 27	58.3	02F/04			7.03	0.8	1.00	0.5	300.0	346.63	5.32	89.0		0.27	0.20	97.0	34.50	1.0	4.67	17.0	9.52	6.4	2.08	1.84	0.3	0.3
117379	c	748660	5450322	21	NAD 27	74.6	02F/04			5.73	1.4	1.00	0.5	570.0	545.09	3.91	6.0		0.81	0.05	100.0	75.77	3.0	6.60	100.0	18.18	3.8	5.98	4.87	1.0	1.0
117380		751039	5459609	21	NAD 27	65.0	02F/04			7.20	0.7	1.00	0.5	1300.0	1324.48	1.80	11.0		0.98	0.05	240.0	55.78	1.0	6.26	61.0	57.59	3.3	1.66	1.47	2.2	2.2
117381	c	737839	54573075	21	NAD 27	66.9	02F/05			6.40	3.4	3.16	0.5	440.0	405.43	3.54	21.0		0.99	0.05	120.0	98.28	5.0	9.03	190.0	25.81	3.9	9.53	5.82	1.5	1.8
117382	bc	725254	5478551	21	NAD 27	49.3	02F/05			6.30	17.0	14.78	0.5	270.0	328.93	2.56	255.0		0.61	0.18	59.0	50.31	8.0	11.53	180.0	126.02	7.1	23.94	3.11	1.3	1.3
117383	c	722581	5480149	21	NAD 27	50.5	02F/05			7.48	5.3	4.59	0.5	440.0	406.13	3.07	29.0		1.26	0.12	76.0	67.84	9.0	10.92	410.0	55.48	3.3	8.22	4.94	1.7	1.7
117384	c	736640	5471310	21	NAD 27	68.9	02F/05			6.46	0.3	1.00	0.5	740.0	692.31	4.13	10.0		0.69	0.05	18.0	8.71	1.0	5.97	48.0	9.34	5.1	1.65	0.84	0.6	0.6
117386	c	745751	5466165	21	NAD 27	51.5	02F/05			7.97	0.7	1.00	0.5	670.0	653.67	3.39	20.0		0.75	0.05	180.0	59.35	3.0	13.61	110.0	32.18	5.9	2.90	1.71	0.9	0.9
117387	bc	750109	5461440	21	NAD 27	59.3	02F/05			6.96	29.0	24.25	0.5	350.0	348.32	8.04	76.0		0.70	0.57	160.0	125.86	10.0	16.19	120.0	78.86	18.0	24.50	7.35	2.9	2.9
117388		752739	5461877	21	NAD 27	62.9	02F/05			7.02	4.3	4.49	0.5	240.0	256.23	3.27	209.0		0.59	0.10	120.0	69.40	7.0	14.81	370.0	99.89	5.3	22.15	4.66	1.8	1.8
117389		750904	5457711	21	NAD 27	50.1	02F/04			7.76	1.7	1.00	0.5	410.0	431.87	5.86	34.0		1.28	0.16	56.0	28.23	1.0	11.78	22.0	12.26	8.2	5.12	3.75	0.9	0.9
117390	c	742962	5449451	21	NAD 27	61.5	02F/04			6.40	1.2	1.00	0.5	310.0	286.66	1.75	1.0		1.04	0.05	25.0	21.07	2.0	7.85	85.0	31.00	5.2	4.26	3.58	0.9	0.6
117500	c	685134	5462436	21	NAD 27	5.96	02E/08			5.12	2.3	1.00	0.5	380.0	327.01	4.98	28.0		0.66	0.05	76.0	46.66	4.0	7.63	200.0	31.00	5.2	4.26	3.58	0.9	0.6
117501	c	686051	5460856	21	NAD 27	5.81	02E/08			5.81	31.0	26.84	4.0	310.0	273.78	1.37	21.0		0.84	0.11	97.0	53.13	2.0	17.68	134.0	148.09	3.5	17.87	3.18	1.7	1.7
117508	bc	706979	5461333	21	NAD 27	0.0	02E/08			6.53	0.3	1.00	0.5	250.0	245.42	3.60	21.0		0.68	0.05	75.0	31.80	1.0	7.61	270.0	36.13	11.0	1.40	1.01	1.2	1.2
117509	bc	709236	5461168	21	NAD 27	0.0	02E/08			6.68	2.0	2.36	0.5	290.0	295.81	3.65	29.0		0.59	0.05	80.0	59.40	4.0	6.63	200.0	41.11	5.4	6.43	1.80	0.6	0.6
117510	c	689507	5471017	21	NAD 27	108.4	02E/08			6.88	43.0	36.94	2.0	400.0	385.98	1.62	12.0		0.22	0.19	92.0	75.99	27.0	26.54	240.0	110.93	4.8	48.62	2.79	1.3	1.3
117511	c	691380	5472082	21	NAD 27	74.2	02E/08			6.85	53.8	48.24	0.5	370.0	378.57	1.87	28.0		0.20	0.25	81.0	68.04	20.0	19.24	250.0	118.91	4.5	30.43	2.83	1.1	1.1
117512	c	693655	5472617	21	NAD 27	60.4	02E/08			6.88	4.7	6.23	0.5	600.0	614.45	1.30	7.0		0.50	0.05	97.0	32.84	1.0	17.01	210.0	68.88	7.7	36.17	3.94	1.0	1.2
117513	bc	692745	5474235	21	NAD 27	62.0	02E/08			7.38	29.0	26.32	0.5	240.0	276.59	1.17	110.0		0.69	0.12	79.0	53.37	14.0	15.90	400.0	117.53	4.3	25.83	2.09	1.3	1.3
117514	c	695844	5470947	21	NAD 27	46.6	02E/08			6.66	44.0	38.74	0.5	240.0	276.59	1.17	110.0		0.27	0.12	67.0	50.78	8.0	10.51	290.0	115.36	3.9	15.66	2.84	1.3	1.3
117515	bc	702062	5473415	21	NAD 27	52.9	02E/08			7.79	14.0	12.91	0.5	200.0	216.04	1.16	113.0		1.15	0.25	110.0	93.19	43.0	38.60	740.0	352.60	7.0	81.89	6.95	2.4	2.4
117516	c	705968	5475820	21	NAD 27	87.3	02E/08			6.86	63.5	62.34	2.0	220.0	252.22	1.68	73.0		0.80	0.15	46.0	35.73	6.0	9.27	330.0	70.78	4.3	11.21	1.72	0.8	0.8
117517	bc	708577	5477282	21	NAD 27	128.6	02E/08			6.88	4.7	6.23	0.5	600.0	614.45	1.30	7.0		0.50	0.05	97.0	32.84	1.0	17.01	210.0	68.88	7.7	36.17	3.94	1.0	1.2
117518	c	708769	5479714	21	NAD 27	118.5	02E/08			7.41	22.0	18.35	2.0	210.0	231.77	1.45	14.0		1.74	0.19	48.0	48.99	21.0	24.80	270.0	149.78	3.6	24.80	3.00	0.9	0.9
117519	bc	707575	5481492	21	NAD 27	24.5	02E/08			8.48	36.0	32.09	2.0	210.0	231.77	1.45	99.0		1.52	0.19	36.0	31.88	8.0	12.64	230.0	97.06	3.6	11.92	2.04	0.9	1.5
117520	c	693843	5468696	21	NAD 27	0.0	02E/08			6.00	48.0	37.82	5.0	300.0	273.29	1.40	7.0		0.23	0.19	130.0	68.80	22.0	19.35	500.0	99.59	3.7	26.95	2.49	1.5	1.5
117522	c	693977	5467140	21	NAD 27	316.2	02E/08			6.98	30.0	28.74	2.0	320.0	294.87	1.37	50.0		0.26	0.23	81.0	55.30	22.0	19.70	520.0	124.93	4.4	15.85	2.52	1.2	1.2
117523	c	695712	5465062	21	NAD 27	75.8	02E/08			6.92	10.0	9.05	3.0	300.0	287.26	1.01	2.0		1.12	0.10	75.0	57.10	22.0	17.70	2010.0	244.43	2.9	14.36	2.00	1.2	1.2
117524	bc	696883	5468771	21	NAD 27	316.2	02E/08			6.51	24.0	22.70	0.5	320.0	312.30	1.12	61.0		0.47	0.23	62.0	53.88	28.0	25.69	990.0	248.97	4.0	11.30	1.78	1.2	1.4
117525	c	698410	5468601	21	NAD 27	104.2	02E/08			6.80	9.1	7.62	1.0</																		



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Ce2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm		
117550	c	711160	5469635	21	NAD 27	90.9	02E/08				7.65	13.0	10.81	0.5	230.0	223.05	6.80	63.0		0.50	0.18	58.0	8.29	430.0	72.29	11.0	18.06	1.55	1.0		
117551	bc	712840	5467471	21	NAD 27	109.6	02E/08				5.84	15.0	12.75	0.5	260.0	252.32	2.13	53.0		0.57	0.16	52.0	8.0	670.0	104.43	7.3	16.75	1.72	0.9		
117552	bc	711732	5468525	21	NAD 27	102.2	02E/08				6.41	3.8	20.58	0.5	290.0	276.32	3.49	69.0		0.56	0.05	70.0	10.14	480.0	67.60	4.2	12.76	1.68	1.2		
117553	bc	718482	5479250	21	NAD 27	77.8	02F/05				8.04	23.0	20.58	0.5	200.0	210.07	3.49	112.0		0.47	0.23	38.0	6.0	400.0	112.07	7.7	12.17	1.81	0.6		
117554	bc	719349	5475331	21	NAD 27	91.6	02F/05				8.35	4.9	3.49	0.5	270.0	208.36	3.15	76.0		0.65	0.05	60.0	7.04	520.0	57.80	4.7	12.48	1.97	1.0		
117555	bc	721939	5475865	21	NAD 27	59.0	02F/05				6.67	10.0	8.78	0.5	210.0	268.78	3.29	91.0		0.77	0.13	76.0	5.0	892	62.00	3.8	8.58	3.65	1.1		
117556	b	723873	5475788	21	NAD 27	63.4	02F/05				6.49	6.7	5.68	0.5	290.0	293.87	2.72	124.0		0.62	0.05	53.0	36.79	5.0	8.67	240.0	48.59	5.6	5.58	2.45	0.8
117557	b	726055	5475645	21	NAD 27	51.6	02F/05				4.42	0.3	1.00	0.5	430.0	384.47	2.55	6.0		0.53	0.05	32.0	10.32	1.0	3.99	220.0	8.00	1.00	1.01	0.6	
117558	b	727815	5474415	21	NAD 27	87.5	02F/05				6.56	0.9	1.00	0.5	390.0	397.86	3.55	18.0		0.79	0.05	57.0	23.82	1.0	5.47	150.0	13.69	7.6	1.83	1.36	0.5
117559	b	729284	5474366	21	NAD 27	62.7	02F/05				6.50	2.7	2.10	0.5	440.0	438.87	3.82	45.0		0.74	0.05	64.0	31.23	2.0	9.75	290.0	29.11	7.8	2.82	2.38	0.8
117560	bc	731589	5474319	21	NAD 27	56.2	02F/05				8.93	7.9	7.10	0.5	190.0	214.95	2.88	125.0		0.44	0.11	64.0	52.77	3.0	5.81	240.0	90.44	2.9	4.42	4.62	1.0
117562	b	733911	5473844	21	NAD 27	64.9	02F/05				6.18	1.1	1.00	0.5	440.0	498.16	2.99	42.0		0.67	0.05	47.0	33.83	1.0	6.66	120.0	11.93	5.2	1.00	2.22	0.9
117563	bc	735969	5471746	21	NAD 27	51.9	02F/05				6.64	4.8	4.85	0.5	430.0	424.28	4.08	16.0		0.91	0.11	130.0	111.40	4.0	16.42	290.0	23.33	4.4	1.89	6.34	1.6
117564	c	726348	5472209	21	NAD 27	77.2	02F/05				6.27	3.5	2.53	0.5	380.0	336.05	2.96	34.0		0.84	0.05	76.0	41.02	5.0	7.27	270.0	41.11	4.1	6.16	2.20	0.7
117565	bc	723118	5471888	21	NAD 27	74.3	02F/05				7.02	4.1	2.95	0.5	300.0	293.50	2.71	125.0		0.50	0.10	69.0	45.35	4.0	8.68	180.0	45.41	4.5	6.32	2.51	0.6
117566	bc	720252	5472160	21	NAD 27	80.0	02F/05				6.00	6.8	5.54	0.5	230.0	221.65	3.10	51.0		0.79	0.05	49.0	27.28	5.0	6.05	360.0	57.53	4.2	7.74	2.01	0.7
117567	c	719435	5467882	21	NAD 27	71.7	02F/05				6.43	10.0	7.67	4.0	370.0	319.41	2.91	36.0		0.54	0.05	110.0	74.07	8.0	10.81	260.0	57.12	4.8	8.82	3.02	1.1
117574	b	744576	5457210	21	NAD 27	63.0	02F/04				5.99	2.7	2.61	0.5	400.0	351.32	2.66	112.0		0.66	0.05	63.0	35.88	4.0	6.27	300.0	40.39	4.0	4.08	2.27	0.8
117575	b	746725	5457260	21	NAD 27	48.5	02F/04				8.15	0.5	1.00	0.5	440.0	421.05	3.68	24.0		0.61	0.05	97.0	54.62	4.0	8.36	340.0	46.60	3.5	6.04	3.15	0.7
117576	b	748094	5455063	21	NAD 27	59.3	02F/04				7.65	2.5	1.00	0.5	280.0	316.04	4.48	31.0		0.57	0.12	52.0	16.69	1.0	3.53	5.0	10.23	6.0	1.47	1.08	0.7
117577	bc	745345	5455518	21	NAD 27	57.1	02F/04				7.83	2.1	1.00	0.5	530.0	467.14	2.24	101.0		0.80	0.13	120.0	30.59	5.0	14.98	110.0	78.21	8.5	3.68	1.78	1.7
117578	bc	743629	5455003	21	NAD 27	56.3	02F/04				7.93	3.4	2.81	0.5	420.0	393.09	3.14	76.0		0.47	0.05	98.0	56.49	4.0	7.39	170.0	33.01	4.7	7.40	2.84	1.2
117579	c	742030	5455929	21	NAD 27	85.2	02F/04				6.52	3.2	2.59	2.0	410.0	362.88	3.12	11.0		0.42	0.10	96.0	70.34	4.0	8.56	150.0	31.81	7.9	15.23	4.50	1.4
117580	c	739626	5455514	21	NAD 27	80.2	02F/04				6.58	2.7	1.00	0.5	350.0	354.95	2.05	6.0		0.67	0.05	120.0	55.93	8.0	11.71	530.0	51.39	5.1	8.58	4.05	1.5
117582	bc	737209	5455270	21	NAD 27	89.0	02F/04				6.65	4.8	3.58	0.5	360.0	362.38	3.34	63.0		0.77	0.05	100.0	39.08	9.0	6.58	180.0	16.00	19.0	1.00	2.12	1.0
117583	c	733484	5455240	21	NAD 27	99.4	02F/04				8.70	4.7	4.35	0.5	360.0	376.64	2.93	14.0		0.65	0.05	92.0	58.48	6.0	7.84	310.0	52.59	5.9	6.06	2.22	0.9
117584	bc	736420	5451119	21	NAD 27	72.6	02F/04				8.76	7.6	8.59	0.5	300.0	286.14	8.13	36.0		0.35	0.05	86.0	61.07	6.0	10.87	180.0	60.37	7.0	5.51	2.18	0.9
117585	bc	731477	5453568	21	NAD 27	121.5	02F/04				5.91	3.7	3.96	0.5	380.0	328.69	2.88	20.0		0.50	0.13	46.0	32.43	4.0	7.79	150.0	36.67	11.0	4.75	1.38	0.8
117586	bc	726617	5448114	21	NAD 27	101.7	02F/04				9.08	3.6	3.72	0.5	480.0	458.01	2.65	34.0		0.56	0.05	100.0	65.28	6.0	9.16	380.0	62.06	5.1	5.79	2.92	1.3
117587	c	723792	5451797	21	NAD 27	89.8	02F/04				5.97	0.7	1.00	0.5	560.0	534.95	2.05	6.0		0.49	0.12	140.0	104.80	10.0	15.45	65.0	27.30	5.4	7.74	5.99	1.0
117588	c	720804	5450682	21	NAD 27	96.4	02F/04				5.32	18.0	15.57	0.5	380.0	388.24	3.25	16.0		0.39	0.05	98.0	31.14	8.0	11.63	300.0	58.55	6.7	9.66	2.80	1.0
117589	c	721832	5448194	21	NAD 27	99.5	02F/04				6.85	6.5	6.06	0.5	370.0	368.98	2.89	45.0		0.30	0.05	98.0	78.13	7.0	11.17	250.0	67.56	6.7	1.00	0.94	1.2
117590	bc	721976	5446349	21	NAD 27	112.5	02F/04				8.74	5.0	4.36	4.0	420.0	411.17	3.27	16.0		0.39	0.05	90.0	71.14	11.0	14.02	320.0	83.76	7.8	8.52	2.81	1.2
117591	c	725860	5443721	21	NAD 27	79.8	02F/04				6.11	22.0	19.11	0.5	390.0	378.38	2.57	27.0		0.38	0.10	110.0	71.43	5.0	10.19	130.0	35.53	4.9	4.27	2.83	1.3
117592	c	727626	5444937	21	NAD 27	147.2	02F/04				6.13	5.9	5.68	0.5	380.0	388.24	3.25	16.0		0.31	0.05	98.0	71.21	8.0	11.63	300.0	58.55	5.7	9.66	2.80	1.0
117593	c	728641	5441042	21	NAD 27	98.8	02F/04				5.52	18.0	15.57	0.5	380.0	351.74	3.75	12.0		0.40	0.10	92.0	59.48	8.0	12.59	270.0	59.35	6.6	17.77	2.19	1.3
117594	c	731327	5442508	21	NAD 27	148.7	02F/04				5.37	25.0	21.03	0.5	310.0	301.86	4.02	50.0		0.39	0.13	75.0	59.51	5.0	11.27	190.0	54.17	8.8	14.84	2.12	0.6
117595	c	731972	5444375	21	NAD 27	142.4	02F/04				5.49	5.9	5.47	0.5	390.0	359.60	3.54	3.0		0.43	0.05	85.0	67.61	4.0	9.40	270.0	39.72	5.8	5.98	2.66	0.9
117596	b	732847	5446333	21	NAD 27	107.6	02F/04				7.00	7.1	6.73	0.5	260.0	282.49	4.38	90.0		0.36	0.05	56.0	37.37	4.0	7.43	250.0	48.19	6.2	3.71	1.39	0.7
117597	bc	735467	5445761	21	NAD 27	99.5	02F/04				7.20	5.1	4.78	0.5	390.0	411.12	7.08	50.0		0.73	0.10	79.0	66.38	8.0	12.33	150.0	55.28	10.0	9.94	3.44	1.2
117598	c	740241	5445352	21	NAD 27	98.4	02F/04				6.03	2.7	2.79	0.5	440.0	424.15	5.76	5.0		0.93	0.05	110.0	75.62	5.0	9.11	220.0	38.85	6.6	6.96	5.02	1.8
117599	bc	742295	5445225	21	NAD 27	97.0	02F/04				9.01	4.1	3.63	0.5	340.0	377.79	4.16	64.0		0.31	0.05	72.0	48.29	1.0	7.81	140.0	52.24	8.1	1.80	2.50	1.0
117600	bc	742244	5443308	21	NAD 27	62.3	02F/04				5.37	3.6	3.45	0.5	350.0	336.24	4.91	17.0		0.60	0.05	79.0	58.85	2.0	7.07	190.0	32.85	4.6	2.40	3.16	0.9
117601	bc	737903	5442981	21	NAD 27	70.4	02F/04				5.21	13.0	11.08	0.5	320.0	304.09	3.48	15.0		0.54</											



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm	Al2 wt. %	As1 ppm	As2 ppb	Au1 ppm	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
117626	bc	740028	5437269	21	NAD 27	118.3	02F/04			5.31	12.0	10.55	0.5	310.0	288.03	2.63	49.0	0.37	0.05	66.0	81.0	47.78	6.0	10.23	190.0	52.48	5.5	9.08	2.26	1.0	
117627	c	741718	5436529	21	NAD 27	92.3	02F/04			5.65	30.0	7.73	0.5	340.0	391.17	2.20	15.0	0.34	0.05	81.0	32.57		18.0	10.36	150.0	44.00	4.6	1.00	1.30	1.1	
117628	c	649607	5408006	21	NAD 27	198.2	02D/15			7.33	8.7	25.21	0.5	420.0	330.79	1.75	21.0	0.35	0.13	52.0	67.57		20.0	21.38	190.0	83.97	8.6	28.75	2.96	0.9	
117629	c	646688	5413532	21	NAD 27	65.2	02D/14			7.64	26.0	23.53	2.0	320.0	319.02	2.16	18.0	0.28	0.13	94.0	77.69		20.0	22.56	120.0	78.07	14.0	38.56	2.81	1.2	
117630	c	654708	5414255	21	NAD 27	161.5	02D/15			10.89	25.0	23.52	0.5	270.0	310.84	2.41	70.0	0.30	0.14	68.0	46.52		28.0	27.26	120.0	117.85	7.8	25.41	1.51	1.0	
117631	bc	657616	5420070	21	NAD 27	62.7	02D/15			7.16	175.0	160.85	4.0	280.0	280.76	2.01	26.0	0.15	0.33	75.0	58.69		30.0	32.79	200.0	98.32	6.4	79.03	2.42	1.3	
117632	c	661051	5417503	21	NAD 27	140.2	02D/15			7.90	198.0	178.08	0.5	320.0	328.47	2.28	5.0	0.62	0.41	87.0	82.01		27.0	32.36	260.0	155.64	16.0	121.54	2.44	1.4	
117633	b	665788	5417216	21	NAD 27	192.8	02D/15			6.01	1.3	1.00					8.0	0.25	0.05	59.0	28.41		1.0	5.15	74.0	32.32	20.0	1.00	1.00	0.73	1.0
117634	b	666698	5419622	21	NAD 27	205.9	02D/15			6.29	4.3	4.02	0.5	330.0	324.86	9.46	8.0	0.50	0.12	75.0	28.11		3.0	11.43	97.0	50.84	11.0	3.43	1.11	1.3	
117635	c	669018	5419028	21	NAD 27	244.8	02D/15			7.20	8.7	7.65	0.5	310.0	317.64	5.79	15.0	0.40	0.05	84.0	56.27		9.0	11.97	170.0	72.87	10.0	15.66	2.07	1.3	
117636	bc	671377	5422317	21	NAD 27	61.5	02D/15			6.76	1.7	1.00	0.5	470.0	498.74	2.98	5.0	0.48	0.05	90.0	29.04		1.0	8.48	100.0	48.53	8.7	1.51	0.94	1.2	
117637	c	659975	5403714	21	NAD 27	246.7	02D/15			7.13	24.0	22.33	0.5	300.0	303.35	1.80	30.0	0.26	0.13	92.0	55.24		19.0	22.51	130.0	73.94	4.6	34.06	2.37	0.9	
117638	bc	661710	5407015	21	NAD 27	218.9	02D/15			9.30	4.4	4.40	0.5	400.0	437.27	3.57	16.0	0.18	0.14	92.0	46.28		8.0	16.63	100.0	85.37	34.0	21.73	1.60	1.4	
117639	b	663555	5408535	21	NAD 27	223.1	02D/15			8.01	15.0	13.61	0.5	170.0	191.21	2.39	65.0	0.12	0.05	45.0	32.86		3.0	6.47	88.0	63.33	9.1	8.62	1.03	1.2	
117640	c	665539	5410957	21	NAD 27	297.8	02D/15			4.80	2.8	2.78	5.0	190.0	202.73	3.07	19.0	0.31	0.05	72.0	35.41		2.0	9.19	110.0	33.52	7.9	1.32	1.38	1.3	
117641	bc	668153	5413652	21	NAD 27	237.5	02D/15			8.57	16.0	14.93	0.5	280.0	256.33	4.65	49.0	0.20	0.12	51.0	45.98		9.0	12.91	89.0	66.49	10.0	30.71	1.38	0.8	
117642	c	670045	5411107	21	NAD 27	177.7	02D/15			4.85	1.2	1.00	0.5	230.0	216.35	2.56	5.0	0.58	0.05	57.0	16.53		2.0	8.65	73.0	30.75	6.9	25.06	1.37	0.8	
117643	b	673792	5404223	21	NAD 27	251.4	02D/15			8.15	33.0	17.0	0.5	320.0	475.73	2.18	35.0	0.32	0.17	60.0	30.13		11.0	14.90	170.0	70.91	3.9	25.06	1.95	1.0	
117644	b	673975	5410996	21	NAD 27	236.2	02D/15			6.22	15.0	14.27	0.5	250.0	236.78	2.04	23.0	0.35	0.15	53.0	28.60		6.0	11.82	140.0	53.58	5.7	16.49	2.52	1.0	
117645	c	676358	5411257	21	NAD 27	215.6	02D/15			6.71	5.9	4.26	0.5	280.0	261.40	4.28	10.0	0.49	0.05	69.0	26.89		6.0	9.00	75.0	41.04	8.2	10.66	1.55	0.9	
117646	c	679947	5409667	21	NAD 27	191.7	02D/15			5.90	3.1	2.23	0.5	280.0	264.39	4.09	21.0	0.48	0.05	61.0	31.29		3.0	8.94	78.0	40.46	7.2	5.86	1.83	0.7	
117647	c	682709	5410820	21	NAD 27	183.5	02D/15			5.73	10.0	7.97	0.5	250.0	222.25	4.30	20.0	0.55	0.05	47.0	27.50		5.0	7.84	94.0	35.94	6.8	15.70	2.13	0.6	
117648	b	682856	5408417	21	NAD 27	232.5	02D/15			4.85	1.2	1.00	0.5	230.0	216.35	2.56	5.0	0.58	0.05	57.0	16.53		2.0	8.65	73.0	30.75	6.9	25.06	1.37	0.8	
117649	c	662903	5402286	21	NAD 27	251.4	02D/15			8.15	33.0	17.0	0.5	320.0	475.73	2.18	35.0	0.32	0.17	60.0	30.13		11.0	14.90	170.0	70.91	3.9	25.06	1.95	1.0	
117650	c	665868	5404223	21	NAD 27	236.2	02D/15			6.22	15.0	14.27	0.5	250.0	236.78	2.04	23.0	0.35	0.15	53.0	28.60		6.0	11.82	140.0	53.58	5.7	16.49	2.52	1.0	
117651	c	666144	5406310	21	NAD 27	280.1	02D/15			6.11	16.0	14.27	0.5	250.0	236.78	2.04	23.0	0.35	0.15	53.0	28.60		6.0	11.82	140.0	53.58	5.7	16.49	2.52	1.0	
117652	c	668962	5406894	21	NAD 27	255.2	02D/15			7.49	6.1	5.07	0.5	330.0	310.27	2.56	98.0	0.26	0.13	72.0	24.98		6.0	11.27	100.0	69.44	15.0	17.79	2.21	1.3	
117653	c	672637	5405452	21	NAD 27	241.5	02D/15			7.39	8.9	7.07	0.5	370.0	358.49	2.59	32.0	0.38	0.12	88.0	59.38		6.0	17.11	93.0	61.80	6.7	30.39	3.58	1.1	
117654	c	673242	5406927	21	NAD 27	232.5	02D/15			7.96	7.0	5.76	0.5	450.0	434.40	2.46	39.0	0.24	0.11	81.0	58.90		18.0	22.23	100.0	78.10	8.7	27.83	4.11	1.3	
117655	c	673243	5406932	21	NAD 27	234.5	02D/15			8.06	12.0	9.15	2.0	330.0	286.46	2.89	10.0	0.45	0.11	85.0	56.09		13.0	15.94	100.0	47.06	5.3	21.73	3.33	1.1	
117656	c	679448	5406353	21	NAD 27	198.5	02D/15			5.62	6.4	5.16	0.5	250.0	222.64	2.82	23.0	0.54	0.05	57.0	27.82		5.0	10.33	100.0	39.74	5.4	10.98	2.26	0.9	
117657	c	682496	5405352	21	NAD 27	184.7	02E/08			6.72	6.7	5.61	0.5	200.0	195.08	2.82	48.0	0.34	0.12	47.0	23.56		4.0	8.28	100.0	44.43	5.5	17.39	1.68	0.7	
117658	b	713933	5464483	21	NAD 27	118.3	02E/08			8.38	0.3	1.00	0.5	450.0	464.98	5.96	16.0	0.45	0.05	57.0	15.60		1.0	6.17	78.0	28.30	10.0	2.66	3.59	0.7	
117659	bc	708648	5464891	21	NAD 27	100.6	02E/08			6.20	7.1	5.61	0.5	220.0	212.12	2.54	70.0	0.67	0.05	52.0	29.56		12.0	12.65	720.0	125.29	6.0	19.52	2.05	0.9	
914000		647175	5409800	21	NAD 27		02D/15		0.10	7.88	23.0		2.0	400.0	302.62	2.15	14.0	0.5	0.24	0.05	72.0	64.93		21.0	17.77	160.0	120.92	4.0	52.75	3.02	1.2
914001		648650	5412025	21	NAD 27		02D/15	2.5	0.20	7.93	36.0		14.0	420.0	386.14	2.18	14.0	0.5	0.19	0.05	69.0	66.97		16.0	20.37	120.0	79.96	5.0	46.55	4.51	1.6
914002		650000	5414300	21	NAD 27		02D/15	2.5	0.20	7.13	36.0		14.0	420.0	386.14	2.18	14.0	0.5	0.19	0.05	69.0	66.97		16.0	20.37	120.0	79.96	5.0	46.55	4.51	1.6
914003		649450	5413200	21	NAD 27		02D/15	2.5	0.20	7.07	24.0		0.5	370.0	358.38	1.78	3.8	0.5	0.20	0.05	63.0	60.64		13.0	16.31	120.0	92.58	4.0	37.16	2.93	1.5
914004		647450	5408425	21	NAD 27		02D/15	2.5	0.10	7.60	37.0		0.5	280.0	401.99	2.22	0.3	0.5	0.28	0.05	63.0	65.02		17.0	22.84	120.0	96.31	4.0	51.46	4.63	1.7
914005		647450	5403550	21	NAD 27		02D/15	2.5	0.05	7.11	35.0		0.5	340.0	372.20	1.84	2.2	0.5	0.35	0.05	73.0	72.29		18.0	23.24	140.0	97.01	4.0	44.21	3.21	1.4
914007		649800	5403250	21	NAD 27		02D/15	2.5	0.05	4.55	38.0		10.0	240.0	200.32	1.45	0.3	0.5	0.75	0.05	70.0	67.28		11.0	13.65	320.0	89.83	2.0	36.55	3.42	1.9
914008		651650	5407450	21	NAD 27		02D/15	2.5	0.05	6.09	56.0		6.0	330.0	285.98	1.83	0.3	0.5	0.47	0.05	96.0	94.64		27.0	35.72	180.0	83.46	3.0	74.15	4.42	1.5
914009		651350	5409025	21	NAD 27		02D/15	2.5	0.05	7.30	78.0		16.0	440.0	391.43	2.24	0.3	0.5	0.25	0.05	88.0	77.41		47.0	64.47	150.0	99.08	4.0	129.23	4.38	1.9
914011		665100	5423950	21	NAD 27		02D/15	2.5	0.05																						



Sample	Horizon	UTMEast	UTMNorth	UTMZone	NAD	Elevation	NTS_map	Ag1 ppm	Ag4 ppm	Ag6 ppm wt. %	As1 ppm	As2 ppb	Au1 ppb	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca1 wt. %	Ca2 wt. %	Cd2 ppm	Cs1 ppm	Cs2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm	Cs1 ppm	Cu2 ppm	Dy2 ppm	Eu1 ppm	
914045		652850	5427200	21	NAD 27		02D/15	2.5		0.05 6.00	18.0		1.0	410.0	384.95	1.89	0.3	0.5	0.17	0.05	62.0	62.62	11.0	15.49	92.0	60.76	60.76	4.0	25.43	3.23	1.4
914046		651350	5426750	21	NAD 27		02D/15	2.5		0.05 6.79	12.0		6.0	360.0	380.38	2.00	9.1	0.5	0.11	0.10	61.0	57.75	9.0	12.00	110.0	122.19	16.0	26.57	4.48	1.8	
914047		648200	5427775	21	NAD 27		02D/15	2.5		0.10 8.71	30.0		13.0	400.0	521.33	2.17	25.0	0.5	0.18	0.20	78.0	69.49	12.0	14.17	220.0	109.08	11.0	19.68	3.81	1.5	
914048		647100	5418450	21	NAD 27		02D/15	2.5		0.05 7.09	35.0		20.0	680.0	424.87	2.04	21.0	0.5	0.23	0.20	85.0	41.24	1.0	1.69	30.0	18.72	11.0	19.68	3.81	1.5	
914049		646950	5419700	21	NAD 27		02D/15	2.5		0.05 9.56					259.50	2.00			0.05 0.05		58.83		20.62				30.41	3.25			
914050		647850	5421400	21	NAD 27		02D/15	2.5		0.05 8.10	35.0		0.5	480.0	369.34	1.86	9.0	0.5	0.04	0.05	71.0	55.79	12.0	14.81	150.0	100.07	9.0	30.41	2.24	1.2	
914051		668450	5404275	21	NAD 27		02D/15	2.5		0.05 6.63	12.0		6.0	370.0	365.88	2.63	9.1	0.5	0.42	0.05	61.0	78.39	9.0	17.64	120.0	70.72	6.0	59.95	3.67	1.1	
914052		668450	5404275	21	NAD 27		02D/15	2.5		0.05 6.61	27.0		7.0	380.0	373.91	2.62	1.8	0.5	0.40	0.10	82.0	88.40	14.0	19.42	100.0	72.79	6.0	72.12	3.55	1.4	
914053		667875	5405400	21	NAD 27		02D/15	2.5		0.05 0.01	13.0		5.0	380.0	474.72	4.44	3.6	0.5	0.50	0.05	88.0	89.99	13.0	18.57	95.0	79.99	14.0	92.52	3.56	1.8	
914054		654850	5406200	21	NAD 27		02D/15	2.5		0.10 8.45	41.0		4.0	210.0	376.40	2.32	12.0	0.5	0.15	0.05	85.0	86.76	32.0	31.50	120.0	113.09	5.0	84.44	3.02	1.4	
914055		657150	5406250	21	NAD 27		02D/15	2.5		0.10 7.89	33.0		6.0	360.0	391.38	2.34	0.3	0.5	0.12	0.05	69.0	70.77	19.0	29.95	110.0	107.39	5.0	69.81	3.62	1.7	
914056		668950	5407725	21	NAD 27		02D/15	2.5		0.10 7.56	33.0		0.5	350.0	377.63	2.35	0.3	0.5	0.19	0.10	62.0	68.24	10.0	26.78	100.0	97.94	4.0	59.12	3.54	1.6	
914057		651950	5402350	21	NAD 27		02D/15	2.5		0.10 6.13	38.0		0.5	290.0	271.91	1.71	4.1	0.5	0.63	0.10	74.0	79.31	22.0	33.03	120.0	77.44	3.0	70.13	3.47	1.7	
914058		647950	5425050	21	NAD 27		02D/15	2.5		0.10 6.23	23.0		0.5	410.0	443.35	2.63	3.6	0.5	0.48	0.10	160.0	155.34	8.0	10.59	38.0	33.32	4.0	26.93	6.37	1.2	
914059		646900	5425050	21	NAD 27		02D/15	2.5		0.05 6.16	32.0		9.0	430.0	470.84	2.59	4.4	0.5	0.54	0.05	65.0	69.95	2.0	4.20	15.0	17.70	3.0	19.49	6.91	1.1	
914060		654400	5426950	21	NAD 27		02D/15	2.5		0.10 6.28	73.0		13.0	480.0	532.64	2.18	0.3	0.5	0.09	0.05	78.0	69.92	28.0	37.47	160.0	75.58	6.0	70.40	4.14	2.1	
914061		682750	5417650	21	NAD 27		02D/15	2.5		0.10 7.97	7.3		10.0	500.0	571.65	2.90	3.7	0.5	0.24	0.05	55.0	52.98	10.0	12.75	93.0	86.18	7.0	28.63	2.99	1.2	
914062		677800	5421550	21	NAD 27		02D/15	2.5		0.10 10.14	9.4		9.0	460.0	628.76	4.32	25.0	0.5	0.12	0.05	110.0	103.07	17.0	23.84	120.0	123.27	11.0	86.89	4.23	1.4	
914063		678750	5427500	21	NAD 27		02D/15	2.5		0.05 7.59	23.0		14.0	450.0	493.64	2.72	0.3	0.5	0.42	0.05	84.0	55.30	18.0	23.93	180.0	116.05	12.0	44.36	4.17	2.0	
914064		676500	5425600	21	NAD 27		02D/15	2.5		0.05 7.62	28.0		7.0	430.0	531.25	2.64	0.3	0.5	0.26	0.05	98.0	86.42	21.0	28.07	260.0	101.95	5.0	74.55	3.35	1.9	
914065		674800	5427425	21	NAD 27		02D/15	2.5		0.05 6.76	31.0		0.5	400.0	407.57	2.20	2.6	0.5	0.61	0.05	74.0	74.31	19.0	25.14	290.0	144.00	4.0	70.38	4.35	1.6	
914066		670550	5425600	21	NAD 27		02D/15	2.5		0.10 7.75	9.0		0.5	430.0	446.56	2.23	6.5	0.5	0.37	0.05	36.0	34.89	13.0	16.80	360.0	149.31	7.0	18.59	2.44	0.9	
914067		657400	5425700	21	NAD 27		02D/15	2.5		0.05 8.28	130.0		42.0	470.0	436.81	2.18	0.3	0.5	0.05	0.05	91.0	82.78	35.0	48.97	110.0	116.02	5.0	115.64	3.61	2.2	
914068		657350	5423275	21	NAD 27		02D/15	2.5		0.05 8.61	50.0		9.0	640.0	590.74	3.10	0.3	0.5	0.11	0.05	73.0	70.06	15.0	19.88	100.0	98.78	7.0	55.80	6.04	1.9	
914069		657500	5427625	21	NAD 27		02D/15	2.5		0.05 7.49	45.0		13.0	520.0	444.20	2.19	0.3	0.5	0.11	0.05	65.0	60.61	14.0	18.97	92.0	89.17	7.0	42.62	2.84	1.7	
914070		675975	5422400	21	NAD 27		02D/15	2.5		0.05 8.76	49.0		0.5	630.0	602.06	3.67	10.0	0.5	0.20	0.05	150.0	136.85	34.0	48.00	110.0	110.60	10.0	112.60	5.29	2.6	
914072		663100	5419850	21	NAD 27		02D/15	2.5		0.05 7.73	24.0		0.5	410.0	450.70	4.53	3.4	0.5	0.82	0.05	150.0	141.90	17.0	23.60	140.0	109.89	11.0	96.16	4.50	1.9	
914074		663300	5419250	21	NAD 27		02D/15	2.5		0.05 7.69	20.0		0.5	340.0	460.11	4.58	2.7	0.5	0.98	0.05	120.0	119.01	18.0	22.80	140.0	109.07	6.0	64.40	4.78	2.0	
914075		663975	5418750	21	NAD 27		02D/15	2.5		0.05 8.74	9.8		2.0	430.0	378.04	7.00	2.7	0.5	0.29	0.05	170.0	138.92	11.0	13.09	120.0	91.23	13.0	39.57	3.90	2.4	
914076		663900	5422850	21	NAD 27		02D/15	2.5		0.10 6.15					546.34	2.79			0.05 0.05		87.45		101.44				588.42	251.49	6.49		
914077		676950	5414925	21	NAD 27		02D/15	2.5		0.05 7.53	9.0		1.0	320.0	347.72	6.98	3.4	0.5	0.45	0.05	87.0	86.04	10.0	14.02	100.0	79.62	10.0	46.26	3.02	1.3	
914078		677400	5417400	21	NAD 27		02D/15	2.5		0.10 7.51	8.3		0.5	270.0	419.24	6.16	12.0	0.5	0.71	0.05	88.0	81.02	9.0	11.99	95.0	80.04	14.0	33.88	2.84	1.1	
914079		660350	5422125	21	NAD 27		02D/15	2.5		0.05 9.65					470.55	3.46			0.05 0.10		101.98		152.13				161.01	219.20	8.14		
914080		680830	5425410	21	NAD 27		02D/15	2.5		0.05 8.23	6.6		2.0	580.0	614.94	3.21	0.3	0.5	0.54	0.05	78.0	81.95	17.0	22.96	110.0	98.45	6.0	45.93	3.76	1.7	
914083		682650	5426260	21	NAD 27		02D/15	2.5		0.05 7.04	23.0		0.5	440.0	429.92	2.24	0.3	0.5	0.58	0.05	70.0	66.03	18.0	23.40	210.0	128.11	4.0	45.96	3.66	1.6	
914084		678650	5426500	21	NAD 27		02D/15	2.5		0.05 7.51	18.0		4.0	460.0	518.80	2.81	0.3	0.5	0.32	0.05	76.0	78.22	16.0	21.75	120.0	90.55	5.0	56.94	3.91	1.8	
914085		678590	5427490	21	NAD 27		02D/15	2.5		0.05 7.24	22.0		1.0	380.0	468.93	2.32	0.3	0.5	0.50	0.05	55.0	60.99	17.0	23.21	190.0	114.39	5.0	48.93	4.03	1.5	
914086		680130	5418360	21	NAD 27		02D/15	2.5		0.05 7.93	10.0		5.0	470.0	554.42	3.41	0.3	0.5	0.39	0.05	97.0	103.75	15.0	20.50	110.0	88.75	5.0	61.79	4.75	1.9	
914087		661940	5423670	21	NAD 27		02D/15	2.5		0.05 8.13	22.0		2.0	450.0	367.50	2.27	0.3	0.5	0.05	0.05	66.0	70.99	18.0	34.76	200.0	114.99	5.0	68.53	2.42	1.5	
914088		660160	5423430	21	NAD 27		02D/15	2.5		0.05 8.32	12.0		17.0	430.0	391.59	2.44	0.3	0.5	0.05	0.05	110.0	72.49	30.0	39.24	130.0	115.29	8.0	80.84	2.93	1.8	
914089		657360	5423370	21	NAD 27		02D/15	2.5		0.05 8.13	42.0		2.0	460.0	527.57	2.82	0.3	0.5	0.10	0.10	71.0	71.31	14.0	19.88	90.0	91.69	7.0	46.30	5.03	1.6	
914090		654320	5423380	21	NAD 27		02D/15	2.5		0.05 8.97	69.0		21.0	450.0	575.51	3.11	0.3	0.5	0.05	0.10	72.0	77.99	18.0	26.64	100.0	113.15	8.0	65.58	5.47	1.7	
914091		653500	5421750	21	NAD 27		02D/15	2.5		0.05 7.45	49.0		14.0	530.0	508.05	2.72	0.3	0.5	0.10	0.05	78.0	77.12	19.0	25.07	91.0	81.63	6.0	52.22	5.42	1.8	
914092		651480	5426500	21	NAD 27		02D/15	2.5		0.05 7.17	52.0		7.0	420.0	467.56	2.41	0.3	0.5	0.23												



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 wt. %	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
97003	3.90	3.80	8.0			2.25	42.0	36.00	38.80	0.52	0.96	909.00	1.0	1.00	1.40	1.17	14.00			35.00	588.00	6.00	120.0	141.00		0.5	15.8	14.20	1.0	7.2			70.00	1.5	0.9
97004	4.10	3.82	11.0			1.58	42.0	37.00	11.90	0.53	0.41	733.00	1.0	1.00	1.40	1.25	12.00			9.00	497.00	5.00	87.0	87.00		0.6	16.2	15.40	1.0	4.1			86.00	1.2	0.7
97005	4.50	4.31	8.0			2.35	34.0	38.00	34.00	0.49	0.87	979.00	1.0	1.00	1.60	1.47	13.00			30.00	526.00	35.00	140.0	136.00		0.9	14.9	13.70	1.0	9.0			106.00	1.4	1.1
97007	4.00	3.77	8.0			2.15	45.0	37.00	34.00	0.49	0.87	1054.00	1.0	1.00	1.70	1.47	14.00			33.00	526.00	11.00	140.0	135.00		0.6	14.9	13.70	1.0	6.4			103.00	1.3	0.9
97008	4.70	4.69	5.0			1.04	22.0	15.00	21.50	0.34	0.34	635.00	1.0	1.00	1.00	0.99	13.00			12.00	1064.00	8.00	57.0	62.00		0.2	13.0	12.30	1.0	6.8			72.00	1.1	0.5
97009	4.10	3.88	7.0			1.67	38.0	29.00	48.10	0.57	0.83	728.00	1.0	1.00	1.60	1.39	12.00			36.00	288.00	13.00	91.0	96.00		1.0	14.0	12.70	1.0	4.0			97.00	1.3	1.1
97010	4.00	3.79	9.0			2.13	41.0	30.00	42.60	0.52	0.91	1017.00	1.0	1.00	1.70	1.52	12.00			31.00	725.00	38.00	130.0	134.00		0.9	14.9	13.80	1.0	8.1			114.00	1.7	1.1
97011	2.40	2.26	9.0			2.12	34.0	23.00	38.20	0.40	0.53	851.00	1.0	1.00	1.90	1.65	11.00			16.00	222.00	12.00	140.0	141.00		0.3	10.0	8.80	1.0	6.4			101.00	1.9	0.8
97013	4.10	3.92	9.0			1.53	31.0	19.00	51.80	0.34	0.67	686.00	1.0	1.00	1.50	1.31	12.00			27.00	672.00	11.00	97.0	102.00		0.9	13.1	12.10	1.0	5.8			95.00	1.6	0.8
97015	2.00	1.94	11.0			1.69	26.0	20.00	28.70	0.22	0.26	734.00	1.0	1.00	1.70	1.63	12.00			4.00	176.00	13.00	120.0	124.00		0.2	5.7	4.90	1.0	4.8			104.00	2.4	0.6
97016	3.10	2.99	10.0			1.47	27.0	15.00	24.10	0.29	0.24	561.00	1.0	1.00	1.50	1.34	11.00			6.00	2281.00	14.00	110.0	111.00		0.2	7.0	5.70	1.0	5.1			83.00	2.1	0.6
97017	1.90	1.81	8.0			2.26	24.0	19.00	32.80	0.37	0.35	735.00	1.0	1.00	1.80	1.72	9.00			12.00	763.00	14.00	170.0	178.00		0.2	5.9	5.90	1.0	5.1			103.00	2.0	0.7
97018	1.90	1.76	8.0			1.94	23.0	17.00	28.40	0.32	0.30	541.00	1.0	1.00	1.70	1.52	9.00			12.00	321.00	17.00	150.0	151.00		0.2	5.5	5.00	1.0	4.3			98.00	1.8	0.6
97019	1.10	1.08	7.0			1.92	23.0	17.00	20.60	0.32	0.25	509.00	1.0	1.00	1.80	1.81	6.00			7.00	540.00	12.00	140.0	145.00		0.2	4.4	4.00	1.0	4.5			97.00	1.8	0.6
97020	0.80	0.88	9.0			1.53	28.0	21.00	25.90	0.35	0.31	638.00	1.0	1.00	1.90	1.84	7.00			8.00	732.00	15.00	140.0	140.00		0.3	5.1	4.50	1.0	5.5			106.00	1.8	0.7
97022	2.40	2.15	8.0			1.93	20.0	11.00	22.30	0.26	0.25	600.00	1.0	1.00	1.70	1.59	7.00			10.00	338.00	13.00	110.0	107.00		0.3	5.4	4.70	1.0	3.6			91.00	1.6	0.3
97023	1.80	1.79	8.0			2.05	29.0	19.00	34.40	0.43	0.47	770.00	1.0	1.00	1.80	1.68	10.00			11.00	362.00	13.00	140.0	135.00		0.4	10.9	10.50	1.0	5.8			114.00	1.5	0.8
97024	2.40	2.23	9.0			1.65	28.0	22.00	30.10	0.27	0.60	818.00	1.0	1.00	1.80	1.61	8.00			45.00	513.00	10.00	120.0	104.00		0.7	8.5	7.80	1.0	6.0			104.00	1.6	0.8
97025	1.50	1.50	7.0			1.68	18.0	14.00	16.90	0.23	0.25	557.00	1.0	1.00	1.70	1.73	5.00			12.00	692.00	13.00	120.0	115.00		0.3	3.8	3.30	1.0	3.8			97.00	1.3	0.6
97026	1.80	1.63	8.0			1.64	20.0	14.00	17.40	0.26	0.27	727.00	1.0	1.00	1.70	1.75	6.00			10.00	701.00	13.00	110.0	112.00		0.3	4.2	3.70	1.0	4.1			99.00	1.4	0.6
97027	1.80	1.67	7.0			1.94	18.0	14.00	18.50	0.28	0.30	692.00	1.0	1.00	1.70	1.76	9.00			8.00	623.00	9.00	170.0	168.00		0.5	4.9	4.70	1.0	3.9			98.00	2.6	0.6
97028	3.30	2.90	10.0			1.86	32.0	22.00	29.80	0.48	0.63	1087.00	1.0	1.00	1.60	1.61	10.00			25.00	704.00	11.00	120.0	122.00		1.2	8.9	8.50	1.0	6.2			101.00	2.1	0.9
97029	4.20	3.94	8.0			2.20	39.0	26.00	42.80	0.51	0.64	1161.00	1.0	1.00	1.40	1.22	13.00			22.00	577.00	16.00	140.0	135.00		1.8	13.2	11.90	1.0	7.4			90.00	1.6	0.9
97030	2.10	2.11	8.0			1.93	26.0	20.00	30.40	0.44	0.48	613.00	1.0	1.00	1.70	1.63	9.00			19.00	439.00	10.00	130.0	126.00		1.0	8.6	8.00	1.0	5.2			94.00	1.6	0.7
97031	1.50	1.44	11.0			1.77	24.0	14.00	23.40	0.52	0.21	539.00	1.0	1.00	1.50	1.41	9.00			4.00	350.00	8.00	130.0	119.00		0.7	7.7	6.50	1.0	4.4			79.00	2.0	0.6
97032	1.30	1.20	7.0			2.25	15.0	13.00	19.00	0.32	0.28	467.00	1.0	1.00	1.90	1.77	9.00			6.00	485.00	9.00	170.0	169.00		0.5	4.3	3.90	1.0	3.1			93.00	2.7	0.3
97033	1.80	1.70	9.0			1.89	24.0	19.00	26.10	0.40	0.30	607.00	1.0	1.00	1.60	1.74	7.00			8.00	602.00	13.00	130.0	129.00		0.2	5.4	5.10	1.0	5.3			110.00	1.6	0.8
97034	3.10	2.47	13.0			1.92	36.0	20.00	20.90	0.49	0.57	844.00	1.0	1.00	1.50	1.22	7.00			22.00	719.00	15.00	52.0	41.00		1.7	10.0	7.80	1.0	5.6			77.00	1.3	0.8
97035	3.10	2.75	13.0			1.44	39.0	26.00	45.70	0.53	0.68	882.00	1.0	1.00	1.40	1.17	13.00			16.00	1351.00	12.00	97.0	93.00		1.2	12.2	10.50	1.0	8.0			94.00	1.7	1.1
97036	2.90	2.66	11.0			1.18	27.0	20.00	26.40	0.46	0.65	698.00	1.0	1.00	1.40	1.22	8.00			25.00	470.00	13.00	70.0	60.00		1.6	10.5	9.30	1.0	5.2			73.00	1.2	0.8
97037	3.50	3.18	10.0			1.79	31.0	23.00	42.40	0.52	0.79	942.00	1.0	1.00	1.40	1.19	11.00			26.00	649.00	21.00	110.0	105.00		1.6	13.8	12.10	1.0	6.0			76.00	1.4	0.9
97038	4.00	3.63	10.0			1.85	33.0	26.00	34.50	0.52	0.93	1040.00	1.0	1.00	1.40	1.21	11.00			33.00	652.00	17.00	100.0	98.00		1.8	16.0	13.90	1.0	6.3			70.00	1.3	0.9
97039	3.90	3.46	10.0			1.64	34.0	25.00	34.10	0.53	0.90	902.00	1.0	1.00	1.40	1.23	10.00			34.00	387.00	11.00	97.0	87.00		1.8	14.9	12.90	1.0	6.5			72.00	1.2	1.0
97040	3.60	3.20	13.0			1.31	37.0	24.00	29.90	0.67	0.76	680.00	1.0	1.00	1.50	1.33	10.00			26.00	273.00	11.00	82.0	67.00		1.7	13.5	11.70	1.0	7.7			82.00	1.5	1.0
97042	3.00	2.73	11.0			1.70	37.0	29.00	33.20	0.51	0.78	712.00	1.0	1.00	1.60	1.44	10.00			24.00	675.00	17.00	97.0	94.00		1.3	12.3	11.10	1.0	7.0			95.00	1.5	1.0
97043	3.60	3.36	9.0			1.90	33.0	27.00	32.20	0.51	0.82	954.00	1.0	1.00	1.60	1.36	10.00			35.00	236.00	11.00	88.0	87.00		1.8	17.4	12.50	1.0	7.3			79.00	1.3	1.0
97048	4.00	3.68	10.0			1.76	34.0	25.00	33.90	0.53	0.80	1118.00	1.0	1.00	1.40	1.19	10.00			29.00	351.00	10.00	110.0	108.00		1.8	17.4	16.00	1.0	7.3			79.00	1.2	0.9
97050	3.20	2.94	11.0			2.18	35.0	27.00	37.80	0.51	0.84	820.00	1.0	1.00	1.80	1.64	11.00			24.00	1025.00	17.00	130.0	135.00		1.0	11.6	10.80	1.0	7.4			124.00	1.8	1.0
97051	4.40	3.89	17.0			2.35	40.0	33.00	38.50	0.70	0.82	1295.00	1.0	1.00	1.90	1.59	15.00			23.00	1539.00	27.00	140.0	144.00		0.7	15.5	13.90	1.0	10.3			127.00	2.1	1.5
97062	2.80	2.65	20.0			2.88	41.0	40.00	26.60	0.70	0.59	607.00	1.0	1.00	1.90	1.84	13.00			11.00															



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
97083	2.90	2.71	11.0			1.46	29.0	20.00	27.60	0.18	0.58	1072.00	1.0	1.00	1.30	1.17	11.00			21.00	249.00	20.00	91.0	83.00		0.6	10.0	9.00	1.0	5.4			74.00	1.6	0.8
97084	3.00	2.74	11.0			1.58	33.0	23.00	29.50	0.19	0.71	1012.00	1.0	1.00	1.40	1.23	11.00			26.00	567.00	11.00	96.0	92.00		0.8	12.6	11.30	1.0	6.5			84.00	1.7	1.0
97085	3.20	2.99	10.0			1.66	36.0	24.00	29.90	0.25	0.81	946.00	1.0	1.00	1.40	1.19	11.00			31.00	734.00	11.00	100.0	97.00		0.8	12.4	10.20	1.0	6.7			50.00	0.9	1.3
97086	5.80	5.01	5.0			0.88	35.0	25.00	19.20	0.21	0.51	632.00	1.0	1.00	0.81	0.66	11.00			21.00	1189.00	19.00	46.0	52.00		0.6	18.8	15.60	1.0	6.1			58.00	2.0	0.9
97087	4.20	4.66	11.0			2.06	41.0	31.00	55.20	0.23	0.88	809.00	1.0	1.00	1.30	1.08	14.00			27.00	467.00	1.00	120.0	138.00		0.6	18.8	15.60	1.0	6.1			87.00	2.0	1.1
97088	4.70	4.07	11.0			1.10	39.0	27.00	42.40	0.26	0.91	1058.00	1.0	1.00	1.40	1.10	19.00			49.00	671.00	21.00	66.0	70.00		3.8	11.7	9.60	1.0	5.7			58.00	1.4	0.9
97089	3.70	3.28	11.0			1.27	31.0	19.00	31.30	0.18	0.57	1115.00	1.0	1.00	1.40	1.06	10.00			27.00	621.00	12.00	82.0	84.00		0.3	13.6	13.30	1.0	7.6			97.00	1.3	1.2
97090	4.50	4.24	4.0			1.30	42.0	36.00	27.30	0.06	0.56	798.00	1.0	1.00	1.40	1.31	11.00			15.00	951.00	16.00	76.0	84.00		2.4	10.9	9.50	1.0	5.2			50.00	1.5	0.8
97091	4.10	3.75	12.0			1.16	27.0	19.00	24.10	0.17	0.49	795.00	1.0	1.00	1.20	0.98	11.00			18.00	952.00	13.00	76.0	71.00		3.4	12.5	11.00	1.0	6.5			58.00	1.6	0.9
97092	4.20	3.77	11.0			1.56	34.0	25.00	30.90	0.11	0.71	729.00	1.0	1.00	1.30	1.10	11.00			26.00	642.00	11.00	92.0	90.00		1.0	6.5	5.80	1.0	5.0			81.00	1.6	0.8
97093	2.20	2.04	13.0			1.17	24.0	17.00	23.90	0.14	0.44	1044.00	1.0	1.00	1.40	1.24	8.00			14.00	879.00	22.00	73.00	73.00		0.3	12.9	11.60	1.0	4.7			51.00	1.9	0.7
97095	2.30	2.24	14.0			1.77	27.0	18.00	9.20	0.25	0.31	773.00	1.0	1.00	1.00	0.97	11.00			9.00	312.00	1.00	110.0	118.00		6.3	12.1	11.00	1.0	7.0			65.00	1.7	1.0
97096	3.40	3.09	12.0			1.58	37.0	27.00	26.90	0.15	0.79	814.00	1.0	1.00	1.40	1.23	10.00			28.00	421.00	16.00	91.0	83.00		2.8	11.6	10.20	1.0	6.4			66.00	1.5	1.0
97097	3.40	3.11	11.0			1.40	35.0	25.00	28.00	0.26	0.75	766.00	1.0	1.00	1.40	1.18	10.00			29.00	355.00	15.00	85.0	79.00		1.6	11.9	11.60	1.0	5.2			40.00	1.3	0.8
97098	4.50	4.83	6.0			1.31	30.0	24.00	34.80	0.10	0.56	608.00	2.0	1.00	0.68	0.60	14.00			25.00	752.00	26.00	80.0	93.00		12.2	15.0	13.40	1.0	6.6			37.00	1.5	0.9
97099	5.00	4.97	10.0			1.48	37.0	30.00	73.50	0.41	1.23	521.00	1.0	1.00	0.84	0.75	12.00			68.00	650.00	8.00	92.0	108.00		10.7	15.2	0.50	1.0	8.9			57.00	1.9	1.3
97100	4.60	3.93	13.0			2.09	48.0	32.00	37.80	0.31	0.87	1265.00	1.0	1.00	1.00	1.03	10.00			39.00	556.00	26.00	120.0	116.00		4.8	9.4	8.60	1.0	6.1			70.00	1.4	0.9
97101	0.01	0.00	10.0			0.01	33.0	1.00	0.50	0.38	0.03	1.00	1.00	1.00	1.20	0.01	1.00			1.00	1.00	1.00	110.0	1.00		0.2	7.3	6.30	1.0	4.6			105.00	1.5	0.6
97103	3.30	3.07	12.0			1.26	29.0	23.00	24.80	0.56	0.56	1987.00	1.0	1.00	1.20	1.05	11.00			27.00	629.00	26.00	78.0	74.00		0.2	6.9	6.00	1.0	6.2			102.00	1.5	0.8
97104	2.60	2.53	10.0			1.04	24.0	19.00	21.00	0.43	0.56	975.00	1.0	1.00	1.20	1.18	9.00			21.00	495.00	8.00	62.0	58.00		1.4	8.4	7.80	1.0	4.6			74.00	1.4	0.7
97105	4.80	4.81	7.0			2.04	31.0	21.00	55.30	0.34	0.85	704.00	1.0	1.00	1.10	1.01	14.00			31.00	570.00	12.00	120.0	131.00		3.9	14.9	13.90	1.0	5.6			60.00	1.4	0.7
97106	3.20	2.97	9.0			1.25	30.0	21.00	29.60	0.45	0.53	649.00	3.0	4.00	1.10	1.02	9.00			19.00	382.00	13.00	75.0	70.00		2.2	10.5	9.10	1.0	5.6			59.00	1.4	0.7
97107	0.50	0.45	13.0			2.30	31.0	17.00	14.40	0.49	0.41	412.00	1.0	1.00	1.70	1.58	9.00			1.00	222.00	14.00	150.0	140.00		0.2	6.2	4.80	1.0	5.4			108.00	2.4	0.6
97108	2.50	2.33	10.0			2.36	40.0	31.00	33.50	0.54	0.42	722.00	1.0	1.00	2.00	1.79	10.00			12.00	971.00	15.00	180.0	165.00		0.2	8.0	7.00	1.0	8.3			123.00	2.1	1.1
97109	2.00	1.84	6.0			2.12	25.0	18.00	35.30	0.22	0.38	513.00	1.0	1.00	2.00	1.81	7.00			11.00	403.00	14.00	160.0	152.00		0.2	7.3	6.30	1.0	4.6			105.00	1.5	0.6
97110	1.90	1.75	7.0			1.92	28.0	20.00	27.80	0.23	0.31	709.00	1.0	2.00	2.00	1.86	7.00			11.00	333.00	15.00	140.0	132.00		0.2	6.9	6.00	1.0	6.2			102.00	1.5	0.8
97111	2.20	2.07	10.0			2.37	29.0	22.00	31.70	0.26	0.32	526.00	1.0	1.00	2.00	1.81	11.00			7.00	461.00	14.00	160.0	150.00		0.1	6.8	5.80	1.0	5.5			112.00	2.1	0.6
97112	2.80	1.84	8.0			2.10	32.0	21.00	37.60	0.30	0.21	428.00	1.0	1.00	1.70	1.48	10.00			5.00	249.00	26.00	140.0	145.00		0.2	8.8	7.70	1.0	7.0			86.00	2.0	1.0
97113	2.10	1.96	11.0			2.32	32.0	21.00	30.40	0.42	0.28	538.00	1.0	1.00	1.80	1.59	11.00			9.00	531.00	14.00	160.0	151.00		0.2	7.7	6.70	1.0	8.0			115.00	2.3	1.1
97114	2.40	2.36	7.0			2.41	31.0	25.00	46.80	0.34	0.54	668.00	1.0	1.00	1.90	1.71	10.00			11.00	869.00	22.00	179.00	179.00		0.3	10.9	9.40	1.0	8.3			116.00	3.0	1.1
97115	1.80	1.72	11.0			2.21	30.0	24.00	30.50	0.45	0.27	552.00	1.0	1.00	1.90	1.75	11.00			6.00	205.00	14.00	150.0	142.00		0.2	6.3	5.50	1.0	5.9			108.00	2.1	0.8
97116	1.70	1.71	10.0			1.91	34.0	25.00	27.10	0.47	0.34	614.00	1.0	1.00	1.00	1.76	9.00			9.00	231.00	13.00	140.0	120.00		0.3	7.0	6.30	1.0	6.6			108.00	2.1	0.8
97117	2.10	2.02	13.0			2.05	37.0	23.00	30.70	0.48	0.32	641.00	1.0	1.00	1.90	1.73	11.00			7.00	189.00	15.00	140.0	118.00		0.2	7.2	6.00	1.0	7.0			111.00	2.3	0.9
97118	2.60	2.30	15.0			3.20	49.0	37.00	53.00	1.00	0.47	830.00	1.0	1.00	2.20	1.99	15.00			7.00	975.00	26.00	200.0	197.00		0.2	11.1	10.00	1.0	10.7			124.00	3.1	1.6
97119	2.80	2.28	13.0			2.42	48.0	29.00	45.80	1.00	0.52	756.00	1.0	1.00	2.20	1.89	10.00			14.00	717.00	14.00	180.0	154.00		0.4	10.5	8.80	1.0	8.0			115.00	2.3	1.1
97120	2.70	2.39	12.0			2.88	41.0	30.00	64.70	0.73	0.52	775.00	1.0	1.00	2.30	1.91	14.00			11.00	869.00	22.00	179.00	179.00		0.3	10.9	9.40	1.0	8.3			116.00	3.0	1.1
97122	2.80	2.86	14.0			2.64	42.0	38.00	52.40	0.29	0.54	1039.00	1.0	1.00	1.90	1.71	12.00			12.00	1515.00	20.00	190.0	160.00		0.3	8.4	8.50	1.0	10.5			135.00	2.6	1.6
97123	1.40	1.35	9.0			1.87	22.0	20.00	20.60	0.35	0.27	572.00	1.0	1.00	1.60	1.68	8.00			7.00	612.00	11.00	130.0	113.00		0.2	4.8	4.60	1.0	4.7			104.00	1.8	0.7
97124	1.70	1.67	8.0			1.83	20.0	17.00	17.70	0.29	0.24	758.00	1.0	1.00	1.70	1.77	7.00			7.00	747.00	13.00	130.0	111.00		0.2	4.2	3.80	1.0	4.4			102.00	1.8	0.6
97125	2.30	2.09	10.0			1.83	33.0	24.00	45.60	0.45	0.37	858.00	1.0	1.00	1.90	1.68	13.00			10.00	225.00	19.00	170.0	134.00											



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 wt. %	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
97160	3.70	3.64	7.0			1.55	26.0	21.00	54.60	0.38	1.24	814.00	1.0	1.00	1.20	1.10	9.00			63.00	345.00	4.00	100.0	98.00		1.5	17.4	16.90	1.0	5.4			78.00	1.1	0.8
97161	4.00	3.92	7.0			1.30	28.0	19.00	45.50	0.47	0.93	643.00	1.0	1.00	1.20	1.11	9.00			38.00	264.00	4.00	79.0	79.00		0.2	5.0	4.40	1.0	4.7			102.00	2.1	0.6
97163	1.70	1.47	8.0			2.09	27.0	19.00	25.60	0.68	0.26	569.00	2.0	3.00	2.00	1.90	8.00			8.00	289.00	18.00	150.0	154.00		0.4	6.2	5.60	1.0	5.6			107.00	1.7	0.8
97164	2.10	1.96	10.0			1.75	30.0	22.00	22.80	0.72	0.32	769.00	1.0	1.00	1.90	1.76	8.00			10.00	692.00	13.00	130.0	124.00		0.3	5.4	4.30	1.0	5.3			103.00	2.1	0.8
97166	1.70	1.53	10.0			1.92	28.0	20.00	19.20	0.76	0.24	671.00	1.0	1.00	2.00	1.83	8.00			6.00	756.00	16.00	220.0	206.00		0.3	11.4	9.50	1.0	10.0			122.00	2.9	1.4
97167	2.90	2.55	15.0			2.65	50.0	36.00	58.30	1.30	0.58	1002.00	1.0	1.00	2.30	1.94	13.00			12.00	1387.00	12.00	250.0	200.0		0.3	11.4	9.50	1.0	10.0			107.00	1.6	0.8
97168	2.20	2.04	8.0			1.88	32.0	22.00	28.50	0.61	0.40	832.00	1.0	1.00	2.10	1.81	8.00			15.00	722.00	13.00	140.0	135.00		0.1	6.9	6.00	1.0	6.0			107.00	1.6	1.0
97169	2.20	1.98	12.0			2.63	41.0	29.00	30.00	0.91	0.30	607.00	1.0	1.00	2.10	1.86	11.00			7.00	777.00	13.00	200.0	185.00		0.1	6.9	6.00	1.0	7.0			112.00	2.6	1.0
97170	2.20	2.11	12.0			2.16	34.0	27.00	33.80	1.00	0.38	889.00	1.0	1.00	1.90	1.90	10.00			7.00	1203.00	16.00	160.0	157.00		0.2	6.6	6.10	1.0	7.3			111.00	2.3	1.1
97171	4.80	4.24	8.0			2.20	37.0	26.00	35.80	0.72	0.71	849.00	1.0	1.00	1.50	1.24	13.00			41.00	401.00	11.00	130.0	131.00		0.9	17.1	14.80	1.0	6.4			87.00	1.4	0.9
97173	3.80	3.24	16.0			1.52	49.0	30.00	37.30	0.67	0.74	655.00	1.0	1.00	2.00	1.76	12.00			20.00	175.00	12.00	82.0	75.00		0.8	13.3	11.50	1.0	8.6			121.00	1.5	1.2
97174	3.00	2.75	16.0			1.12	34.0	26.00	26.50	0.54	0.58	701.00	1.0	1.00	1.40	1.25	11.00			15.00	264.00	11.00	60.0	59.00		1.5	11.5	9.60	1.0	6.5			72.00	1.5	0.9
97175	3.30	2.90	16.0			1.03	29.0	24.00	23.40	0.48	0.58	530.00	1.0	1.00	1.50	1.32	11.00			15.00	227.00	8.00	62.0	58.00		1.1	11.9	9.90	1.0	5.5			87.00	1.1	0.8
97176	3.30	2.76	11.0			0.89	25.0	14.00	18.70	0.46	0.32	414.00	1.0	1.00	1.30	1.16	9.00			7.00	212.00	9.00	57.0	55.00		1.2	8.9	7.30	1.0	4.3			69.00	1.3	0.3
97177	0.60	0.57	24.0			2.67	18.0	10.00	9.40	3.60	0.09	103.00	1.0	1.00	2.00	4.00	4.13	22.00		1.00	189.00	46.00	320.0	237.00		0.2	2.4	1.40	1.0	7.4			63.00	1.3	0.6
97178	0.80	0.58	16.0			1.30	28.0	18.00	7.90	0.41	0.17	388.00	1.0	2.00	1.40	1.24	13.00			2.00	61.00	17.00	78.0	70.00		1.5	8.3	7.20	1.0	3.9			34.00	1.6	0.7
97179	2.50	2.27	11.0			1.45	31.0	21.00	27.50	0.38	0.58	494.00	1.0	1.00	1.00	1.09	8.00			12.00	78.00	13.00	99.0	83.00		1.6	13.5	11.60	1.0	5.9			75.00	1.8	0.8
97181	0.70	0.60	29.0			1.92	26.0	14.00	7.60	0.53	0.17	458.00	13.0	12.00	1.50	1.37	20.00			1.00	112.00	25.00	84.0	80.00		0.9	8.9	6.70	1.0	4.9			97.00	2.5	0.6
97182	1.10	1.02	17.0			2.02	32.0	17.00	9.30	0.61	0.58	417.00	1.0	1.00	1.40	1.42	16.00			6.00	121.00	16.00	110.0	111.00		1.2	15.4	13.20	1.0	5.9			100.00	1.9	0.8
97184	1.00	1.08	82.0			1.75	11.0	13.00	2.70	0.72	0.30	586.00	1.0	2.00	2.60	2.81	27.00			1.00	157.00	19.00	51.0	54.00		0.1	14.6	13.10	1.0	4.3			273.00	1.7	0.6
97185	1.70	1.50	12.0			1.09	22.0	13.00	19.10	0.33	0.18	451.00	1.0	1.00	1.20	1.18	7.00			5.00	69.00	4.00	74.0	63.00		1.5	8.3	7.20	1.0	3.9			63.00	1.3	0.6
97186	1.00	0.79	16.0			0.73	25.0	14.00	10.00	0.52	0.09	475.00	1.0	1.00	0.64	0.64	6.00			2.00	48.00	2.00	43.0	34.00		1.9	6.8	5.10	1.0	4.9			34.00	1.6	0.7
97187	2.10	2.07	10.0			0.80	21.0	19.00	23.70	0.33	0.46	748.00	1.0	1.00	1.10	1.09	8.00			15.00	374.00	15.00	49.0	39.00		1.5	7.0	6.50	1.0	4.3			66.00	1.1	0.6
97188	0.70	0.69	10.0			1.38	19.0	14.00	12.80	0.24	0.22	425.00	1.0	1.00	1.10	1.08	10.00			3.00	134.00	7.00	91.0	87.00		1.3	8.8	8.50	1.0	3.6			48.00	2.2	0.3
97189	1.00	0.91	12.0			1.37	11.0	8.00	9.00	0.38	0.24	567.00	1.0	1.00	1.20	1.16	10.00			3.00	131.00	1.00	74.0	68.00		0.3	8.7	7.90	1.0	2.1			47.00	1.2	0.3
97190	1.00	0.96	13.0			1.40	11.0	8.00	7.80	0.31	0.20	623.00	1.0	1.00	0.72	0.71	12.00			2.00	84.00	1.00	78.0	67.00		0.8	10.0	8.80	1.0	2.3			23.00	1.7	0.3
97191	1.90	1.51	15.0			0.75	30.0	18.00	6.80	0.53	0.23	482.00	1.0	1.00	0.88	0.88	8.00			5.00	64.00	1.00	36.0	29.00		2.1	8.8	7.50	1.0	6.7			45.00	1.7	0.9
97192	1.20	1.03	13.0			1.44	36.0	20.00	8.50	0.54	0.16	738.00	1.0	1.00	0.73	0.71	8.00			2.00	47.00	4.00	62.0	53.00		1.7	12.0	10.80	1.0	6.6			54.00	1.7	0.9
97193	0.80	0.76	12.0			2.09	57.0	28.00	25.70	0.68	0.21	179.00	1.0	1.00	0.49	0.46	11.00			3.00	104.00	6.00	88.0	90.00		3.2	17.8	16.40	1.0	10.6			46.00	2.3	1.3
97194	1.20	1.14	11.0			1.75	27.0	21.00	7.70	0.50	0.34	302.00	1.0	1.00	1.10	1.08	9.00			6.00	98.00	2.00	100.0	93.00		1.2	15.0	13.70	1.0	5.0			49.00	1.6	0.7
97195	1.80	1.78	12.0			1.56	35.0	28.00	7.70	0.57	0.32	330.00	1.0	1.00	0.75	0.72	9.00			10.00	94.00	1.00	97.0	94.00		1.8	13.6	12.30	1.0	6.3			33.00	1.6	1.0
97196	0.90	0.74	23.0			1.15	34.0	17.00	8.60	0.62	0.12	464.00	1.0	1.00	0.81	0.75	9.00			1.00	94.00	6.00	54.0	52.00		1.3	10.0	7.70	1.0	6.4			54.00	1.9	0.9
97197	0.50	0.58	31.0			1.98	49.0	14.00	8.80	0.38	0.21	234.00	1.0	1.00	1.40	1.53	9.00			1.00	160.00	15.00	64.0	65.00		0.6	11.6	11.60	1.0	7.8			164.00	1.8	0.8
97198	3.30	2.94	10.0			0.71	21.0	15.00	20.30	0.31	0.45	613.00	1.0	1.00	1.30	1.13	9.00			15.00	812.00	9.00	37.0	36.00		1.8	10.3	9.00	1.0	4.7			71.00	1.1	0.6
97200	2.60	2.60	10.0			1.59	30.0	22.00	31.00	0.44	0.13	555.00	1.0	1.00	1.30	1.19	8.00			39.00	102.00	1.00	95.0	90.00		1.3	14.7	13.90	1.0	5.6			65.00	1.1	0.9
97201	4.20	4.17	8.0			1.84	27.0	21.00	32.60	0.49	1.04	741.00	1.0	1.00	1.10	1.09	11.00			40.00	425.00	6.00	100.0	112.00		0.9	14.2	12.40	1.0	6.2			59.00	1.1	0.9
97202	4.60	4.24	11.0			1.79	29.0	24.00	21.10	0.55	0.88	965.00	1.0	1.00	1.50	1.32	10.00			34.00	759.00	14.00	100.0	99.00		0.9	14.2	12.40	1.0	6.2			66.00	1.6	1.0
97203	3.90	3.64	8.0			1.40	34.0	27.00	34.60	0.60	1.00	867.00	1.0	1.00	1.40	1.29	10.00			41.00	206.00	6.00	84.0	79.00		1.9	16.2	14.50	1.0	7.6			80.00	0.9	1.0
97205	2.60	2.42	10.0			1.62	30.0	20.00	30.20	0.48	0.78	625.00	1.0	1.00	1.50	1.26	10.00			20.00	108.00	4.00	110.0	94.00		0.8	15.4	13.20	1.0	5.5			76.00	1.4	0.7
97206	1.40	1.64	10.0			1.97	18.0	12.00	6.10	0.41	0.32	872.00	1.0	1.00	0.69	0.75	10.00			5.00	90.00	1.00	100.0	103.00		0.8	14.8	15.70	1.0						



Sample	Fe1	Fe2	Hf1	Hg1	Ir1	K2	La1	La2	Li2	Lu1	Mg2	Mn2	Mo1	Mo2	Na1	Na2	Nb2	Nd1	Ni1	Ni2	P2	Pb2	Rb1	Rb2	Rb6	Sb1	Sc1	Sc2	Se1	Sm1	Sn1	Sr1	Sr2	Ta1	Tb1
	wt. %	wt. %	ppm	ppm	ppb	wt. %	ppm	ppm	ppm	ppm	wt. %	wt. %	ppm	ppm	ppm	wt. %	wt. %	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt. %	wt. %	ppm	ppm	ppm
97241	3.40	3.13	7.0			0.63	28.0	11.00	15.60	0.39	0.22	451.00	1.0	1.00	1.50	1.53	8.00		10.00	919.00	18.00	46.0	100.0	83.00	0.2	7.4	6.40	1.0	4.9			132.00	1.0	0.6	
97242	4.20	3.76	7.0			1.84	27.0	12.00	37.40	0.36	0.29	443.00	1.0	1.00	1.30	1.15	10.00		26.00	1173.00	9.00	100.0	88.00	0.7	11.3	10.00	1.0	4.5			89.00	1.5	0.6		
97243	0.80	3.89	10.0			1.88	27.0	15.00	27.80	0.48	0.14	859.00	1.0	1.00	1.20	1.03	10.00		18.00	291.00	11.00	110.0	110.0	88.00	2.3	13.9	12.30	1.0	5.4			82.00	1.7	0.7	
97244	0.80	4.46	10.0			0.43	17.0	8.00	18.30	0.37	0.93	589.00	1.0	1.00	1.50	1.41	14.00		8.00	177.00	2.00	160.0	44.00	10.0	0.9	13.5	22.00	1.0	3.6			98.00	2.3	0.3	
97246	1.90	1.47	11.0			1.72	31.0	20.00	21.70	0.30	0.14	578.00	1.0	1.00	2.40	1.73	7.00		8.00	282.00	9.00	120.0	88.00	0.4	8.1	5.80	1.0	5.1			97.00	1.8	0.7		
97247	0.70	0.68	9.0			1.82	24.0	15.00	16.80	0.37	0.04	457.00	5.0	6.00	1.80	1.50	8.00		2.00	172.00	9.00	120.0	89.00	0.4	10.0	7.90	1.0	3.9			88.00	1.7	0.6		
97248	3.80	3.48	8.0			2.01	37.0	30.00	44.80	0.36	0.54	817.00	3.0	4.00	1.80	1.54	10.00		24.00	120.00	11.00	130.0	90.00	1.6	14.5	12.80	1.0	7.1			100.00	1.4	1.0		
97249	4.20	3.91	10.0			1.56	37.0	28.00	37.70	0.51	0.91	805.00	1.0	1.00	1.80	1.50	12.3	11.00		46.00	143.00	6.00	91.0	73.00	2.0	18.1	16.00	1.0	7.3			77.00	1.3	1.0	
97250	1.90	1.81	10.0			2.16	21.0	16.00	25.80	0.18	0.06	486.00	1.0	1.00	1.80	1.75	7.00		6.00	481.00	11.00	150.0	104.00	0.3	4.6	3.90	1.0	3.7			97.00	2.0	0.3		
97251	2.80	1.63	10.0			1.87	26.0	17.00	36.30	0.37	0.33	696.00	1.0	1.00	1.70	1.59	8.00		11.00	245.00	8.00	130.0	89.00	0.6	9.4	8.20	1.0	4.8			95.00	1.9	0.7		
97252	2.00	1.88	10.0			1.83	27.0	17.00	25.50	0.23	0.14	606.00	1.0	1.00	1.90	1.89	9.00		7.00	182.00	14.00	130.0	96.00	0.4	6.3	5.90	1.0	5.1			97.00	2.3	0.5		
97253	0.70	0.65	12.0			1.78	20.0	13.00	15.60	0.38	0.12	447.00	1.0	1.00	1.50	1.34	6.00		3.00	152.00	7.00	130.0	88.00	0.8	8.1	6.80	1.0	3.8			64.00	1.9	0.6		
97254	0.80	0.68	18.0			3.46	37.0	16.00	32.90	0.93	0.02	664.00	6.0	7.00	1.90	1.89	10.00		2.00	306.00	14.00	210.0	147.00	0.4	6.9	6.10	1.0	7.1			89.00	4.5	1.0		
97255	1.90	1.97	9.0			1.97	21.0	14.00	36.70	0.03	0.18	546.00	1.0	1.00	1.70	1.69	8.00		8.00	366.00	15.00	130.0	92.00	0.6	7.2	6.70	1.0	3.6			83.00	1.8	0.5		
97256	3.80	3.35	8.0			1.26	18.0	10.00	22.10	0.29	0.11	459.00	1.0	1.00	1.40	1.26	7.00		7.00	795.00	9.00	85.0	71.00	0.9	10.0	8.80	1.0	5.0			67.00	1.2	0.8		
97257	2.50	2.24	9.0			1.58	17.0	11.00	24.00	0.29	0.16	554.00	1.0	1.00	1.80	1.44	7.00		10.00	504.00	10.00	110.0	80.00	1.0	7.5	6.00	1.0	3.4			57.00	1.6	0.3		
97258	3.20	2.91	26.0			2.12	87.0	26.00	4.20	2.60	0.30	937.00	1.0	1.00	2.30	2.24	15.00		6.00	227.00	8.00	84.0	72.00	0.1	25.5	22.00	1.0	19.0			234.00	2.0	3.2		
97259	0.70	0.63	15.0			2.27	20.0	14.00	14.20	0.45	0.10	410.00	1.0	2.00	2.00	1.90	8.00		3.00	145.00	18.00	130.0	88.00	0.6	8.4	6.50	1.0	3.8			114.00	2.1	0.6		
97260	5.30	4.86	6.0			2.02	49.0	36.00	55.70	0.85	1.23	1155.00	1.0	1.00	1.60	1.31	14.00		56.00	529.00	48.00	110.0	112.00	1.6	19.0	16.70	1.0	8.2			101.00	1.1	1.2		
97261	2.40	2.12	12.0			0.85	27.0	21.00	19.80	0.71	0.53	547.00	1.0	1.00	1.40	1.26	7.00		19.00	249.00	10.00	54.0	53.00	0.9	10.0	8.80	1.0	5.0			67.00	1.2	0.8		
97262	2.70	2.45	11.0			1.04	25.0	19.00	20.60	0.64	0.57	585.00	1.0	1.00	1.50	1.31	7.00		20.00	205.00	9.00	63.0	62.00	0.9	10.0	8.60	1.0	4.4			68.00	1.4	0.7		
97263	4.90	4.13	10.0			1.76	39.0	26.00	34.50	0.84	1.05	825.00	1.0	1.00	1.60	1.21	10.00		47.00	478.00	10.00	110.0	102.00	1.7	18.8	15.60	1.0	6.9			78.00	1.3	0.9		
97264	4.30	3.60	9.0			1.35	33.0	23.00	28.60	0.84	0.98	846.00	1.0	1.00	1.70	1.31	10.00		49.00	347.00	9.00	82.0	81.00	1.4	17.3	13.90	1.0	5.6			78.00	1.2	0.7		
97265	4.40	3.73	10.0			1.59	40.0	29.00	28.40	0.71	0.90	957.00	1.0	1.00	1.60	1.25	10.00		40.00	428.00	14.00	95.0	84.00	1.3	16.3	14.30	1.0	7.3			75.00	1.4	1.1		
97266	4.80	4.09	9.0			1.51	32.0	22.00	37.80	0.68	1.05	1114.00	1.0	1.00	1.50	1.19	11.00		58.00	357.00	13.00	95.0	82.00	1.5	17.5	14.70	1.0	5.7			75.00	1.2	0.9		
97267	3.90	3.51	10.0			1.63	36.0	27.00	56.70	0.95	0.80	1298.00	1.0	1.00	1.50	1.24	13.00		29.00	861.00	30.00	100.0	87.00	1.0	14.5	12.40	1.0	7.1			65.00	1.8	1.1		
97268	4.30	3.89	10.0			1.80	38.0	27.00	38.10	0.79	1.01	1089.00	1.0	1.00	1.50	1.23	12.00		46.00	440.00	18.00	110.0	96.00	1.0	16.5	14.20	1.0	6.6			72.00	1.5	1.0		
97269	6.30	5.60	9.0			1.41	48.0	35.00	39.60	0.86	1.38	1539.00	1.0	1.00	1.20	1.03	12.00		115.00	597.00	26.00	79.0	73.00	2.6	18.5	16.20	1.0	10.0			73.00	0.9	1.2		
97270	5.30	5.07	10.0			1.54	31.0	20.00	28.50	0.76	0.80	646.00	1.0	1.00	1.30	1.12	12.00		28.00	222.00	21.00	130.0	111.00	1.3	15.8	14.10	1.0	5.0			69.00	1.3	0.8		
97271	4.20	3.85	10.0			2.19	42.0	31.00	39.70	0.93	0.96	1143.00	1.0	1.00	1.50	1.25	15.00		38.00	616.00	21.00	130.0	111.00	0.8	15.8	13.80	1.0	7.5			64.00	1.9	1.1		
97272	3.80	3.38	11.0			1.67	36.0	26.00	32.60	0.84	0.81	1002.00	1.0	1.00	1.40	1.19	11.00		39.00	572.00	33.00	100.0	87.00	0.9	13.9	12.10	1.0	6.5			65.00	1.5	0.8		
97273	3.90	3.40	9.0			1.55	29.0	20.00	38.50	0.69	0.76	747.00	1.0	1.00	1.50	1.16	11.00		30.00	270.00	25.00	100.0	86.00	0.8	13.7	11.40	1.0	5.1			60.00	1.5	0.9		
97274	4.16	4.16	11.0			2.28	39.0	29.00	46.90	0.76	1.01	979.00	1.0	1.00	1.40	1.10	12.00		40.00	439.00	32.00	140.0	120.00	1.4	16.8	14.80	1.0	7.5			57.00	1.5	1.1		
97275	3.60	3.16	10.0			1.41	31.0	22.00	29.40	0.71	0.77	984.00	1.0	1.00	1.50	1.28	10.00		36.00	475.00	8.00	86.0	73.00	1.0	13.1	11.50	1.0	5.7			76.00	1.5	0.8		
97276	3.80	3.22	11.0			1.71	40.0	28.00	31.30	0.85	0.70	871.00	1.0	1.00	1.40	1.12	10.00		25.00	461.00	19.00	110.0	90.00	1.1	12.6	10.60	1.0	7.2			68.00	1.5	1.0		
97278	5.60	4.98	7.0			2.18	39.0	29.00	60.10	0.71	1.89	367.00	5.0	4.00	1.40	1.18	12.00		63.00	259.00	19.00	130.0	121.00	26.0	16.2	14.10	1.0	6.4			70.00	1.1	0.9		
97279	3.70	3.39	6.0			1.44	31.0	21.00	34.50	0.58	0.47	867.00	1.0	1.00	1.20	1.08	9.00		24.00	501.00	13.00	76.0	82.00	1.9	9.4	8.20	1.0	5.3			101.00	0.9	0.8		
97280	3.90	3.40	16.0			1.54	59.0	31.00	38.00	1.20	0.55	909.00	1.0	1.00	1.60	1.40	13.00		16.00	301.00	10.00	96.0	88.00	3.1	11.9	9.60	1.0	10.0			91.00	2.2	1.2		
97281	2.30	2.06	36.0			3.53	150.0	46.00	36.10	3.60	0.27	958.00	4.0	6.00	3.20	3.47	27.00		2.00	255.00	21.00	207.00	207.00	0.8	9.4	7.40	1.0	23.6			221.00	6.2	2.9		
97282	2.70	2.41	12.0			1.36	34.0	19.00	18.40	0.86	0.29	618.00	1.0	1.00	1.50	1.30	12.00		7.00	306.00	18.00	82.0	78.00	0.5	11.9	10.20	1.0	5.6			101.00	1.9	0.8		
97283	1.50	1.45	11.0			2.44	30.0	25.00	17.20	1.80	0.21																								



Sample	Fe1	Fe2	Hf1	Hg1	Ir1	K2	La1	La2	Li2	Lu1	Mg2	Mn2	Mo1	Mo2	Na1	Na2	Nb2	Nd1	Ni1	Ni2	P2	Pb2	Rb1	Rb2	Rb6	Sb1	Sc1	Sc2	Se1	Sm1	Sn1	Sr1	Sr2	Ta1	Tb1
	wt. %	wt. %	ppm	ppm	ppb	wt. %	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt. %	wt. %	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt. %	wt. %	ppm	ppm	ppm
97316	2.50	2.29	9.0			1.67	31.0	15.00	27.80	0.72	0.41	701.00	1.0	1.00	1.70	1.61	8.00		13.00	246.00	11.00	120.0	103.00		0.5	8.3	7.50	1.0	5.4		95.00	1.4	0.8		
97317	4.30	3.93	11.0			2.82	51.0	33.00	50.10	1.00	0.91	872.00	1.0	1.00	1.50	1.25	12.00		30.00	583.00	30.00	160.0	143.00		2.2	16.3	14.30	1.0	8.6		87.00	2.1	1.1		
97318	2.80	2.49	9.0			1.91	30.0	19.00	34.70	0.72	0.45	680.00	1.0	1.00	1.70	1.49	9.00		20.00	438.00	15.00	150.0	137.00		0.9	10.1	8.60	1.0	5.1		104.00	1.9	0.7		
97319	2.70	2.30	10.0			2.19	34.0	21.00	42.90	0.70	0.42	609.00	1.0	1.00	2.00	1.66	10.00		15.00	402.00	14.00	160.0	137.00		0.2	9.3	7.80	1.0	5.7		104.00	2.0	0.7		
97320	2.50	2.19	9.0			2.29	34.0	22.00	37.70	0.66	0.41	586.00	1.0	1.00	2.10	1.75	9.00		13.00	397.00	15.00	160.0	144.00		0.1	8.5	6.90	1.0	5.6		104.00	2.0	0.7		
97322	1.70	1.60	8.0			1.87	24.0	16.00	19.20	0.57	0.26	581.00	1.0	1.00	1.90	1.86	7.00		8.00	602.00	13.00	140.0	120.00		0.3	4.8	4.30	1.0	4.8		102.00	2.0	0.7		
97323	1.60	1.47	8.0			1.79	20.0	14.00	18.50	0.55	0.20	521.00	2.0	2.00	1.80	1.80	6.00		6.00	235.00	14.00	130.0	114.00		0.2	4.0	3.30	1.0	4.1		95.00	1.9	0.7		
97324	1.90	1.76	8.0			1.82	22.0	14.00	19.80	0.60	0.26	605.00	1.0	1.00	1.90	1.81	7.00		9.00	511.00	14.00	140.0	117.00		0.2	4.5	3.90	1.0	4.0		98.00	1.9	0.6		
97325	1.90	1.79	11.0			2.11	37.0	19.00	33.70	0.87	0.33	645.00	1.0	1.00	2.00	1.90	9.00		8.00	161.00	14.00	160.0	140.00		0.3	7.0	6.00	1.0	6.5		104.00	2.6	0.8		
97326	1.90	1.74	10.0			2.16	29.0	18.00	26.50	0.73	0.26	534.00	1.0	1.00	1.90	1.83	8.00		7.00	436.00	14.00	140.0	138.00		0.1	6.3	5.60	1.0	5.7		108.00	1.9	0.7		
97327	2.90	2.71	14.0			1.46	38.0	21.00	18.20	0.93	0.36	787.00	1.0	1.00	1.10	0.97	10.00		7.00	494.00	16.00	94.0	90.00		1.9	12.6	10.70	1.0	6.0		42.00	2.0	0.8		
97328	2.50	4.31	9.0			1.15	31.0	18.00	34.30	0.61	0.67	1389.00	3.0	1.00	1.90	1.90	10.00		30.00	884.00	12.00	100.0	70.00		0.2	8.3	11.90	1.0	5.2		59.00	1.9	0.7		
97329	3.60	3.21	9.0			1.70	36.0	22.00	37.60	0.79	0.91	734.00	1.0	1.00	1.50	1.19	9.00		36.00	423.00	4.00	110.0	101.00		0.8	15.8	13.40	1.0	6.1		75.00	1.2	0.9		
97330	4.30	3.56	11.0			1.52	39.0	23.00	32.20	0.82	0.82	933.00	1.0	1.00	1.70	1.30	10.00		35.00	431.00	16.00	92.0	83.00		0.9	14.8	11.90	1.0	6.5		78.00	1.3	1.0		
97332	4.30	3.75	11.0			1.82	44.0	29.00	31.40	0.88	0.84	1018.00	1.0	1.00	1.60	1.27	10.00		33.00	504.00	15.00	100.0	100.00		0.9	15.8	13.50	1.0	7.7		78.00	1.6	1.1		
97333	4.40	3.89	10.0			1.92	40.0	25.00	31.30	0.83	0.93	1141.00	1.0	1.00	1.40	1.19	9.00		42.00	661.00	47.00	110.0	101.00		1.7	15.8	13.80	1.0	7.0		75.00	1.3	1.0		
97334	3.90	3.58	10.0			1.72	40.0	27.00	29.90	0.79	0.89	867.00	1.0	1.00	1.70	1.45	10.00		40.00	476.00	15.00	110.0	95.00		0.9	15.0	13.30	1.0	7.1		93.00	1.5	1.0		
97335	2.50	2.40	10.0			1.53	34.0	20.00	33.10	0.73	0.60	706.00	1.0	1.00	1.30	1.18	10.00		16.00	179.00	12.00	93.0	92.00		0.5	12.4	11.10	1.0	5.6		71.00	1.5	0.8		
97336	3.80	3.46	8.0			1.86	35.0	25.00	25.80	0.73	0.74	822.00	1.0	1.00	1.80	1.57	10.00		23.00	587.00	11.00	110.0	103.00		0.4	12.9	11.90	1.0	6.2		110.00	1.4	0.9		
97337	4.30	3.85	9.0			1.21	28.0	18.00	29.90	0.75	0.91	784.00	1.0	1.00	1.40	1.24	9.00		47.00	362.00	10.00	110.0	77.0	69.00		1.5	15.5	13.80	1.0	5.2		78.00	1.1	0.8	
97338	3.00	2.78	9.0			1.42	31.0	19.00	38.70	0.77	0.92	912.00	3.0	3.00	1.70	1.51	9.00		35.00	205.00	7.00	93.0	86.00		0.9	18.3	16.40	1.0	5.6		101.00	1.5	0.8		
97339	3.90	3.36	9.0			1.20	34.0	21.00	35.90	0.86	1.13	662.00	1.0	1.00	1.80	1.51	9.00		41.00	683.00	5.00	69.0	84.00		1.0	17.9	15.30	1.0	6.5		97.00	1.2	1.1		
97340	2.20	2.14	10.0			1.84	27.0	19.00	18.60	0.68	0.27	779.00	1.0	1.00	1.80	1.69	7.00		8.00	681.00	14.00	130.0	114.00		0.6	6.7	6.00	1.0	5.0		90.00	1.7	0.7		
97347	1.20	1.10	12.0			2.02	23.0	12.00	20.90	0.72	0.23	457.00	1.0	1.00	1.40	1.29	8.00		5.00	305.00	11.00	130.0	119.00		0.6	7.2	6.00	1.0	4.0		72.00	1.8	0.6		
97348	1.90	1.73	9.0			1.95	22.0	16.00	25.50	0.56	0.38	625.00	1.0	1.00	2.00	1.79	9.00		14.00	359.00	11.00	150.0	123.00		0.8	7.4	6.40	1.0	3.7		86.00	1.8	0.6		
97349	3.00	2.57	9.0			1.90	23.0	13.00	41.50	0.62	0.38	579.00	1.0	1.00	1.60	1.33	9.00		13.00	487.00	8.00	150.0	129.00		0.7	10.0	7.80	1.0	3.8		71.00	1.8	0.6		
97350	1.60	1.49	8.0			2.07	17.0	12.00	19.80	0.50	0.32	615.00	1.0	1.00	1.80	1.76	7.00		9.00	520.00	11.00	140.0	127.00		0.6	5.0	4.60	1.0	3.4		85.00	2.0	0.5		
97351	5.80	5.37	8.0			1.87	19.0	14.00	21.90	0.66	0.72	278.00	1.0	1.00	1.80	1.53	8.00		18.00	285.00	1.00	130.0	131.00		0.5	24.4	22.80	1.0	3.9		92.00	1.3	0.6		
97352	3.20	2.85	8.0			2.42	28.0	20.00	44.60	0.66	0.67	781.00	1.0	1.00	1.80	1.49	8.00		29.00	495.00	36.00	180.0	151.00		1.0	12.2	10.80	1.0	5.1		81.00	1.8	0.8		
97354	2.00	1.82	11.0			2.17	26.0	19.00	20.90	0.71	0.37	614.00	1.0	1.00	1.90	1.71	9.00		10.00	672.00	12.00	150.0	131.00		0.6	7.0	6.30	1.0	5.3		101.00	2.3	0.8		
97355	1.80	1.64	12.0			1.86	27.0	18.00	21.90	0.69	0.38	624.00	1.0	1.00	1.90	1.69	9.00		9.00	171.00	11.00	130.0	113.00		0.6	7.4	6.30	1.0	4.9		92.00	2.3	0.7		
97356	7.20	6.43	6.0			1.14	24.0	19.00	37.90	0.64	2.08	699.00	1.0	1.00	2.10	1.86	12.00		24.00	744.00	1.00	65.0	68.00		0.6	27.1	23.00	1.0	6.0		326.00	0.8	0.9		
97357	2.20	1.91	11.0			2.12	27.0	20.00	24.00	0.75	0.43	827.00	1.0	1.00	2.00	1.75	9.00		13.00	547.00	13.00	160.0	131.00		0.8	8.2	7.00	1.0	4.9		89.00	2.6	0.8		
97358	2.30	1.91	9.0			1.87	24.0	17.00	20.70	0.68	0.47	521.00	1.0	1.00	2.10	1.71	8.00		12.00	451.00	10.00	120.0	108.00		0.5	8.5	6.90	1.0	4.7		97.00	1.8	0.6		
97359	3.20	2.84	11.0			1.88	30.0	21.00	38.90	0.61	0.56	545.00	1.0	1.00	1.60	1.35	11.00		22.00	387.00	12.00	140.0	118.00		0.7	10.7	9.40	1.0	5.5		87.00	1.8	0.7		
97360	2.00	1.83	10.0			2.03	20.0	14.00	25.10	0.53	0.42	596.00	1.0	1.00	1.90	1.71	8.00		11.00	168.00	12.00	150.0	124.00		0.6	6.9	6.40	1.0	4.2		88.00	2.4	0.6		
97361	1.80	1.65	9.0			2.05	22.0	15.00	21.70	0.55	0.36	654.00	1.0	1.00	1.80	1.70	8.00		10.00	674.00	13.00	150.0	120.00		0.6	6.0	5.50	1.0	4.2		86.00	2.1	0.6		
97362	1.30	1.23	9.0			1.97	19.0	13.00	17.30	0.57	0.31	606.00	1.0	1.00	1.80	1.80	6.00		9.00	665.00	12.00	140.0	121.00		0.6	4.9	4.30	1.0	3.9		83.00	1.8	0.6		
97363	1.70	1.60	9.0			1.93	21.0	14.00	21.00	0.62	0.37	822.00	1.0	1.00	1.80	1.73	7.00		12.00	541.00	12.00	140.0	119.00		0.7	6.0	5.40	1.0	3.9		84.00	2.1	0.6		
97364	1.30	1.25	9.0			1.92	19.0	14.00	16.00	0.56	0.29	474.00	1.0	1.00	1.80	1.77	6.00		7.00	435.00	10.00	130.0	111.00		0.6	5.0	4.60	1.0	3.7		96.00	2.3	0.7		
97365	1.80	1.60	11.0			2.04	26.0	19.00	19.40	0.73	0.37	615.00	1.0	1.00	1.90	1.77																			



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
97392	1.80	1.66	13.0			1.80	30.0	21.00	19.20	0.79	0.38	622.00	1.0	1.00	1.90	1.74	9.00		8.00	170.00	12.00	120.0	108.00		0.6	8.6	7.40	1.0	6.0		107.00	2.2	0.9		
97393	3.40	3.15	9.0			1.42	21.0	15.00	31.10	0.76	0.39	456.00	1.0	1.00	1.40	1.25	11.00		10.00	257.00	10.00	88.0	93.00		0.6	15.1	13.60		1.0	5.8		79.00	1.6	0.8	
97394	1.80	1.62	10.0			1.93	30.0	23.00	24.80	0.72	0.47	854.00	1.0	1.00	1.90	1.63	8.00		12.00	505.00	10.00	130.0	115.00		0.6	9.2	7.80	1.0	5.9		101.00	1.8	0.9		
97395	2.80	2.55	9.0			2.22	27.0	20.00	37.70	0.68	0.62	854.00	1.0	1.00	1.70	1.49	9.00		22.00	738.00	13.00	160.0	147.00		0.9	10.6	9.60	1.0	5.0		88.00	1.9	0.8		
97397	5.80	5.23	7.0			0.92	21.0	18.00	21.60	0.75	2.16	1098.00	7.0	6.00	1.90	1.65	16.00		23.00	368.00	1.00	57.0	63.00		0.4	29.8	26.20	1.0	5.7		183.00	1.4	1.0		
97398	2.50	2.35	8.0			2.29	25.0	22.00	39.90	0.51	0.58	707.00	1.0	1.00	1.70	1.50	10.00		20.00	638.00	15.00	170.0	157.00		0.8	9.4	8.90	1.0	4.8		84.00	1.8	0.7		
97399	1.70	1.49	12.0			1.71	22.0	17.00	12.70	0.62	0.24	449.00	1.0	1.00	1.80	1.57	8.00		5.00	299.00	10.00	100.0	98.00		0.4	5.8	4.90	1.0	4.3		104.00	1.8	0.6		
97400	1.80	1.73	10.0			2.13	31.0	25.00	21.00	0.68	0.41	663.00	1.0	1.00	1.90	1.76	8.00		10.00	645.00	12.00	140.0	123.00		0.6	8.2	7.50	1.0	6.2		103.00	1.9	0.9		
97401	1.80	1.70	10.0			2.20	21.0	19.00	20.30	0.54	0.35	553.00	1.0	1.00	1.80	1.73	9.00		8.00	485.00	11.00	140.0	122.00		0.4	6.0	5.70	1.0	4.0		111.00	2.1	0.6		
97402	1.60	1.49	10.0			1.94	22.0	17.00	16.70	0.57	0.30	585.00	1.0	1.00	1.90	1.77	7.00		7.00	209.00	11.00	130.0	114.00		0.6	5.6	5.00	1.0	4.2		97.00	2.1	0.6		
97403	1.00	0.89	10.0			1.98	18.0	16.00	14.60	0.52	0.25	489.00	1.0	1.00	1.80	1.69	7.00		4.00	246.00	10.00	130.0	117.00		0.4	4.6	4.20	1.0	3.6		92.00	2.2	0.3		
97404	2.70	2.52	8.0			1.67	22.0	17.00	17.30	0.71	0.42	531.00	1.0	1.00	1.90	1.65	8.00		7.00	432.00	11.00	110.0	94.00		0.5	10.0	8.40	1.0	4.7		93.00	1.5	0.7		
97405	2.00	1.75	8.0			1.80	23.0	19.00	18.60	0.69	0.42	558.00	4.0	4.00	2.10	1.78	8.00		8.00	253.00	12.00	130.0	107.00		0.7	10.7	8.90	1.0	6.2		90.00	1.6	0.9		
97406	1.90	1.70	9.0			2.04	32.0	26.00	21.80	0.64	0.43	552.00	1.0	1.00	2.10	1.77	8.00		10.00	278.00	10.00	140.0	115.00		0.6	7.8	6.70	1.0	6.4		99.00	2.0	0.9		
97407	2.30	2.20	8.0			2.02	27.0	24.00	22.10	0.64	0.60	745.00	1.0	1.00	2.00	1.87	9.00		10.00	748.00	9.00	130.0	110.00		0.5	8.9	8.30	1.0	6.5		131.00	1.8	0.9		
97408	1.70	1.65	13.0			1.83	24.0	22.00	18.80	0.59	0.46	623.00	1.0	1.00	1.90	1.79	9.00		6.00	232.00	7.00	120.0	102.00		0.6	7.2	6.70	1.0	5.3		110.00	2.2	0.8		
97409	2.00	1.76	10.0			1.87	24.0	17.00	20.40	0.64	0.39	536.00	1.0	1.00	2.00	1.80	8.00		9.00	180.00	10.00	120.0	104.00		0.6	7.5	6.60	1.0	4.7		106.00	1.7	0.7		
97410	2.80	2.42	8.0			2.38	30.0	24.00	36.80	0.67	0.63	678.00	2.0	2.00	1.90	1.64	10.00		22.00	638.00	19.00	180.0	147.00		0.8	10.1	8.80	1.0	6.7		88.00	2.3	0.9		
97412	2.10	1.82	9.0			1.94	27.0	20.00	18.00	0.67	0.49	712.00	1.0	2.00	2.10	1.88	7.00		8.00	306.00	14.00	130.0	106.00		0.6	8.5	7.20	1.0	5.4		106.00	1.5	0.8		
97413	2.90	2.55	11.0			1.64	27.0	21.00	18.40	0.78	0.79	729.00	1.0	1.00	2.10	1.81	11.00		15.00	352.00	8.00	110.0	99.00		0.6	12.4	10.70	1.0	5.2		131.00	1.7	0.7		
97414	3.00	2.62	12.0			1.83	26.0	22.00	19.60	0.89	0.92	796.00	1.0	1.00	2.10	1.82	11.00		8.00	224.00	5.00	110.0	100.00		0.4	15.8	13.70	1.0	6.4		168.00	1.7	1.0		
97415	3.60	2.92	9.0			1.73	28.0	21.00	22.60	0.92	0.73	731.00	1.0	1.00	2.10	1.72	11.00		13.00	185.00	7.00	110.0	97.00		0.5	14.0	11.50	1.0	6.1		115.00	1.4	1.0		
97416	2.30	1.93	10.0			1.64	25.0	19.00	16.90	0.69	0.42	607.00	1.0	1.00	2.10	1.74	8.00		9.00	271.00	11.00	110.0	104.00		0.5	9.4	7.80	1.0	5.1		106.00	1.5	0.8		
97417	2.00	1.56	10.0			2.03	22.0	16.00	20.80	0.63	0.33	545.00	1.0	1.00	2.40	1.71	7.00		10.00	426.00	11.00	140.0	133.00		0.6	7.6	5.50	1.0	3.7		92.00	2.1	0.6		
97418	2.50	2.21	14.0			2.18	26.0	20.00	18.00	0.70	0.43	484.00	1.0	1.00	2.00	1.82	9.00		12.00	771.00	15.00	110.0	107.00		0.4	7.8	6.90	1.0	5.8		130.00	1.4	0.9		
97700	1.50	1.30	13.0			1.39	23.0	8.00	16.40	0.43	0.03	388.00	1.0	1.00	1.30	1.08	7.00		3.00	129.00	6.00	83.0	67.00		1.2	10.0	8.40	1.0	4.2		58.00	1.6	0.7		
97701	2.70	2.47	13.0			1.46	28.0	14.00	20.20	0.48	0.14	432.00	1.0	1.00	1.30	1.07	9.00		6.00	102.00	8.00	82.0	70.00		1.1	12.6	10.90	1.0	5.1		58.00	1.6	0.7		
97702	3.80	3.34	11.0			1.66	36.0	26.00	46.70	0.25	0.71	623.00	1.0	1.00	1.60	1.30	10.00		26.00	317.00	21.00	100.0	76.00		1.1	14.6	12.40	1.0	6.5		93.00	1.6	0.9		
97703	3.70	3.41	17.0			1.78	17.0	10.00	14.10	0.31	0.08	300.00	1.0	2.00	1.30	0.98	14.00		3.00	248.00	9.00	82.0	76.00		0.4	10.4	8.30	1.0	4.2		70.00	1.5	0.6		
97704	2.10	1.85	15.0			1.32	28.0	19.00	15.20	0.45	0.19	487.00	1.0	1.00	1.30	1.11	11.00		8.00	386.00	30.00	69.0	65.00		0.7	9.1	7.60	1.0	5.8		75.00	1.8	0.9		
97705	0.40	0.43	7.0			4.18	13.0	7.00	23.90	0.33	0.01	189.00	1.0	1.00	3.20	0.01	9.00		1.00	241.00	13.00	300.0	184.00		0.5	5.5	4.60	1.0	2.3		53.00	5.7	0.3		
97706	3.20	2.93	13.0			1.12	35.0	20.00	25.10	0.38	0.40	589.00	1.0	1.00	1.60	1.37	10.00		14.00	149.00	8.00	64.0	58.00		1.2	13.4	11.80	1.0	6.1		80.00	1.4	0.8		
97707	3.50	3.09	12.0			1.35	38.0	24.00	23.60	0.70	0.63	624.00	1.0	1.00	1.60	1.30	10.00		22.00	119.00	7.00	85.0	67.00		1.5	13.7	11.80	1.0	6.6		82.00	1.3	1.0		
97708	2.20	2.02	18.0			1.25	50.0	26.00	34.50	0.93	0.51	752.00	1.0	1.00	1.30	1.15	12.00		16.00	138.00	17.00	71.0	64.00		1.1	13.3	11.50	1.0	8.2		84.00	1.8	1.1		
97709	2.20	2.02	18.0			1.53	39.0	12.00	13.60	0.70	0.04	382.00	1.0	1.00	1.40	1.20	10.00		2.00	94.00	12.00	82.0	71.00		1.2	10.3	8.50	1.0	6.4		67.00	1.8	0.9		
97710	3.20	2.78	13.0			1.04	33.0	19.00	28.10	0.60	0.42	593.00	1.0	1.00	1.40	1.16	8.00		16.00	126.00	13.00	64.0	59.00		1.8	10.9	9.50	1.0	5.7		70.00	1.3	0.7		
97712	0.80	0.69	18.0			1.20	31.0	11.00	9.90	0.71	0.05	709.00	1.0	1.00	1.30	1.04	7.00		2.00	81.00	8.00	78.0	65.00		1.0	10.0	8.10	1.0	5.1		73.00	1.8	0.7		
97713	5.50	5.06	6.0			0.99	25.0	14.00	35.30	0.71	0.31	477.00	1.0	1.00	0.86	0.64	16.00		11.00	764.00	8.00	56.0	67.00		1.4	14.4	12.40	1.0	4.2		53.00	1.4	0.6		
97714	5.50	3.33	7.0			1.58	21.0	20.00	27.50	0.63	0.58	767.00	1.0	1.00	1.00	1.17	10.00		28.00	265.00	6.00	58.0	75.00		1.2	12.4	12.50	1.0	4.6		67.00	1.1	0.6		
97715	3.30	3.37	11.0			1.58	30.0	22.00	27.80	0.48	0.73	783.00	1.0	1.00	1.40	1.19	11.00		28.00	333.00	8.00	95.0	90.00		1.3	13.2	12.20	1.0	5.6		65.00	1.5	0.8		
97716	1.60	1.47	11.0			1.80	15.0	11.00	11.30	0.41	0.37	627.00	1.0	1.00	1.00	0.90	12.00		7.00	117.00	5.00	99.0	96.00		0.6	12.2	10.60	1.0</							



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 wt. %	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
97750	3.90	3.23	10.0			1.32	41.0	28.0	34.30	0.85	0.77	837.00	1.0	1.00	1.0	1.00	1.40	11.00		27.00	286.00	10.00	12.00	113.00		5.8	15.5	12.30	1.0	7.0			92.00	1.6	0.9
97751	5.70	4.64	7.0			1.32	30.0	16.00	33.20	0.75	0.44	923.00	1.0	1.00	1.0	1.00	0.92	12.00		18.00	864.00	7.00	74.0	87.00		2.7	14.7	12.60		5.0			78.00	1.9	0.6
97752	0.90	0.86	21.0			1.68	23.0	17.00	9.40	0.73	0.27	464.00	1.0	2.00	1.70	1.52	19.00		3.00	103.00	19.00	100.0	104.00		1.1	14.8	13.90	1.0	3.9			226.00	1.3	0.5	
97753	5.60	5.36	9.0			1.44	21.0	18.00	24.10	0.62	0.56	656.00	1.0	1.00	1.50	1.28	15.00		12.00	1202.00	11.00	89.0	100.00		1.1	14.8	13.90	1.0	4.3			61.00	2.4	1.0	
97754	0.60	0.54	21.0			1.58	44.0	27.00	9.60	1.10	0.13	567.00	1.0	1.00	1.00	0.89	14.00		3.00	197.00	20.00	92.0	90.00		1.2	8.9	7.10	1.0	6.9			75.00	2.2	1.0	
97755	1.40	1.22	20.0			1.58	41.0	24.00	11.10	1.00	0.17	590.00	1.0	1.00	1.20	1.07	12.00		3.00	398.00	13.00	90.0	93.00		1.5	10.0	8.40	1.0	5.4			101.00	1.4	0.7	
97756	2.90	2.65	10.0			1.57	31.0	24.00	24.80	0.73	0.56	596.00	1.0	1.00	1.60	1.41	10.00		11.00	242.00	9.00	86.0	80.00		1.3	7.5	6.40	1.0	5.0			105.00	1.5	0.7	
97757	2.60	2.30	12.0			1.42	30.0	22.00	19.30	0.74	0.38	533.00	1.0	1.00	1.60	1.44	10.00		20.00	285.00	11.00	93.0	90.00		2.3	10.0	8.50	1.0	5.7			110.00	1.4	0.8	
97758	3.90	3.23	10.0			1.42	30.0	26.00	24.70	0.80	0.53	593.00	1.0	1.00	1.70	1.55	11.00		16.00	1075.00	13.00	89.0	77.00		1.4	11.9	9.80	1.0	6.2			106.00	1.4	1.0	
97759	4.10	3.37	12.0			1.42	30.0	18.00	26.30	0.93	0.47	603.00	1.0	1.00	1.80	1.41	11.00		18.00	281.00	21.00	95.0	87.00		1.0	10.2	9.20	1.0	4.6			89.00	1.4	0.6	
97761	3.60	3.25	9.0			1.43	29.0	20.00	33.60	0.61	0.54	568.00	1.0	1.00	1.50	1.31	12.00		12.00	655.00	17.00	120.0	90.00		0.9	15.7	15.60	1.0	5.1			45.00	0.9	0.8	
97762	7.00	6.87	5.0			0.91	27.0	22.00	68.10	0.56	0.47	1308.00	1.0	1.00	0.60	0.47	17.00		14.00	292.00	20.00	130.0	116.00		0.9	7.4	6.20	1.0	5.8			113.00	2.0	0.9	
97763	2.60	2.24	12.0			2.11	31.0	19.00	19.10	0.87	0.36	562.00	1.0	1.00	1.00	1.62	9.00		13.00	485.00	18.00	110.0	104.00		0.5	10.9	9.50	1.0	5.3			84.00	1.9	0.6	
97764	3.00	2.66	9.0			1.60	27.0	15.00	31.30	0.79	0.37	491.00	1.0	1.00	1.60	1.35	10.00		13.00	428.00	13.00	140.0	128.00		0.3	6.6	5.60	1.0	4.7			99.00	1.7	0.7	
97765	2.20	1.87	7.0			1.95	27.0	18.00	25.70	0.63	0.36	558.00	1.0	1.00	1.90	1.69	8.00		12.00	733.00	13.00	140.0	135.00		0.3	6.6	5.70	1.0	5.9			102.00	1.8	0.8	
97766	1.50	1.31	8.0			2.04	33.0	22.00	23.60	0.74	0.35	591.00	1.0	1.00	2.00	1.76	7.00		16.00	518.00	15.00	150.0	130.00		0.4	7.2	6.50	1.0	3.6			83.00	2.0	0.5	
97767	4.30	2.09	10.0			2.03	28.0	16.00	26.10	0.79	0.29	576.00	1.0	1.00	1.90	1.63	9.00		16.00	518.00	15.00	150.0	130.00		0.5	8.0	7.50	1.0	5.8			76.00	1.6	0.9	
97768	2.30	3.55	10.0			1.73	37.0	19.00	27.40	1.00	0.30	690.00	1.0	1.00	1.40	1.14	10.00		11.00	1235.00	12.00	110.0	107.00		2.2	11.1	9.10	1.0	6.6			80.00	1.7	1.0	
97769	1.70	1.43	8.0			1.78	23.0	15.00	20.30	0.57	0.26	579.00	1.0	1.00	2.00	1.73	7.00		8.00	159.00	15.00	130.0	115.00		0.3	5.2	4.10	1.0	3.6			96.00	1.6	0.3	
97770	3.10	2.66	12.0			1.34	33.0	18.00	24.90	0.80	0.33	844.00	1.0	1.00	1.90	1.53	10.00		13.00	203.00	14.00	97.0	87.00		0.6	8.2	6.50	1.0	5.7			91.00	1.9	0.7	
97771	2.30	2.28	11.0			2.53	29.0	22.00	43.30	0.84	0.25	830.00	1.0	1.00	2.00	1.82	15.00		5.00	370.00	17.00	220.0	195.00		0.2	7.0	6.00	1.0	5.0			87.00	4.7	0.8	
97772	2.90	2.74	6.0			1.74	22.0	16.00	37.60	0.46	0.32	538.00	1.0	1.00	1.50	1.30	13.00		6.00	1104.00	13.00	140.0	141.00		0.4	7.2	6.50	1.0	3.8			83.00	2.0	0.5	
97773	2.20	2.04	9.0			1.24	25.0	13.00	31.20	0.69	0.17	589.00	1.0	1.00	1.40	1.34	8.00		4.00	233.00	8.00	87.0	77.00		0.5	8.0	7.50	1.0	5.2			93.00	3.4	0.9	
97774	2.60	2.39	9.0			1.75	26.0	18.00	30.30	0.74	0.52	748.00	1.0	1.00	1.70	1.40	9.00		5.00	740.00	11.00	140.0	130.00		0.6	6.1	4.80	1.0	3.2			71.00	2.3	0.3	
97775	2.20	1.96	8.0			1.58	22.0	13.00	30.00	0.65	0.34	570.00	1.0	1.00	1.60	1.37	7.00		19.00	353.00	11.00	120.0	110.00		1.4	10.2	9.40	1.0	5.2			87.00	1.4	0.8	
97776	2.00	1.60	7.0			1.31	42.0	29.00	35.20	0.76	0.41	593.00	1.0	1.00	1.60	1.36	9.00		12.00	410.00	13.00	89.0	93.00		0.5	9.4	7.80	1.0	6.5			87.00	1.5	1.1	
97777	1.80	1.60	7.0			2.08	33.0	22.00	27.90	0.76	0.30	610.00	1.0	1.00	2.10	1.79	9.00		9.00	458.00	10.00	160.0	148.00		0.2	6.8	5.80	1.0	5.5			97.00	2.2	0.7	
97778	2.40	1.52	10.0			1.53	24.0	14.00	23.50	0.70	0.29	720.00	1.0	1.00	1.80	1.57	9.00		9.00	331.00	14.00	110.0	104.00		0.6	6.1	5.00	1.0	3.8			83.00	2.0	0.5	
97779	1.70	2.13	9.0			2.39	30.0	19.00	33.80	1.00	0.37	670.00	2.0	2.00	2.00	1.74	18.00		4.00	678.00	9.00	200.0	202.00		0.5	10.9	9.90	1.0	5.2			93.00	3.4	0.9	
97780	1.80	1.73	12.0			1.80	19.0	9.00	23.80	0.65	0.20	484.00	1.0	1.00	1.70	1.40	9.00		5.00	740.00	11.00	140.0	130.00		0.6	6.1	4.80	1.0	3.2			71.00	2.3	0.3	
97781	2.10	1.79	9.0			1.93	26.0	17.00	29.20	0.70	0.40	871.00	1.0	1.00	1.80	1.55	9.00		25.00	402.00	9.00	140.0	133.00		0.9	8.6	7.10	1.0	4.7			82.00	1.7	1.0	
97782	3.10	3.07	10.0			3.03	44.0	34.00	35.50	1.00	0.85	378.00	1.0	1.00	1.90	1.73	11.00		19.00	172.00	10.00	170.0	165.00		2.5	21.8	20.40	1.0	7.9			89.00	1.8	0.7	
97783	2.00	4.84	7.0			1.33	39.0	29.80	33.99	0.37	1.93	1063.71	0.5	0.50	1.20	1.10	6.80		141.12	181.14	5.86	79.0	82.15		1.7	18.7	17.74	0.5	6.8			63.80	1.1	1.0	
97784	3.30	2.94	10.0			0.98	33.0	21.39	23.39	0.36	1.50	851.68	0.5	0.50	1.50	1.38	5.33		77.53	349.53	2.67	56.0	54.11		1.7	16.8	15.43	0.5	6.5			74.26	1.1	1.1	
97785	4.00	3.73	10.0			1.05	38.0	26.41	24.98	0.34	1.80	871.52	0.5	0.50	1.30	1.26	5.81		97.77	228.64	8.97	58.0	62.95		1.8	18.0	17.69	0.5	7.7			64.94	1.1	1.2	
97786	2.60	2.70	8.0			1.08	27.0	21.49	31.77	0.34	1.30	539.01	0.5	0.50	1.30	1.31	5.62		49.42	219.32	3.53	92.0	94.97		2.0	15.9	15.26	0.5	4.8			75.05	1.2	0.8	
97787	4.80	4.96	7.0			1.76	39.0	31.29	37.18	0.40	1.21	1882.97	0.5	0.50	1.30	1.22	7.36		76.30	514.29	10.21	110.0	106.34		2.5	17.7	17.62	0.5	7.3			76.07	1.2	1.1	
97788	4.10	3.96	8.0			1.49	33.0	25.50	33.68	0.37	1.18	1327.59	0.5	0.50	1.40	1.33	7.81		52.48	415.86	8.58	86.0	89.99		2.0	16.0	15.36	0.5	6.3			84.98	1.1	1.0	
97789	5.20	4.84	7.0			1.33	39.0	29.80	33.99	0.37	1.93	1063.71	0.5	0.50	1.20	1.10	6.80		141.12	181.14	5.86	79.0	82.15		1.7	18.7	17.74	0.5	6.8			63.80	1.1	1.0	
97790	3.30	2.94	10.0			0.98	33.0	21.39	23.39	0.36	1.50	851.68	0.5	0.50	1.50	1.38	5.33		77.53	349.53	2.67	56.0	54.11		1.7	16.8	15.43	0.5	6.5			74.26	1.1	1.1	
97791	4.00	3.73	10.0			1.05	38.0	26.41	24.98	0.34	1.80	871.52</																							



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
107042	4.20	4.07	7.0			1.73	35.0	25.78	42.48	0.37	1.34	2090.63	0.5	0.50	1.10	1.07	7.47			60.47	323.63	1.40	100.0	110.07		1.4	18.2	17.44	0.5	6.3			68.54	1.1	1.0
107043	4.10	3.93	7.0			1.47	32.0	23.13	39.61	0.37	1.27	728.87	0.5	0.50	1.20	1.17	6.46			46.35	166.26	1.77	83.0	90.65		1.5	15.9	15.21	0.5	5.2			71.11	1.1	0.7
107044	4.10	4.27	8.0			1.35	35.0	24.13	37.45	0.41	1.38	1052.88	0.5	0.50	1.20	1.16	6.45			92.60	244.80	7.59	87.0	90.65		2.2	16.9	16.71	0.5	6.0			69.62	1.0	0.9
107045	4.10	4.07	8.0			1.65	32.0	23.96	33.41	0.42	1.24	1161.48	0.5	0.50	1.30	1.25	7.94			61.68	453.89	7.88	86.0	97.94		1.6	15.5	15.67	0.5	5.8			73.34	1.0	0.8
107046	2.00	2.07	10.0			1.12	25.0	19.36	24.91	0.33	0.86	446.28	0.5	0.50	1.20	1.23	7.73			26.14	143.81	4.57	93.0	83.75		1.1	11.9	12.44	0.5	4.2			72.29	1.2	0.6
107047	3.80	3.95	8.0			1.84	38.0	33.03	31.07	0.44	1.06	1156.46	0.5	0.50	1.30	1.31	8.85			51.42	670.50	9.98	93.0	106.28		1.1	14.4	15.05	0.5	6.8			88.75	1.2	1.0
107048	3.80	3.91	8.0			1.33	28.0	22.51	38.65	0.30	1.23	772.06	0.5	0.50	1.20	1.16	6.22			58.54	164.68	3.51	66.0	80.23		1.5	14.1	14.88	0.5	5.0			67.37	0.9	0.7
107049	3.60	3.73	8.0			1.20	27.0	22.72	36.75	0.36	1.30	840.60	0.5	0.50	1.30	1.22	6.28			66.29	242.28	2.81	64.0	68.14		1.8	14.8	15.84	0.5	5.5			71.02	0.9	0.9
107050	4.10	3.87	8.0			1.31	32.0	24.18	34.94	0.42	1.21	985.76	0.5	0.50	1.20	1.16	8.15			67.17	130.47	1.59	80.0	89.96		2.0	16.1	16.06	0.5	6.1			64.20	1.0	0.9
107051	4.10	4.00	8.0			1.62	34.0	27.17	32.33	0.43	1.26	1144.59	0.5	0.50	1.20	1.16	8.62			70.60	158.80	6.41	94.0	93.96		1.4	17.5	17.77	0.5	6.6			66.51	1.0	0.9
107052	2.30	2.32	9.0			1.28	32.0	24.68	38.56	0.42	0.90	530.66	0.5	0.50	1.30	1.25	7.40			32.75	118.97	2.70	79.0	82.99		1.3	15.2	14.73	0.5	5.5			75.46	1.4	0.9
107053	3.80	4.05	6.0			1.39	30.0	26.21	37.51	0.38	1.25	1157.76	0.5	0.50	1.30	1.32	5.96			62.60	172.50	3.30	74.0	77.95		1.7	15.9	17.18	0.5	5.5			79.12	1.1	0.8
107054	2.50	2.61	9.0			1.18	26.0	21.42	30.86	0.37	1.11	540.91	0.5	0.50	1.20	1.23	6.04			43.92	285.33	1.04	61.0	62.71		1.2	12.5	12.98	0.5	4.6			75.36	1.1	0.7
107055	3.40	3.46	7.0			1.14	33.0	27.99	35.73	0.40	1.35	1000.60	0.5	0.50	1.20	1.13	6.18			58.83	197.43	5.26	85.0	64.30		1.6	15.2	15.34	0.5	6.7			67.85	0.9	1.0
107056	3.60	3.80	7.0			1.27	30.0	26.34	45.26	0.37	1.31	787.40	0.5	0.50	1.20	1.16	6.00			75.78	125.29	1.19	69.0	79.93		1.5	14.1	14.46	0.5	5.1			66.81	0.8	0.8
107057	3.30	3.03	9.0			1.10	27.0	18.16	26.32	0.37	1.06	694.50	0.5	0.50	1.50	1.40	5.12			48.64	113.00	4.89	86.0	68.78		1.3	13.9	13.12	0.5	4.9			74.96	1.3	0.8
107058	4.30	4.49	6.0			1.17	26.0	17.51	36.25	0.36	0.94	514.54	0.5	0.50	1.10	1.06	6.94			33.59	254.97	0.05	71.0	62.73		1.3	14.5	14.13	0.5	5.5			60.43	0.9	0.7
107059	4.40	4.23	8.0			1.41	27.0	22.83	44.35	0.39	1.19	1292.39	0.5	0.50	1.10	1.08	6.24			58.17	483.34	3.34	75.0	82.02		1.5	16.6	16.61	0.5	5.3			64.31	0.8	0.9
107060	4.30	4.28	7.0			1.61	41.0	33.34	39.02	0.44	1.39	1065.02	0.5	0.50	1.20	1.15	7.02			78.43	231.80	7.51	93.0	97.27		1.9	16.7	16.62	0.5	7.0			76.80	1.0	1.1
107061	3.60	3.78	7.0			1.26	39.0	33.98	36.01	0.50	1.29	1798.11	0.5	0.50	1.20	1.16	5.80			68.02	283.22	5.89	64.0	73.71		1.4	17.1	17.27	0.5	7.5			84.88	0.9	1.1
107062	3.70	3.71	7.0			1.23	28.0	23.59	39.28	0.36	1.31	691.63	0.5	0.50	1.20	1.18	5.89			73.41	183.30	7.07	71.0	72.33		1.5	15.6	15.77	0.5	5.3			69.20	0.9	0.8
107063	4.20	4.12	7.0			1.38	30.0	24.72	39.39	0.41	1.28	941.88	0.5	0.50	1.20	1.20	6.47			61.45	279.46	4.89	78.0	78.02		1.9	19.0	18.81	0.5	7.6			87.73	1.3	1.2
107064	3.30	3.44	7.0			1.60	34.0	29.00	35.53	0.40	1.38	963.29	0.5	0.50	1.40	1.33	6.38			64.59	142.97	5.93	94.0	92.60		1.7	17.4	17.84	0.5	6.5			72.79	1.2	0.9
107065	3.10	3.04	6.0			1.17	26.0	17.51	36.25	0.36	0.94	514.54	0.5	0.50	1.30	1.28	5.98			60.79	81.65	1.73	90.0	96.25		1.2	14.9	15.95	0.5	5.5			67.90	1.0	0.9
107066	4.30	4.49	6.0			1.41	27.0	22.83	44.35	0.39	1.19	1292.39	0.5	0.50	1.10	1.08	6.24			69.46	370.73	3.96	88.0	88.45		2.1	16.6	16.61	0.5	7.2			60.43	0.8	0.9
107067	4.10	4.23	7.0			1.46	27.0	26.28	38.16	0.38	1.29	1100.57	0.5	0.50	1.20	1.20	6.87			61.67	185.27	4.32	71.0	82.27		1.8	15.6	16.29	0.5	5.1			71.07	1.1	0.8
107068	2.60	2.77	8.0			1.36	25.0	21.58	31.70	0.34	1.14	549.02	0.5	0.50	1.20	1.23	5.23			40.47	184.52	0.05	78.0	78.52		1.4	13.4	14.69	0.5	4.9			73.39	1.0	0.7
107069	4.80	4.46	8.0			1.60	38.0	31.99	29.74	0.48	1.42	1258.48	0.5	0.50	1.50	1.40	7.03			92.98	398.08	7.24	92.0	86.18		1.9	19.0	18.81	0.5	7.6			87.73	1.3	1.2
107070	4.30	4.24	7.0			1.58	34.0	29.00	35.53	0.40	1.38	963.29	0.5	0.50	1.40	1.33	6.38			64.59	142.97	5.93	94.0	92.60		1.7	17.4	17.84	0.5	6.5			72.79	1.2	0.9
107071	3.30	3.43	7.0			1.60	34.0	27.70	41.25	0.35	1.42	595.72	0.5	0.50	1.30	1.28	5.98			60.79	81.65	1.73	90.0	96.25		1.2	14.9	15.95	0.5	5.5			67.90	1.0	0.9
107072	3.80	3.82	10.0			1.27	36.0	28.41	30.65	0.47	1.44	973.65	0.5	0.50	1.40	1.37	6.61			69.46	370.73	3.96	88.0	88.45		2.1	16.6	16.61	0.5	7.2			60.43	0.8	0.9
107073	3.30	3.06	5.0			1.40	27.0	23.77	54.78	0.39	2.05	799.95	0.5	0.50	1.00	0.93	5.96			156.09	234.90	4.78	89.0	88.45		1.4	17.6	18.98	0.5	5.0			58.82	0.8	0.9
107074	3.30	3.46	7.0			1.28	25.0	22.45	34.16	0.34	1.99	720.60	0.5	0.50	1.20	1.23	5.23			95.43	111.11	0.05	69.0	72.89		1.3	15.4	16.48	0.5	4.6			72.94	0.9	0.7
107075	2.70	3.06	8.0			1.15	30.0	30.16	41.00	0.37	1.39	529.74	0.5	0.50	1.30	1.44	4.73			64.28	149.55	2.87	63.0	76.36		0.9	13.4	15.67	0.5	5.6			77.03	1.1	0.8
107076	3.70	4.07	7.0			1.43	30.0	29.57	34.10	0.36	1.67	2222.79	0.5	0.50	1.10	1.17	5.92			81.36	312.03	1.31	72.0	81.74		1.3	14.4	16.20	0.5	5.6			62.26	1.0	0.8
107077	3.70	3.46	7.0			1.44	36.0	29.32	41.56	0.40	1.82	602.60	0.5	0.50	1.40	1.21	6.16			76.00	280.78	0.05	84.0	87.00		1.2	16.7	15.96	0.5	6.4			67.08	1.0	0.9
107078	3.80	3.18	9.0			0.98	37.0	19.92	27.88	0.43	1.62	693.40	0.5	0.50	1.40	1.22	4.97			93.49	219.30	2.46	84.0	57.58		1.3	17.9	15.53	0.5	6.8			60.90	1.0	1.0
107079	4.50	4.01	10.0			1.05	47.0	31.68	31.06	0.50	1.44	692.61	0.5	0.50	1.50	1.32	5.33			78.18	198.77	7.37	64.0	59.44		1.6	17.1	15.35	0.5	9.3			61.55	1.3	1.3
107080	4.00	3.75	10.0			1.21	49.0	37.25	39.95	0.60	1.49	772.07	0.5	0.50	1.50	1.40	5.35			143.57	159.00	9.60	71.0	64.76		1.8	19.3	18.66	0.5	8.7			69.69	1.2	1.4
107081	4.00	3.75	10.0			1.06	43.0	29.34	24.23	0.56	1.63	917.13	0.5	0.50	1.50	1.33	5.12			72.78	340.26	12.22	58.0	53.14		1.7									



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
107118	7.40	6.76	9.0			2.36	26.0	18.74	28.14	0.49	0.49	720.99	17.0	13.57	1.00	0.87	9.95			61.02	666.69	15.84	98.0	104.56		39.5	11.7	10.80	0.5	4.3		47.31	1.2	0.8	
107119	3.00	3.01	6.0			1.71	29.0	20.72	52.08	0.44	0.92	906.94	0.5	1.11	0.87	0.83	7.33			15.40	314.18	4.66	140.0	161.22		2.6	17.5	17.86	0.5	7.9		170.80	1.3	1.0	
107121	4.50	4.39	8.0			1.53	32.0	20.80	53.40	0.41	0.81	1190.07	0.5	0.50	1.20	1.09	7.94			46.67	302.73	5.70	95.0	111.54		2.7	14.8	14.41	0.5	5.2		66.15	1.0	0.9	
107122	5.30	5.50	8.0			1.43	31.0	21.14	53.45	0.31	1.01	1452.85	0.5	1.22	0.91	0.89	8.11			45.80	533.65	13.40	84.0	106.29		2.6	16.6	16.53	0.5	5.5		66.32	0.8	0.8	
107123	5.30	5.43	6.0			1.71	38.0	21.14	53.45	0.31	1.01	1452.85	0.5	0.50	0.92	0.90	8.01			62.82	414.53	9.59	80.0	94.26		2.9	13.2	13.46	0.5	5.0		57.88	1.0	0.7	
107124	5.70	5.24	7.0			1.41	38.0	25.62	54.05	0.51	1.01	1300.82	0.5	0.50	1.20	1.04	8.37			78.48	297.49	6.39	100.0	105.72		3.0	16.1	14.65	0.5	7.1		59.98	1.0	1.0	
107125	4.60	4.34	9.0			1.79	36.0	26.33	41.41	0.54	1.03	1547.50	0.5	0.50	1.30	1.14	9.02			62.48	321.10	8.01	110.0	109.37		3.0	16.3	14.88	0.5	6.7		66.15	1.1	1.1	
107126	4.80	5.46	9.0			1.83	50.0	34.79	55.03	0.64	1.08	1681.40	0.5	0.50	1.20	1.04	9.30			73.94	285.62	5.83	110.0	121.24		2.7	19.2	17.93	0.5	10.3		63.67	1.1	1.5	
107127	4.80	4.52	9.0			1.56	43.0	29.01	47.07	0.63	1.01	909.37	0.5	0.50	1.20	1.12	7.97			58.14	289.24	5.10	87.0	98.13		2.5	13.3	12.18	0.5	7.4		68.42	1.1	1.1	
107128	4.80	4.80	9.0			1.65	38.0	28.04	58.84	0.52	0.93	1329.01	0.5	1.03	1.20	1.10	8.75			59.62	243.07	8.57	92.0	110.52		2.9	14.6	13.75	0.5	6.5		65.86	1.1	0.9	
107129	5.30	5.32	5.0			1.76	42.0	28.11	68.75	0.44	1.13	1241.42	0.5	0.50	1.00	0.91	8.31			65.00	429.35	0.05	100.0	116.71		2.3	15.3	14.78	0.5	6.6		62.38	1.1	1.0	
107130	5.00	4.93	6.0			1.92	43.0	27.81	63.43	0.40	1.18	1393.45	0.5	0.50	1.10	1.00	8.56			83.44	222.92	4.16	110.0	123.94		1.8	17.5	16.53	0.5	7.0		65.32	1.1	1.0	
107131	5.70	5.55	7.0			1.73	37.0	23.30	68.89	0.54	1.37	1952.49	0.5	0.50	1.00	0.95	8.20			73.57	449.18	14.82	110.0	122.47		1.6	17.2	16.19	0.5	6.0		71.54	1.0	0.9	
107132	6.30	5.91	8.0			1.63	36.0	23.29	53.94	0.45	1.66	2205.93	0.5	0.50	1.20	1.03	7.48			100.99	459.17	17.59	96.0	98.47		2.5	17.2	16.08	0.5	6.3		71.15	1.0	1.0	
107133	4.00	5.85	5.0			1.89	32.0	24.80	70.21	0.36	0.61	1332.07	0.5	0.50	0.54	0.53	7.56			50.69	842.85	8.41	110.0	128.69		1.2	15.1	17.20	0.5	5.5		44.90	1.1	0.7	
107134	4.00	4.11	9.0			1.88	31.0	27.52	45.39	0.53	0.75	715.91	0.5	1.02	1.10	1.07	10.71			48.77	284.31	12.71	120.0	124.86		4.3	14.3	14.65	0.5	6.0		61.55	1.1	1.0	
107135	3.00	3.10	10.0			1.21	31.0	24.95	29.47	0.52	0.40	454.97	0.5	0.50	0.91	0.90	11.16			14.70	309.08	0.05	79.0	79.83		2.4	12.8	12.48	0.5	5.4		59.24	1.4	0.8	
107136	4.90	4.89	7.0			1.72	36.0	22.79	56.79	0.42	0.83	1716.28	0.5	0.50	1.00	0.90	7.90			46.65	467.59	5.64	92.0	106.10		2.4	13.5	13.16	0.5	6.0		52.42	0.9	0.9	
107137	5.80	5.68	4.0			1.58	27.0	24.21	41.63	0.38	5.14	1173.93	0.5	0.50	1.20	1.14	9.54			337.87	189.93	3.92	93.0	94.81		2.2	19.6	19.83	0.5	4.7		88.40	1.0	0.8	
107138	6.30	6.10	6.0			1.24	28.0	17.51	42.90	0.46	1.88	1181.02	0.5	0.50	2.20	2.01	11.88			99.15	615.81	2.84	76.0	82.53		1.0	26.6	25.86	0.5	6.4		163.27	1.3	1.2	
107141	5.60	5.24	8.0			1.85	34.0	27.61	36.50	0.50	1.50	1527.72	0.5	0.50	1.40	1.26	11.39			95.58	424.12	18.42	100.0	109.87		1.1	20.0	19.16	0.5	6.3		91.04	1.2	0.9	
107142	4.70	4.71	7.0			1.47	36.0	30.62	32.31	0.47	1.53	1460.92	0.5	0.50	1.50	1.43	9.46			92.20	438.80	11.06	84.0	89.19		1.0	18.9	19.50	0.5	6.9		103.75	1.3	1.0	
107143	4.60	5.09	6.0			1.46	29.0	28.31	37.20	0.44	1.15	1133.38	0.5	0.50	1.30	1.28	12.34			70.23	345.11	30.71	65.0	89.65		1.1	14.6	15.63	0.5	5.3		83.22	1.5	0.9	
107144	8.20	7.65	6.0			1.30	23.0	16.75	42.89	0.47	2.01	1399.99	0.5	0.50	1.60	1.67	10.31			35.53	382.70	1.92	77.0	80.87		0.7	33.9	34.10	0.5	6.2		85.66	1.2	1.1	
107145	6.00	5.62	7.0			1.26	45.0	35.23	37.44	0.53	2.32	1553.54	0.5	0.50	1.60	1.45	13.41			187.18	730.94	3.47	76.0	81.08		1.8	23.1	21.19	0.5	10.0		114.54	1.8	1.5	
107146	4.10	3.97	8.0			1.43	33.0	27.42	49.10	0.40	1.73	1374.32	0.5	0.50	1.30	1.25	8.33			106.23	486.05	1.21	75.0	86.80		1.9	17.2	17.48	0.5	6.3		90.78	1.0	1.0	
107147	3.40	3.31	8.0			1.36	31.0	25.77	43.25	0.46	1.45	812.61	0.5	0.50	1.30	1.26	8.64			73.95	277.02	0.05	82.0	85.61		1.3	16.4	16.32	0.5	5.6		75.55	1.0	0.8	
107148	2.00	2.49	8.0			1.40	30.0	24.32	33.32	0.42	1.54	582.15	0.5	0.50	1.50	1.44	7.75			54.69	248.61	0.05	78.0	82.02		1.3	16.7	17.15	0.5	5.4		86.12	0.9	0.9	
107149	2.60	2.55	9.0			1.26	32.0	23.74	32.87	0.41	1.05	525.77	0.5	0.50	1.50	1.39	7.07			33.82	71.92	2.79	81.0	87.31		1.3	15.0	14.44	0.5	5.5		81.21	0.9	0.8	
107150	4.60	4.40	6.0			1.22	27.0	23.08	31.19	0.41	2.50	1121.61	0.5	0.50	1.30	1.25	6.05			177.92	79.34	2.76	67.0	70.26		1.7	18.8	19.01	0.5	5.0		73.79	0.8	0.9	
107151	4.70	4.06	8.0			1.46	30.0	21.84	29.40	0.45	1.14	1136.89	0.5	0.50	1.50	1.24	10.21			55.57	351.34	4.58	90.0	73.80		1.5	17.2	15.78	0.5	5.6		84.31	1.3	0.9	
107152	4.50	3.68	9.0			1.25	30.0	20.19	28.28	0.44	1.06	923.18	0.5	0.50	1.50	1.20	9.31			52.38	446.69	54.26	77.0	63.00		1.5	16.2	14.05	0.5	5.5		81.51	1.0	0.9	
107153	4.00	4.19	8.0			1.59	31.0	28.74	40.46	0.38	1.12	883.39	0.5	0.50	1.30	1.27	10.86			57.58	191.59	148.62	98.0	105.52		1.4	15.6	17.19	0.5	6.3		84.45	1.3	1.0	
107154	4.20	4.09	8.0			1.93	38.0	32.35	37.36	0.50	1.13	836.37	0.5	0.50	1.50	1.40	9.70			41.30	515.08	5.99	110.0	116.38		2.5	31.6	28.02	0.5	7.3		79.20	1.5	1.1	
107155	4.10	4.09	8.0			1.69	26.0	22.13	41.70	0.43	1.17	872.62	0.5	0.50	1.30	1.28	8.95			54.74	343.12	11.82	95.0	110.92		1.1	16.5	16.99	0.5	5.1		89.71	1.3	0.9	
107156	3.60	3.48	8.0			1.75	45.0	36.18	25.89	0.54	0.51	893.53	0.5	0.50	1.60	1.46	11.51			15.85	790.29	13.39	110.0	108.57		0.3	8.7	8.85	0.5	8.8		114.93	1.5	1.3	
107166	3.60	3.43	15.0			2.02	57.0	43.54	39.24	0.59	0.78	942.83	0.5	0.50	1.60	1.45	13.52			31.62	988.61	16.06	130.0	132.29		4.0	23.6	21.44	0.5	6.5		115.15	1.7	1.4	
107167	3.10	3.02	18.0			1.66	59.0	39.74	33.61	0.61	0.54	800.15	0.5	0.50	1.60	1.47	14.00			14.13	407.20	16.37	98.0	96.05		0.3	10.0	9.32	0.5	11.0		117.65	1.8	1.6	
107168	3.40	3.16	8.0			0.99	24.0	17.21	24.26	0.43	0.49	1012.96	0.5	0.50	1.10	1.03	9.86			18.83	477.25	13.76	60.0	61.07		0.3	8.5	7.70	0.5	4.8		67.31	1.3	0.7	
107169	3.50	3.36	9.0			1.51	30.0	21.78	31.47	0.43	0.67	1078.09	0.5	0.50	1.20	1.10	11.92			35.18	408.06	24.32	90.0	97.40		0.5	11.5	10.85	0.5	5.7		71.14	1.5	0.8	
107170	3.40	3.30	10.0			1																													



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
107197	4.50	4.51	10.0			2.16	36.0	31.76	46.92	0.64	0.91	1162.85	2.0	0.50	1.00	0.93	14.25			83.08	319.55	4.24	1200	122.46		2.6	11.1	10.68	0.5	7.4		52.18	1.3	1.3	
107198	2.40	2.47	11.0			1.69	27.0	22.23	37.80	0.47	0.45	1691.79	0.5	0.50	1.00	0.85	9.70			15.39	314.90	6.37	1200	115.03									61.46	1.1	0.8
107199	5.80	5.66	7.0			1.78	45.0	36.09	38.16	0.55	1.33	2693.62	0.5	0.50	1.40	1.28	14.55			143.64	363.56	28.56	1000	99.31		1.6	19.6	18.69	0.5	8.6		65.23	1.2	1.3	
107201	5.20	5.03	6.0			0.87	26.0	18.91	37.51	0.36	2.09	881.57	0.5	0.50	1.20	1.08	9.33			181.82	369.10	1.04	47.0	51.96		2.3	17.4	17.09	0.5	4.4		98.88	0.8	0.7	
107202	7.60	7.11	6.0			0.78	43.0	36.41	43.63	0.41	1.46	1141.51	0.5	0.50	1.10	0.91	12.00			119.67	759.90	1.68	44.0	55.59		2.6	17.2	16.08	0.5	3.9		55.50	0.6	0.6	
107203	3.70	3.74	9.0			1.30	48.0	32.19	39.42	0.45	1.02	815.76	0.5	0.50	1.30	1.26	7.70			50.53	332.54	4.70	69.0	60.87		1.8	12.2	12.66	0.5	9.2		62.88	1.0	1.2	
107204	5.40	5.54	5.0			1.58	32.0	20.63	52.40	0.42	0.65	1304.52	1.0	1.12	0.92	0.87	9.39			27.34	638.52	1.59	93.0	92.35		1.5	13.9	14.47	0.5	5.4		33.75	0.7	0.8	
107205	4.60	4.42	6.0			1.11	28.0	16.81	55.68	0.40	0.89	1366.68	0.5	0.50	0.86	0.74	8.48			46.19	472.94	6.09	63.0	66.18		2.3	15.8	15.43	0.5	5.4		50.47	0.9	0.9	
107206	3.50	3.35	13.0			1.22	37.0	22.50	27.81	0.56	0.57	1544.04	0.5	0.50	1.40	1.26	11.80			20.00	553.11	12.72	74.0	69.50		0.3	10.0	9.44	0.5	6.6		89.31	1.7	1.1	
107207	3.00	2.96	8.0			1.39	28.0	21.38	29.28	0.45	0.64	972.98	0.5	0.50	1.10	1.10	9.63			26.39	672.42	18.06	72.0	75.44		0.3	10.5	10.62	0.5	5.3		76.28	1.3	0.8	
107208	3.80	3.65	9.0			1.85	30.0	23.47	36.06	0.52	0.88	1120.71	0.5	0.50	1.30	1.20	10.50			36.72	492.92	11.38	110.0	100.44		0.4	13.2	13.33	0.5	5.6		81.69	1.4	0.9	
107209	3.70	3.59	9.0			1.44	29.0	20.85	28.54	0.47	0.71	1102.04	0.5	0.50	1.40	1.20	10.25			24.53	533.50	12.98	83.0	80.15		0.3	10.1	10.00	0.5	5.2		82.07	1.5	1.0	
107210	3.00	3.00	14.0			1.96	40.0	22.13	33.19	0.55	0.56	821.13	0.5	0.50	1.50	1.44	10.00			16.89	312.16	21.90	100.0	101.72		0.3	9.0	8.87	0.5	7.3		112.22	1.6	0.8	
107211	3.10	2.81	15.0			2.13	47.0	31.47	35.92	0.66	0.66	834.98	0.5	0.50	1.70	1.53	10.18			19.62	671.44	15.32	100.0	113.28		0.3	10.1	9.66	0.5	8.7		117.66	1.8	1.2	
107212	3.70	3.66	11.0			2.39	40.0	26.61	59.51	0.58	1.04	892.73	0.5	0.50	1.50	1.47	11.46			32.89	931.32	20.60	150.0	138.96		0.2	13.1	13.80	0.5	8.7		110.92	1.8	1.3	
107213	1.00	1.04	11.0			4.15	28.0	16.98	27.58	0.36	0.27	350.95	0.5	0.50	1.80	1.89	8.44			2.99	569.31	92.73	190.0	192.78		0.1	5.8	6.13	0.5	5.4		107.03	1.4	0.6	
107214	2.00	2.03	11.0			1.96	33.0	19.68	35.34	0.43	0.45	808.19	0.5	0.50	1.60	1.63	8.71			13.33	233.29	15.88	140.0	126.36		0.3	8.2	8.12	0.5	7.3		115.86	2.3	0.9	
107215	2.60	2.55	12.0			2.02	41.0	29.49	45.35	0.53	0.64	627.91	0.5	0.50	1.70	1.76	10.56			10.98	1863.77	22.20	190.0	173.01		0.2	8.3	7.68	0.5	6.8		114.86	1.7	0.7	
107216	3.30	3.29	7.0			2.13	33.0	25.26	60.74	0.49	0.67	644.33	0.5	0.50	1.60	1.57	11.71			19.81	190.22	14.65	110.0	104.98		0.2	9.4	9.52	0.5	6.8		120.36	2.1	0.7	
107217	1.60	1.52	9.0			3.32	30.0	23.90	122.10	0.51	0.45	856.20	0.5	0.50	1.50	1.44	10.21			15.46	215.20	15.57	110.0	127.01		0.3	10.6	10.88	0.5	6.2		99.37	2.2	0.8	
107218	4.30	4.23	7.0			1.83	36.0	29.26	78.80	0.39	0.78	626.95	0.5	0.50	1.20	1.14	13.02			6.70	1688.36	23.73	210.0	211.94		0.1	5.8	5.99	0.5	6.5		124.96	3.4	1.0	
107219	2.20	2.13	14.0			2.28	40.0	25.72	68.58	0.54	0.55	752.98	0.5	0.50	1.80	1.80	9.53			20.20	369.91	12.48	110.0	116.14		0.2	12.2	12.38	0.5	6.0		75.02	3.2	0.8	
107220	2.20	2.07	18.0			3.17	32.0	25.22	67.53	0.66	0.62	830.43	0.5	0.50	1.50	1.51	10.78			14.33	233.29	15.88	140.0	126.36		0.3	8.2	8.12	0.5	7.3		115.86	2.3	0.9	
107221	2.30	2.07	18.0			3.17	32.0	25.22	67.53	0.66	0.62	830.43	0.5	0.50	1.50	1.51	10.78			10.98	1863.77	22.20	190.0	173.01		0.2	8.3	7.68	0.5	6.8		112.71	1.8	0.9	
107222	2.90	2.99	24.0			2.74	39.0	29.51	86.15	0.65	0.76	966.44	0.5	0.50	1.80	1.68	12.59			12.59	594.90	14.20	170.0	169.38		0.1	11.5	12.88	0.5	6.9		124.87	2.5	1.1	
107223	2.20	2.20	15.0			3.17	48.0	34.77	62.60	0.69	0.61	762.92	0.5	0.50	1.90	1.86	10.96			13.04	1338.47	22.96	190.0	163.36		0.2	8.6	8.75	0.5	10.3		130.05	3.5	1.3	
107224	2.60	2.58	10.0			1.36	28.0	20.13	27.88	0.39	0.58	831.81	0.5	0.50	1.10	1.09	7.90			25.84	152.46	16.06	43.0	49.40		2.8	21.4	23.83	0.5	4.4		62.14	0.8	0.7	
107225	2.80	2.58	7.0			3.14	30.0	26.70	113.60	0.62	0.72	852.87	2.0	1.37	1.80	1.81	12.42			20.89	401.35	12.24	76.0	76.15		1.9	8.6	9.24	0.5	5.0		68.82	1.4	0.8	
107226	2.90	3.23	43.0			2.86	16.0	10.80	26.98	1.00	0.32	882.89	8.0	8.23	2.70	3.21	38.83			18.62	1292.91	46.51	210.0	200.44		0.5	8.3	9.22	0.5	6.4		113.05	2.8	0.9	
107227	3.00	3.00	11.0			2.09	35.0	25.84	53.95	0.53	0.68	967.42	0.5	0.50	1.50	1.51	10.78			48.26	442.54	10.12	93.0	89.91		0.8	16.8	17.51	0.5	5.6		112.45	1.3	1.0	
107228	3.20	3.42	11.0			3.03	35.0	19.95	104.01	0.52	0.91	874.42	0.5	0.50	1.60	1.68	12.59			52.38	317.13	9.35	91.0	82.85		0.8	16.4	16.34	0.5	5.5		115.11	1.5	0.8	
107229	4.30	4.63	6.0			1.51	38.0	28.22	28.90	0.53	1.10	885.32	0.5	0.50	1.70	1.53	9.72			55.56	580.79	11.97	97.0	77.82		1.1	17.5	16.82	0.5	7.3		112.67	1.4	1.1	
107230	6.30	6.32	6.0			0.94	23.0	18.96	31.57	0.34	3.27	1549.07	0.5	0.50	1.10	1.09	6.84			31.57	194.78	12.96	85.0	94.74		2.6	14.5	14.14	0.5	5.1		66.13	0.9	0.9	
107231	4.10	3.82	8.0			1.04	24.0	19.41	29.28	0.29	1.54	617.85	0.5	0.50	1.20	1.23	5.63			65.93	171.06	1.48	55.0	67.52		4.1	15.9	15.83	0.5	7.0		62.32	1.1	1.1	
107232	4.50	4.45	7.0			0.73	27.0	15.80	15.79	0.38	0.86	388.74	0.5	0.50	1.20	1.07	6.27			52.17	251.02	2.15	44.0	45.75		1.6	12.6	12.06	0.5	4.6		59.72	1.0	0.6	
107233	4.40	4.08	8.0			1.50	30.0	20.60	41.80	0.44	1.21	925.80	0.5	0.50	1.60	1.44	9.30			48.26	442.54	10.12	93.0	89.91		0.8	16.8	17.51	0.5	5.6		112.45	1.3	1.0	
107234	4.70	4.03	8.0			1.55	29.0	20.63	33.78	0.48	1.16	924.28	0.5	0.50	1.50	1.57	9.61			52.38	317.13	9.35	91.0	82.85		0.8	16.4	16.34	0.5	5.5		115.11	1.5	0.8	
107235	4.30	4.63	10.0			1.71	28.0	21.24	52.79	0.52	0.81	649.29	0.5	0.50	1.30	1.21	9.42			55.56	580.79	11.97	97.0	77.82		1.1	17.5	16.82	0.5	7.3		112.67	1.4	1.1	
107236	4.00	3.96	10.0			2.31	34.0	29.00	41.00	0.66	0.73	1267.64	0.5	0.50	1.20	1.13	10.64			39.73	328.97	12.31	120.0	116.43		4.1	15.9	15.83	0.5	7.0		62.32	1.1	1.1	
107237	6.70	6.36	7.0			1.66	36.0	23.03	54.58	0.51	1.14	2043.11	0.5	0.50	1.10	0.95	8.84			122.29	282.03	12.20	94.0	96.50		3.2	18.2	17.71	0.5	6.6		58.82	0.9	0.9	
10																																			



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
107272	6.80	7.33	8.0			0.82	20.0	12.60	17.99	0.29	0.31	491.76	0.5	0.50	0.77	0.82	10.98			5.99	2085.27	11.36	57.0	61.51	1.6	7.1	7.15				3.3		38.22	1.0	0.5
107273	0.80	0.82	12.0			1.19	35.0	26.83	8.09	0.41	0.21	290.58	0.5	0.50	0.61	0.62	5.28			2.78	84.93	0.05	56.0	64.74	2.0	10.0	9.97				5.4		29.61	1.4	0.9
107274	3.30	3.89	6.0			3.98	18.0	16.54	37.26	0.38	0.56	260.32	0.5	0.50	0.55	0.54	11.51			10.20	198.75	0.05	160.0	201.37	2.1	25.2	29.27				3.3		52.84	1.6	0.8
107275	0.80	0.83	10.0			1.29	32.0	21.78	8.03	0.37	0.21	323.74	0.5	0.50	0.95	0.96	6.10			2.94	61.53	1.00	74.0	79.32	3.7	10.1	10.17				4.9		47.10	1.4	0.7
107276	3.10	3.25	6.0			2.19	34.0	23.89	32.95	0.35	0.31	1389.00	0.5	0.50	0.66	0.69	8.10			8.18	761.05	22.23	160.0	194.94	11.8	13.2	14.66				5.1		42.36	1.4	0.9
107277	2.70	3.02	9.0			1.51	33.0	25.13	24.11	0.40	0.42	747.48	0.5	0.50	1.00	0.98	8.39			6.89	235.36	1.95	100.0	124.21	0.8	11.8	12.46				4.9		42.38	1.2	0.9
107278	0.70	0.70	12.0			1.63	60.0	40.39	6.57	0.49	0.27	150.39	0.5	0.50	0.61	0.54	4.98			2.42	84.71	0.05	100.0	112.42	1.0	12.4	12.10				8.9		17.87	1.5	1.2
107279	1.20	1.30	9.0			1.28	15.0	10.24	7.50	0.34	0.35	561.65	0.5	0.50	1.10	1.22	8.43			3.92	143.58	1.29	64.0	72.18	0.3	11.2	12.65				2.7		51.83	1.0	0.3
107280	0.60	0.67	17.0			1.13	61.0	35.87	4.53	0.64	0.22	203.75	0.5	0.50	1.50	1.77	6.61			5.16	95.32	0.05	57.0	70.95	0.7	8.0	7.87				10.0		47.97	2.2	1.3
107281	2.50	2.68	9.0			1.26	20.0	14.39	26.49	0.37	0.36	657.68	0.5	0.50	1.30	1.24	8.43			23.83	127.30	6.58	80.0	83.36	0.6	13.1	13.54				3.3		73.31	1.1	0.5
107283	3.80	3.97	7.0			1.40	28.0	21.38	35.12	0.35	1.52	724.61	0.5	0.50	1.20	1.18	7.33			99.82	99.77	3.07	73.0	81.57	1.1	16.4	16.92				4.5		68.26	0.6	0.6
107284	0.90	0.83	8.0			1.09	33.0	21.86	10.67	0.39	0.75	220.58	1.0	0.50	1.00	1.27	4.83			15.86	62.62	0.05	53.0	60.35	1.1	13.4	12.79				4.8		71.08	1.4	0.7
107285	0.60	0.68	15.0			1.29	8.0	6.17	2.72	0.28	0.11	707.88	0.5	0.50	0.45	0.50	9.55			10.76	52.76	4.36	51.0	59.92	3.5	7.4	8.41				1.3		20.84	1.1	0.3
107286	0.80	0.94	11.0			1.77	23.0	16.66	9.03	0.39	0.24	991.03	0.5	0.50	0.58	0.61	12.50			2.57	140.43	17.07	84.0	104.00	1.2	10.8	11.51				3.4		34.27	1.3	0.7
107287	3.10	3.81	7.0			2.21	37.0	36.65	38.97	0.24	0.45	479.70	0.5	0.50	0.67	0.69	10.50			6.77	793.22	0.05	140.0	179.20	6.3	14.1	16.59				5.2		40.89	1.0	0.7
107288	4.10	4.27	10.0			1.50	18.0	9.43	20.32	0.37	0.36	954.28	0.5	0.50	0.89	0.91	14.49			6.76	211.10	9.48	79.0	91.51	0.4	11.7	12.40				3.1		48.80	1.8	0.6
107289	4.00	3.94	8.0			1.32	30.0	21.78	41.50	0.39	0.75	935.60	0.5	0.50	1.20	1.13	11.98			31.16	199.33	17.93	76.0	76.87	0.3	12.1	11.72				4.8		77.33	1.2	0.6
107290	1.20	1.33	19.0			2.90	12.0	6.40	6.08	0.52	0.23	1665.52	0.5	0.50	0.76	0.78	15.99			1.97	137.62	4.03	120.0	125.82	0.1	14.5	15.41				2.0		55.02	1.8	0.5
107291	2.20	2.18	11.0			1.44	11.0	5.72	6.81	0.35	0.30	883.69	0.5	0.50	1.20	1.32	10.01			8.95	142.00	2.83	62.0	73.75	0.4	10.8	11.67				1.9		62.00	1.3	0.3
107292	1.90	2.12	28.0			3.33	54.0	7.74	26.51	0.83	0.29	944.45	0.5	0.50	1.30	1.31	24.65			2.09	90.22	16.34	97.0	113.52	0.2	20.6	21.02				8.6		97.56	2.7	1.4
107293	1.80	2.02	19.0			3.38	5.0	2.58	6.38	0.44	0.32	1179.82	0.5	0.50	1.20	1.22	15.46			4.18	72.48	5.87	160.0	169.40	0.1	15.5	16.50				0.9		51.35	1.8	0.3
107294	1.60	1.82	9.0			2.64	5.0	4.05	12.28	0.25	0.38	246.19	0.5	0.50	1.20	1.36	9.34			6.27	63.68	0.05	120.0	140.21	0.3	11.7	13.82				1.0		60.47	0.7	0.3
107295	3.90	4.15	7.0			1.45	31.0	25.95	37.55	0.35	1.68	914.85	0.5	0.50	1.00	1.25	7.99			109.38	143.75	5.92	75.0	85.14	1.3	16.2	17.49				5.1		65.69	1.0	0.8
107297	4.40	4.58	7.0			1.39	26.0	22.07	34.70	0.24	1.77	734.24	0.5	0.50	1.20	1.17	8.07			109.58	170.42	4.99	82.0	88.54	1.3	16.1	17.77				4.8		65.00	0.8	0.7
107298	1.30	1.61	12.0			2.21	25.0	12.61	3.97	0.47	0.32	355.52	0.5	0.50	0.84	0.91	9.27			4.89	93.01	0.05	110.0	120.61	2.2	16.4	17.94				4.3		42.94	2.0	0.8
107299	0.70	0.70	25.0			4.24	21.0	8.95	6.38	0.51	0.13	900.70	2.0	2.07	1.30	1.31	11.47			1.33	193.00	17.38	190.0	189.31	0.2	7.9	7.64				3.3		107.97	1.6	0.6
107300	0.90	0.92	41.0			7.79	100.0	19.36	22.09	0.93	0.20	737.83	2.0	3.08	1.20	1.27	13.93			1.22	325.65	29.85	390.0	432.29	0.4	8.8	8.86				15.7		171.49	2.0	1.8
107301	0.70	0.72	31.0			8.19	82.0	19.59	13.22	1.20	0.16	489.58	1.0	0.50	1.30	1.30	9.10			51.27	161.85	2.28	63.0	74.13	0.9	13.4	14.99				4.6		59.01	1.1	0.8
107302	1.10	1.11	29.0			1.71	49.0	16.67	8.43	0.78	0.17	1290.72	0.5	0.50	1.20	1.24	7.33			46.81	113.53	1.90	71.0	73.02	1.1	14.9	16.18				5.1		71.36	1.0	0.8
107303	0.80	0.90	21.0			3.09	7.0	5.33	15.11	0.42	0.20	758.80	0.5	0.50	1.00	1.37	13.95			1.72	135.26	3.97	160.0	172.75	0.6	12.7	14.60				6.2		54.63	1.2	0.9
107304	0.90	0.79	14.0			1.83	38.0	20.86	16.52	0.51	0.21	517.28	0.5	0.50	0.76	0.76	10.86			4.06	132.52	8.48	83.0	89.93	0.6	12.2	12.78				5.9		52.02	1.9	1.0
107305	4.00	4.23	7.0			1.12	31.0	25.26	43.70	0.34	1.14	458.50	0.5	0.50	1.20	1.12	7.48			48.66	163.05	7.14	57.0	74.23	0.9	15.2	16.00				4.8		63.90	1.2	0.8
107306	2.30	2.58	7.0			1.97	3.0	4.67	39.32	0.40	0.45	601.74	0.5	0.50	1.40	1.39	10.67			7.66	96.85	5.62	64.0	77.90	0.1	15.3	17.94				0.7		159.47	1.0	0.3
107307	3.00	3.29	7.0			1.09	28.0	22.57	35.25	0.33	1.12	468.55	0.5	0.50	1.00	1.08	6.80			51.27	161.85	2.28	63.0	74.13	0.9	13.4	14.99				4.6		59.01	1.1	0.8
107308	3.30	3.31	8.0			1.20	32.0	23.92	33.53	0.38	1.26	484.35	0.5	0.50	1.20	1.24	7.33			46.81	113.53	1.90	71.0	73.02	1.1	14.9	16.18				5.1		71.36	1.0	0.8
107309	4.00	4.20	10.0			1.45	39.0	23.65	32.94	0.41	0.82	619.05	1.0	0.50	1.50	1.44	8.36			60.14	351.57	2.21	84.0	81.37	1.3	14.6	15.31				6.2		54.63	1.2	0.9
107310	2.90	2.76	8.0			1.28	31.0	21.95	29.19	0.37	1.25	601.19	0.5	0.50	1.40	1.32	6.32			49.64	111.06	1.22	88.0	69.67	1.3	14.9	15.11				4.8		75.80	0.9	0.7
107311	1.00	1.00	32.0			0.05	116.0	55.62	12.36	1.20	0.19	431.23	0.5	0.50	1.30	1.36	13.13			1.38	601.07	41.97	280.0	314.60	0.2	8.9	9.49				18.8		209.31	1.4	2.2
107312	0.60	0.78	42.0			6.71	160.0	77.15	14.07	1.50	0.27	526.64	5.0	4.40	2.10	2.24	12.77			1.67	421.13	33.47	250.0	267.52	0.1	9.5	9.93				25.4		207.95	1.7	2.7
107313	1.10	1.29	39.0			6.56	163.0	47.79	11.43	1.10	0.22	608.18	3.0	1.25	2.00	2.14	12.79			0.50	337.24	32.37	210.0	235.50	0.2	8.0	7.37				25.8		229.90	1.5	2.4
107314	3.00	2.80	10.0			1.45	39.0	23.65	32.94	0																									



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
107347	5.90	6.07	7.0			1.15	27.0	15.71	25.15	0.30	0.85	555.04	0.5	0.50	1.00	1.02	11.24		39.37	343.04	7.88	58.0	63.05	0.7	129	13.30	0.5	4.4				70.33	1.1	0.7	
107348	1.80	1.80	8.0			2.25	21.0	15.79	15.49	0.32	0.88	373.60	0.5	0.50	1.40	1.43	8.25		15.14	239.56	10.96	110.0	119.61	0.9	15.7	16.91	0.5	3.5				100.43	1.3	0.3	
107349	2.70	2.89	8.0			1.93	38.0	25.76	21.24	0.41	0.95	477.33	0.5	0.50	1.20	1.31	6.11		39.95	135.96	6.96	100.0	109.27	1.3	13.3	15.04	0.5	5.9				67.60	1.1	0.9	
107350	2.20	2.29	9.0			1.72	30.0	19.93	18.86	0.33	0.87	334.30	0.5	0.50	1.30	1.41	11.55		21.98	144.80	14.30	99.0	108.39	1.3	14.7	15.78	0.5	4.9				93.64	1.5	0.7	
107351	0.90	0.90	12.0			1.77	44.0	26.06	7.56	0.41	1.87	37.1	0.5	0.50	1.20	1.21	5.64		13.89	100.97	10.16	100.0	105.55	1.5	12.6	13.00	0.5	3.0				60.43	1.5	0.9	
107352	2.30	2.50	7.0			2.48	17.0	11.23	23.16	0.39	0.75	337.21	0.5	0.50	1.20	1.29	6.63		16.27	77.90	5.48	130.0	159.88	1.4	17.2	19.21	0.5	3.2				78.49	1.4	0.6	
107353	3.50	3.28	5.0			3.73	5.0	4.38	6.52	0.26	0.53	239.32	0.5	0.50	0.79	0.82	13.35		10.90	197.57	0.05	160.0	200.40	0.6	15.6	17.79	0.5	1.1				56.15	1.1	0.3	
107354	0.80	0.85	16.0			1.42	34.0	19.33	7.77	0.40	0.30	222.60	0.5	0.50	0.73	0.85	4.48		9.18	69.62	0.05	81.0	88.76	1.7	9.5	10.38	0.5	6.8				42.83	1.8	1.0	
107355	1.30	1.50	8.0			1.81	42.0	16.16	17.72	0.45	0.38	628.67	0.5	0.50	1.10	1.40	7.48		6.13	90.97	0.05	100.0	106.62	0.2	16.9	20.55	0.5	7.9				68.05	1.4	1.1	
107356	2.50	2.36	11.0			1.04	29.0	19.66	25.06	0.39	0.67	461.22	0.5	0.50	1.30	1.36	6.61		21.91	249.75	10.61	63.0	62.82	1.1	10.7	10.45	0.5	5.0				75.49	1.2	0.8	
107357	2.50	2.50	8.0			1.31	29.0	20.08	32.06	0.37	0.81	563.31	0.5	0.50	1.30	1.30	7.34		23.40	204.03	4.93	86.0	92.07	1.2	14.6	14.81	0.5	4.6				80.67	1.2	0.8	
107358	2.40	2.41	10.0			1.78	29.0	21.81	85.37	0.48	0.52	609.75	0.5	0.50	0.79	0.78	9.81		8.07	93.37	8.75	92.0	100.90	0.7	17.7	17.57	0.5	4.5				50.08	1.6	0.6	
107359	2.40	2.31	9.0			1.17	28.0	20.88	27.22	0.34	0.68	582.83	0.5	0.50	1.10	1.13	6.53		21.08	330.15	3.02	69.0	72.93	0.9	12.0	11.61	0.5	4.5				63.32	1.2	0.8	
107360	4.00	3.83	9.0			0.88	24.0	18.79	28.70	0.35	0.46	1047.95	0.5	0.50	1.00	0.96	8.40		21.11	899.31	22.72	85.0	65.63	1.8	10.5	9.97	0.5	4.1				46.33	1.1	0.7	
107361	2.50	2.35	9.0			1.14	26.0	18.50	29.67	0.37	0.62	582.83	0.5	0.50	1.20	1.13	7.81		20.27	403.59	4.87	69.0	73.15	1.9	10.3	10.08	0.5	4.4				63.77	1.1	0.7	
107363	1.40	1.48	17.0			1.19	76.0	13.53	8.36	0.76	0.61	488.59	0.5	0.50	1.20	1.13	8.96		10.48	203.34	7.66	89.0	72.24	0.3	13.7	13.92	0.5	14.2				147.30	1.4	2.2	
107364	2.90	2.81	11.0			2.00	29.0	23.34	36.42	0.33	0.54	668.74	0.5	0.50	1.60	1.64	10.04		12.02	144.60	11.87	100.0	133.54	0.6	8.4	8.41	0.5	5.1				91.68	2.0	0.8	
107365	1.40	1.46	10.0			1.28	13.0	10.09	7.56	0.38	0.23	342.98	0.5	0.50	1.50	1.58	7.62		1.61	116.97	3.95	80.0	76.70	0.5	7.0	6.65	0.5	2.3				138.06	1.4	0.3	
107366	1.50	1.49	10.0			1.78	19.0	13.96	17.36	0.31	0.28	530.59	0.5	0.50	1.60	1.64	7.54		5.68	191.41	11.02	130.0	115.07	0.6	5.2	5.01	0.5	3.4				80.83	2.0	0.6	
107367	1.29	1.29	7.0			1.65	16.0	10.19	16.06	0.25	0.27	419.12	0.5	0.50	1.50	1.45	5.80		5.26	363.64	7.08	120.0	109.59	0.4	5.1	4.74	0.5	3.0				74.54	1.7	0.3	
107368	3.80	3.58	10.0			1.38	33.0	21.07	31.97	0.40	0.83	789.77	0.5	0.50	1.20	1.17	8.23		27.13	138.84	18.58	79.0	76.60	0.8	12.4	12.08	0.5	5.6				63.40	1.4	0.9	
107369	3.30	3.13	8.0			1.12	28.0	21.10	31.41	0.31	1.88	627.24	0.5	0.50	1.40	1.32	6.32		103.01	69.71	0.05	67.0	59.52	1.4	14.5	14.80	0.5	4.6				71.14	0.9	0.7	
107370	3.70	3.53	9.0			1.29	33.0	23.00	41.74	0.33	1.69	886.51	0.5	0.50	1.20	1.22	6.42		89.95	161.70	0.05	75.0	68.67	1.4	15.8	16.01	0.5	5.4				75.66	0.9	0.8	
107371	3.10	3.00	9.0			1.16	31.0	22.13	34.72	0.32	1.07	561.05	0.5	0.50	1.30	1.26	5.10		68.15	175.01	2.56	57.0	61.49	1.7	11.2	11.29	0.5	5.1				75.22	0.8	0.6	
107372	3.50	3.30	6.0			1.39	27.0	21.31	43.75	0.29	1.41	710.05	0.5	0.50	1.20	1.09	5.85		77.13	274.50	0.05	77.0	76.36	1.5	14.1	14.41	0.5	4.5				67.61	0.9	0.6	
107373	2.80	2.95	7.0			1.15	26.0	23.19	40.55	0.26	1.78	632.21	0.5	0.50	1.30	1.28	6.33		84.85	98.18	0.05	78.0	78.58	1.2	15.5	16.95	0.5	4.5				78.22	0.9	0.7	
107374	4.10	3.92	8.0			2.45	49.0	36.24	31.56	0.44	0.94	1021.18	0.5	0.50	1.40	1.32	11.44		28.96	592.00	15.82	140.0	131.21	0.4	14.9	14.48	0.5	7.3				85.03	1.8	1.1	
107375	3.40	3.16	9.0			1.79	41.0	31.10	40.22	0.46	0.91	729.06	0.5	0.50	1.30	1.14	6.89		29.59	674.03	4.83	100.0	95.93	0.9	14.7	14.79	0.5	7.5				94.40	1.3	1.3	
107376	1.90	1.88	9.0			1.02	17.0	8.02	5.03	0.40	0.17	548.41	0.5	0.50	1.00	0.92	4.40		3.42	119.24	6.14	52.0	45.16	0.6	9.2	8.62	0.5	2.8				43.71	1.1	0.3	
107377	1.90	1.89	9.0			1.81	17.0	10.67	14.84	0.45	0.49	704.13	0.5	0.50	1.40	1.33	8.45		6.13	153.31	7.61	92.0	88.47	0.9	16.5	16.86	0.5	3.0				77.09	1.3	0.6	
107378	2.00	1.91	10.0			2.14	40.0	22.84	27.77	0.47	0.84	646.03	0.5	0.50	1.00	0.98	6.97		8.86	154.90	3.25	140.0	135.34	0.7	14.4	14.00	0.5	6.1				52.16	1.4	0.9	
107379	4.20	3.74	9.0			1.69	33.0	22.16	35.44	0.44	0.87	796.56	0.5	0.50	1.30	1.17	7.79		38.34	254.33	12.21	110.0	89.68	1.0	14.7	13.76	0.5	6.3				61.58	1.4	1.0	
107381	4.40	3.73	8.0			1.28	32.0	20.88	40.86	0.38	0.63	952.48	0.5	0.50	1.20	0.96	6.68		26.05	811.43	13.98	94.0	85.52	1.1	12.8	11.05	0.5	5.0				41.87	1.2	0.7	
107382	3.50	3.07	10.0			1.50	32.0	20.98	27.68	0.32	0.72	147.25	0.5	0.50	1.30	1.14	6.89		27.15	208.08	14.90	110.0	84.97	0.8	13.7	13.81	0.5	5.8				56.84	1.7	0.9	
107383	5.20	4.83	9.0			1.87	46.0	29.55	31.99	0.47	0.74	1516.26	0.5	0.50	0.94	0.88	7.93		12.84	810.53	10.60	160.0	146.46	1.2	14.0	13.81	0.5	7.0				35.65	1.6	1.0	
107384	5.00	4.42	9.0			2.09	42.0	25.25	49.18	0.44	0.98	961.86	0.5	0.50	1.20	1.03	6.93		45.05	428.74	4.78	140.0	121.94	0.9	16.2	14.29	0.5	6.5				40.69	1.4	0.9	
107385	1.40	1.29	9.0			2.44	48.0	32.48	13.04	0.49	0.43	561.78	0.5	0.50	0.92	0.91	7.13		6.52	122.31	0.05	170.0	160.66	1.5	16.1	16.34	0.5	7.1				40.12	1.9	1.0	
107386	3.60	3.19	8.0			1.48	29.0	17.89	34.72	0.39	0.77	746.45	0.5	0.50	1.30	1.18	7.59		27.38	228.19	13.22	85.0	83.92	0.6	12.5	11.41	0.5	4.8				65.23	1.3	0.9	
107387	3.10	2.82	9.0			1.66	29.0	16.84	28.40	0.38	0.58	566.28	0.5	0.50	1.10	1.04	7.40		14.61	262.06	1.15	120.0	109.42	0.5	12.7	11.99	0.5	4.6				47.94	1.3	0.8	
107388	1.00	0.99	11.0			2.92	44.0	23.83	14.38	0.48	0.36	418.94	0.5	0.50	1.10	1.00	5.41		4.02	93.10	0.05	200.0	172.38	1.4	17.0	15.92	0.5	6.5				44.66	1.7	0.9	
107389	3.90	3.43	9.0			1.41	34.0	19.36	31.92	0.44	0.84	831.44	0.5																						



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
107814	3.10	3.16	8.0			1.02	24.0	15.89	28.89	0.34	0.45	470.40	0.5	0.50	1.00	0.99	6.72			16.37	427.98	3.33	63.0	65.76	3.4	1.1	11.6	11.15	0.5	4.1			45.67	1.1	0.7
107815	3.90	3.85	9.0			1.31	28.0	18.56	32.44	0.33	0.60	598.80	0.5	0.50	1.00	0.97	7.23			27.99	438.39	9.85	89.0	84.86					0.5	4.3			45.74	1.2	0.7
107816	3.30	3.04	11.0			1.40	34.0	20.07	22.49	0.39	0.68	654.00	0.5	0.50	1.40	1.32	6.46			23.32	318.97	13.15	82.0	82.66	0.6	1.1	11.7	10.63	0.5	5.2			54.90	1.3	0.9
107817	3.50	3.32	10.0			1.44	31.0	20.59	24.58	0.38	0.76	694.90	0.5	0.50	1.20	1.19	7.09			26.39	264.12	11.52	85.0	83.30	0.6	1.1	11.9	11.41	0.5	5.7			56.38	1.2	0.8
107818	4.90	4.67	12.0			1.78	36.0	22.51	34.06	0.41	0.95	644.10	0.5	0.50	1.10	1.02	9.07			39.02	262.71	22.76	100.0	109.56	1.1	1.5	15.3	14.66	0.5	5.5			54.45	1.6	0.8
107819	1.70	1.63	10.0			2.23	20.0	12.64	18.65	0.36	0.53	1640.00	0.5	0.50	1.20	1.20	12.07			15.13	81.63	7.91	100.0	106.50	0.4	1.4	14.4	15.01	0.5	3.3			67.15	1.5	0.5
107820	1.20	1.21	10.0			2.39	46.0	29.36	11.84	0.50	0.43	691.73	0.5	1.37	0.93	0.88	9.46			4.82	91.74	0.05	130.0	132.31	0.6	1.6	16.4	16.52	0.5	6.7			49.41	1.9	1.0
107821	1.20	1.06	13.0			0.98	26.0	17.26	7.56	0.35	0.29	431.33	0.5	0.50	1.00	1.01	7.50			5.90	94.51	0.05	51.0	54.96	0.6	1.3	13.7	10.74	0.5	4.1			46.30	1.5	0.6
107822	3.30	3.22	9.0			1.27	25.0	19.74	29.07	0.23	1.20	579.23	0.5	0.50	1.40	1.38	7.07			60.45	43.54	5.75	84.0	68.97	1.2	1.3	17.7	14.56	0.5	4.8			75.00	1.1	0.7
107823	4.10	3.01	9.0			1.51	27.0	19.00	23.83	0.33	0.53	956.17	0.5	0.50	1.10	1.03	10.69			16.99	290.85	16.66	79.0	72.22	0.8	1.0	14.0	11.79	0.5	5.0			64.19	1.5	0.7
107824	3.50	4.30	10.0			1.27	34.0	21.52	37.75	0.44	0.62	980.07	2.0	2.41	1.00	0.97	9.96			29.04	577.65	17.11	100.0	97.38	18.7	12.4	11.70	0.5	5.4			52.86	1.5	0.8	
107826	3.10	2.86	10.0			1.27	32.0	19.59	28.75	0.43	0.60	1240.09	0.5	0.50	1.50	1.40	10.49			30.54	392.88	11.53	70.0	73.21	0.3	1.0	10.0	9.03	0.5	5.2			96.80	1.5	0.9
107827	3.60	3.58	9.0			1.90	35.0	28.21	38.34	0.44	0.98	1097.49	0.5	0.50	1.30	1.27	11.09			47.69	492.24	6.28	100.0	103.12	0.5	1.4	14.1	13.98	0.5	5.8			91.97	1.4	0.9
107828	4.70	4.56	7.0			2.22	32.0	23.06	77.75	0.29	0.95	850.65	0.5	0.50	1.10	1.08	12.05			41.32	344.89	8.65	110.0	112.90	0.4	1.5	16.0	16.03	0.5	4.8			87.91	1.5	0.8
107829	3.40	3.18	8.0			1.50	31.0	20.46	40.04	0.38	1.27	642.96	0.5	0.50	1.30	1.25	8.04			61.44	222.86	5.36	89.0	85.51	0.6	1.3	17.7	14.56	0.5	5.0			77.76	1.1	0.9
107830	3.10	2.59	10.0			1.48	25.0	17.66	23.35	0.36	0.74	702.16	0.5	0.50	1.50	1.25	8.75			21.57	135.38	5.82	90.0	80.29	0.6	1.3	12.32	0.5	4.3			77.30	1.3	0.6	
107831	1.90	1.90	8.0			1.31	30.0	19.96	19.16	0.26	0.91	386.48	0.5	0.50	1.40	1.26	7.69			34.31	128.26	4.23	77.0	77.24	1.2	1.2	13.3	13.80	0.5	5.3			67.10	1.1	0.9
107832	4.00	3.93	8.0			1.39	38.0	27.56	29.22	0.34	1.47	778.57	0.5	0.50	1.30	1.32	6.94			108.06	73.14	3.16	82.31	1.5	1.6	16.9	17.53	0.5	6.6			71.63	1.1	1.1	
107833	3.20	2.85	9.0			1.23	39.0	24.33	29.09	0.35	1.38	448.65	0.5	0.50	1.50	1.36	6.89			60.70	326.59	3.85	75.0	74.56	1.2	1.4	14.12	0.5	6.3			78.01	1.2	1.0	
107834	4.90	4.48	8.0			1.48	35.0	23.11	27.72	0.32	1.46	1092.24	0.5	0.50	1.60	1.40	10.28			105.91	198.09	7.30	83.0	87.13	1.7	1.8	14.7	15.55	0.5	5.7			64.86	1.1	0.9
107835	3.10	3.03	9.0			1.20	36.0	24.00	28.41	0.36	1.46	544.16	0.5	0.50	1.50	1.39	6.39			65.83	87.51	1.55	71.0	81.55	1.2	1.5	15.58	0.5	5.8			74.01	1.2	0.7	
107836	4.40	4.23	9.0			1.36	39.0	24.30	30.79	0.36	1.24	664.95	0.5	0.50	1.50	1.38	8.64			48.53	203.12	6.74	76.0	84.92	1.5	1.4	14.75	0.5	5.9			65.40	1.0	0.8	
107837	3.00	2.88	9.0			1.58	33.0	23.62	33.43	0.37	0.69	832.95	0.5	0.50	1.40	1.36	9.57			26.20	233.32	14.33	93.0	107.17	0.3	1.0	10.77	0.5	5.1			92.59	1.2	0.8	
107838	2.20	2.01	11.0			1.71	37.0	21.62	25.47	0.44	0.57	843.92	1.90	0.50	1.80	1.59	8.49			19.04	647.36	10.50	99.0	106.21	0.3	1.5	16.9	17.53	0.5	6.6			111.24	1.5	0.9
107839	3.00	2.95	7.0			1.60	29.0	19.23	37.21	0.25	0.87	811.40	0.5	0.50	1.40	1.25	8.71			43.03	286.81	9.25	88.0	109.25	0.5	1.2	12.4	12.62	0.5	4.8			88.48	1.5	0.8
107840	4.00	3.56	11.0			1.46	42.0	25.50	28.93	0.41	0.72	965.78	0.5	0.50	1.60	1.40	10.28			31.34	345.64	11.75	79.0	95.00	0.4	1.1	11.32	0.5	6.3			92.12	1.2	0.9	
107841	3.40	3.27	7.0			1.41	24.0	17.01	31.86	0.23	0.66	785.24	0.5	0.50	1.50	1.43	9.06			26.40	406.04	10.76	92.0	94.69	0.5	1.0	10.30	0.5	4.4			96.17	1.4	0.6	
107842	3.80	3.57	10.0			1.11	30.0	19.72	34.66	0.26	1.21	716.09	0.5	0.50	1.50	1.04	6.09			80.51	214.44	2.54	61.0	68.54	1.6	1.2	13.42	0.5	4.6			98.78	1.3	1.1	
107843	3.50	3.65	5.0			1.32	26.0	12.76	26.13	0.30	0.78	392.91	2.0	1.29	1.00	0.97	8.97			34.59	165.81	7.92	88.0	86.87	0.8	1.2	12.76	0.5	6.2			99.11	0.8	0.7	
107844	3.80	3.78	7.0			1.62	36.0	22.18	30.24	0.34	1.25	551.41	0.5	0.50	1.50	1.44	8.14			31.86	255.63	8.72	72.0	80.45	0.9	1.4	14.75	0.5	4.2			61.89	1.1	0.7	
107845	1.20	1.34	12.0			1.60	30.0	16.02	11.10	0.40	0.48	269.58	0.5	0.50	0.91	0.91	7.92			77.99	95.46	3.61	83.0	97.05	1.0	1.2	16.6	16.92	0.5	6.1			81.63	1.1	1.0
107846	2.90	2.99	8.0			2.76	20.0	10.04	9.40	0.29	0.73	381.94	0.5	0.50	1.40	1.42	10.92			14.76	76.33	0.05	150.0	180.64	1.2	1.2	12.4	12.62	0.5	3.2			81.45	1.3	0.3
107847	2.70	2.94	10.0			1.26	34.0	18.81	9.17	0.36	0.40	507.69	0.5	0.50	1.30	1.46	7.06			11.32	288.86	0.05	110.0	102.80	1.2	1.1	11.61	0.5	5.5			62.64	1.5	0.8	
107848	3.80	4.02	7.0			1.11	30.0	19.72	34.66	0.26	1.21	716.09	0.5	0.50	1.50	1.04	6.09			80.51	214.44	2.54	61.0	68.54	1.6	1.2	13.42	0.5	4.6			98.78	1.3	1.1	
107849	2.60	2.48	10.0			1.62	38.0	23.64	29.09	0.36	0.78	612.08	0.5	0.50	1.60	1.50	8.92			34.59	165.81	7.92	88.0	86.87	0.8	1.2	12.76	0.5	6.2			99.11	0.8	0.7	
107850	3.50	2.96	12.0			1.25	40.0	21.96	26.40	0.35	0.88	625.19	0.5	0.50	1.70	1.46	8.14			37.08	151.92	6.59	89.0	70.04	1.0	1.2	11.47	0.5	7.4			96.27	1.5	1.2	
107851	3.20	3.16	9.0			1.53	35.0	20.43	33.85	0.38	0.80	671.81	0.5	0.50	1.50	1.48	8.91			29.28	136.14	7.90	95.0	83.13	0.6	1.1	11.47	0.5	5.8			103.96	1.5	0.9	
107852	2.40	2.14	12.0			1.14	40.0	18.01	15.18	0.45	0.38	857.29	0.5	0.50	1.80	1.75	7.60			14.60	575.33	10.65	75.0	60.54	0.3	7.3	6.57	0.5	6.7			135.21	1.7	1.1	
107853	3.70	3.48	7.0			1.66	34.0	20.17	37.84	0.33	1.10	753.28	0.5	0.50	1.50	1.40	8.37			54.16	378.66	5.78	91.0	83.69	0.8	1.3	13.78	0.5	5.7			93.85	1.3	0.9	
107854	4.00	3.83	9.0			1.53	36.0	15.94	61.04	0.39	0.67	771.25	0.5	0.50	1.30	1.23	10.31			23.36	302.65	8.27	89.0	89.90	0.5	1.2									



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 ppm	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
107889	3.50	3.34	8.0			1.38	34.0	20.85	24.40	0.36	1.35	757.48	0.5	0.50	1.30	1.30	5.91			69.72	438.89	3.14	78.0	73.58		1.4	14.1	14.02	0.5	5.9		64.18	0.8	0.9	
107890	3.70	3.55	8.0			1.05	55.0	39.31	34.85	0.40	1.83	1054.45	0.5	0.50	1.20	1.20	7.03			85.86	242.05	3.13	62.0	62.56		2.6	19.3	19.32	0.5	6.2		62.93	0.8	1.0	
107891	4.90	4.79	7.0			1.41	37.0	24.13	34.41	0.36	1.86	1473.46	0.5	0.50	1.30	1.26	7.35			183.02	317.86	5.40	74.0	77.93		1.5	17.2	17.08	0.5	4.9		71.50	0.8	0.9	
107892	4.00	4.01	7.0			1.90	31.0	19.04	40.68	0.33	1.20	1158.21	0.5	0.50	1.20	1.21	9.32			171.08	329.95	3.51	110.0	107.03		1.9	19.2	17.08	0.5	4.9		78.20	1.1	0.9	
107893	2.20	2.10	8.0			2.32	29.0	16.12	35.10	0.39	0.66	632.27	0.5	0.50	1.20	1.20	10.10			18.53	137.49	2.17	140.0	141.48		0.8	13.7	13.06	0.5	4.5		67.99	1.3	0.8	
107894	3.50	3.41	10.0			1.33	32.0	19.83	48.50	0.44	0.81	3052.66	2.0	0.50	1.30	1.31	9.77			34.70	269.39	8.92	99.0	97.21		0.8	13.7	13.06	0.5	5.1		80.66	1.4	0.9	
107895	4.10	3.83	10.0			1.66	43.0	27.18	29.78	0.50	0.87	1262.96	0.5	0.50	1.40	1.40	9.68			43.87	675.15	16.99	99.0	93.76		1.0	14.3	13.21	0.5	7.4		82.05	1.3	1.2	
107897	2.60	2.41	10.0			1.28	28.0	17.50	26.02	0.29	0.71	667.55	0.5	0.50	1.40	1.36	8.10			27.76	225.69	3.71	85.0	77.27		1.0	11.0	10.82	0.5	5.0		78.94	1.3	0.7	
107898	1.50	1.47	10.0			1.43	30.0	16.98	31.03	0.37	0.47	487.00	0.5	0.50	1.40	1.49	7.38			11.82	243.68	6.67	93.0	90.28		1.7	9.0	9.05	0.5	5.0		95.75	1.2	0.7	
107899	0.40	0.36	16.0			2.58	35.0	11.75	11.57	0.49	0.12	537.60	0.5	0.50	1.40	1.41	8.29			1.15	185.35	12.91	170.0	154.64		0.1	4.7	3.58	0.5	5.4		97.21	2.2	0.8	
107900	1.60	1.51	11.0			2.03	26.0	14.53	24.08	0.36	0.40	543.13	0.5	1.27	1.60	1.67	8.02			10.32	372.63	9.71	150.0	128.73		0.6	7.5	6.99	0.5	4.4		93.32	1.8	0.6	
107901	1.60	1.68	10.0			1.79	21.0	13.35	17.00	0.30	0.31	540.65	0.5	0.50	1.80	1.75	7.53			6.02	305.74	8.23	130.0	120.52		0.7	8.2	5.52	0.5	4.1		96.20	2.1	0.7	
107902	2.20	2.13	10.0			1.95	25.0	14.23	25.26	0.37	0.41	572.23	0.5	0.50	1.70	1.72	8.66			10.86	160.82	8.19	140.0	133.28		0.7	8.7	8.39	0.5	4.4		93.87	1.7	0.7	
107903	1.60	1.55	11.0			1.98	22.0	14.50	18.80	0.30	0.31	537.07	0.5	0.50	1.80	1.73	7.84			6.99	376.09	10.33	140.0	134.23		0.5	6.1	5.87	0.5	4.6		97.51	1.9	0.7	
117001	3.90	3.50	7.0			1.22	29.0	20.23	37.49	0.33	0.71	608.24	0.5	0.50	1.60	1.69	17.91			45.17	301.64	14.00	73.0	65.29		0.4	10.1	9.30	0.5	4.5		130.58	1.2	0.8	
117002	1.00	0.94	14.0			3.06	30.0	18.00	30.26	0.30	0.27	513.54	0.5	0.50	2.10	2.21	17.42			2.31	194.08	23.29	160.0	153.76		0.2	8.2	7.98	0.5	4.5		138.45	2.7	0.6	
117003	1.20	1.10	21.0			2.94	26.0	16.16	14.50	0.39	0.15	481.75	0.5	0.50	1.60	1.60	18.21			1.81	438.24	15.08	150.0	146.67		0.2	9.2	8.95	0.5	4.3		167.24	2.5	0.5	
117004	0.90	0.76	18.0			2.41	42.0	18.35	23.06	0.50	0.14	547.13	0.5	0.50	1.60	1.65	17.84			0.50	215.54	20.26	140.0	125.87		0.1	7.9	6.87	0.5	6.4		136.02	2.4	0.8	
117005	2.30	2.30	18.0			3.28	37.0	11.93	21.51	0.39	0.11	503.38	0.5	0.50	1.80	1.97	14.65			2.65	288.10	24.46	170.0	160.45		0.2	7.0	6.30	0.5	5.4		111.76	2.6	0.6	
117006	1.00	0.92	25.0			2.78	46.0	17.06	22.91	0.71	0.13	823.38	0.5	0.50	1.60	1.66	19.11			0.50	331.23	16.30	160.0	142.95		0.1	9.2	7.78	0.5	7.4		103.27	3.0	1.0	
117007	4.20	4.02	7.0			1.84	23.0	16.03	82.34	0.22	0.57	551.12	0.5	0.50	1.60	1.69	17.91			19.47	639.26	16.30	130.0	123.65		0.1	8.9	8.79	0.5	3.6		70.87	3.0	0.5	
117008	1.40	1.00	33.0			3.36	42.0	24.09	16.23	0.63	0.10	415.58	0.5	0.50	2.80	3.00	24.60			0.50	149.62	21.86	190.0	167.95		0.1	6.1	4.95	0.5	7.7		233.01	3.2	1.0	
117009	0.40	0.40	23.0			4.00	9.0	6.03	9.02	0.32	0.05	371.43	0.5	0.50	3.00	3.15	26.81			0.50	155.24	22.36	270.0	248.89		0.1	3.0	2.09	0.5	1.3		146.38	3.2	0.3	
117010	1.40	1.29	29.0			3.03	46.0	22.17	18.21	0.56	0.21	683.91	0.5	1.08	2.10	2.17	22.42			2.55	150.92	19.74	180.0	168.44		0.3	7.4	6.00	0.5	7.0		146.99	3.8	0.8	
117011	0.90	0.89	15.0			2.59	32.0	21.92	15.92	0.30	0.17	442.14	0.5	0.50	1.50	1.80	18.15			1.59	146.97	19.36	160.0	148.86		0.4	7.3	7.78	0.5	5.6		118.85	2.8	0.6	
117012	2.80	2.55	18.0			2.08	65.0	46.34	37.62	0.61	0.63	662.52	0.5	0.50	2.00	1.94	13.04			23.93	153.87	16.78	130.0	110.03		0.6	10.6	9.79	0.5	10.6		137.71	2.6	1.4	
117013	2.90	2.60	14.0			2.18	47.0	31.63	48.63	0.47	0.61	626.36	0.5	0.50	1.80	1.83	13.83			17.97	222.13	18.56	130.0	114.59		0.3	10.6	10.02	0.5	7.7		127.66	2.3	0.9	
117014	3.40	3.11	11.0			1.71	39.0	26.81	38.47	0.44	0.59	937.96	0.5	0.50	1.60	1.77	7.76			24.94	467.68	18.95	95.0	86.06		2.6	11.0	11.35	0.5	6.4		71.35	1.6	0.9	
117015	3.20	3.02	9.0			1.05	30.0	23.53	21.98	0.41	0.51	709.96	0.5	0.50	1.60	1.10	10.9	9.29		15.89	424.68	7.57	58.0	59.98		0.8	9.2	8.93	0.5	4.7		61.29	1.3	0.7	
117016	5.00	4.46	7.0			1.73	37.0	25.86	46.59	0.44	1.75	1204.39	0.5	0.50	1.60	1.53	7.58			82.70	547.81	13.28	98.0	88.43		0.7	18.1	17.39	0.5	6.1		113.46	1.4	1.0	
117017	3.80	3.41	8.0			0.97	28.0	18.12	29.61	0.43	1.05	2059.16	0.5	0.50	1.30	1.34	6.13			39.23	246.88	6.60	48.0	51.09		0.2	13.5	13.12	0.5	4.8		100.90	1.1	0.9	
117018	1.00	0.91	7.0			1.23	24.0	12.16	57.03	0.21	1.33	2379.07	3.0	1.44	2.40	2.15	16.52			46.50	272.23	24.48	51.0	62.51		0.2	12.1	16.33	0.5	3.9		233.97	1.6	0.5	
117019	5.20	0.72	14.0			1.15	30.0	19.59	14.75	0.58	0.28	959.16	0.5	2.16	2.10	2.40	9.83			3.91	117.66	21.04	47.0	47.58		7.9	15.0	6.02	0.5	6.5		238.67	0.8	1.1	
117020	3.60	3.64	5.0			1.01	22.0	18.85	36.63	0.24	1.29	1493.61	0.5	0.50	1.60	1.77	7.76			58.46	289.17	15.00	53.0	53.94		0.4	12.8	14.65	0.5	4.3		185.52	1.0	0.7	
117021	3.20	3.15	5.0			1.09	15.0	12.31	26.63	0.21	1.25	1012.24	0.5	0.50	2.00	2.12	9.32			35.24	277.10	23.53	44.0	47.57		0.3	12.8	13.40	0.5	2.8		298.05	1.0	0.3	
117022	6.30	5.71	5.0			0.85	24.0	17.31	55.68	0.38	1.34	1727.35	1.0	1.47	1.10	1.10	7.87			80.09	582.60	11.50	46.0	52.23		0.4	17.4	16.11	0.5	4.0		98.80	0.9	0.6	
117023	4.80	4.34	7.0			1.37	42.0	32.62	54.30	0.43	1.11	1320.99	2.0	1.43	1.30	1.23	5.20			58.87	277.03	13.08	79.0	73.12		1.3	14.2	12.67	0.5	6.5		71.13	1.3	0.9	
117030	3.90	4.45	6.0			1.43	32.0	25.23	44.43	0.24	0.94	1423.96	1.0	1.56	0.91	1.17	5.71			52.97	367.90	8.85	85.0	83.26		1.1	10.7	13.53	0.5	5.9		70.31	1.3	0.8	
117031	3.10	3.35	6.0			1.90	31.0	25.46	70.07	0.32	1.07	1598.53	2.0	2.22	1.00	1.15	8.09			41.93	224.89	5.38	100.0	104.71		0.7	13.5	15.09	0.5	5.3		84.30	1.4	0.7	
117032	5.80	5.74	4.0			1.30	28.0	21.49	65.88	0.42	2.15	1056.20	0.5	0.50	1.20	1.25	7.34			109.19	269.62	20.21	80.0	79.69		0.7	21.2	20.38	0.5	5.0		55.58	1.0	0.9	
117033	5.10	4.45	7.0			1.58	46.0</																												



Sample	Fe1	Fe2	Hf1	Hg1	Ir1	K2	La1	La2	Li2	Mg2	Mn2	Mo2	Na1	Na2	Nb2	Nd1	Ni1	Ni2	P2	Pb2	Rb1	Rb2	Rb6	Sb1	Sc2	Se1	Sm1	Sn1	Sr1	Sr2	Ta1	Tb1
117062	5.30	4.73	6.0	1.33	37.0	27.65	39.55	0.39	2.77	1031.44	0.39	0.50	1.20	1.21	1.67	185.84	125.79	7.08	75.0	68.99	1.7	18.9	18.50	0.5	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
117063	5.30	4.93	6.0	2.27	47.0	22.90	53.30	0.36	1.73	716.67	1.0	1.82	0.93	0.92	1.00	81.42	479.31	30.01	110.0	106.12	1.9	15.3	14.87	0.5	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
117064	7.50	6.70	7.0	1.14	37.0	28.11	40.33	0.54	3.06	1037.42	1.0	2.18	1.50	1.47	1.52	221.05	488.63	3.43	57.0	56.37	2.3	25.4	24.08	0.5	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
117065	5.90	5.05	8.0	1.02	41.0	25.31	31.90	0.44	2.00	1376.10	0.5	1.23	1.50	1.40	1.47	118.53	468.03	18.44	58.0	50.49	2.7	18.2	16.94	0.5	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
117066	5.30	4.89	7.0	1.23	44.0	30.69	48.78	0.42	1.57	1322.20	0.5	0.50	1.30	1.28	1.73	100.42	227.64	10.28	110.0	108.11	1.9	18.0	17.64	0.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
117067	2.60	2.79	7.0	1.29	36.0	27.01	36.05	0.33	0.94	497.25	0.5	1.37	1.10	1.21	2.26	38.98	245.82	6.65	70.0	75.24	1.1	13.6	15.32	0.5	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
117068	2.90	3.01	7.0	1.37	33.0	26.20	37.50	0.31	1.08	990.33	0.5	0.08	1.10	1.29	2.64	55.04	225.13	5.32	83.0	79.82	1.2	13.8	15.62	0.5	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
117069	5.30	4.97	7.0	1.30	39.0	23.63	50.12	0.43	1.08	990.33	0.5	2.08	1.10	1.12	1.93	73.12	581.35	13.75	75.0	72.06	2.0	13.8	13.32	0.5	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
117070	5.30	4.88	7.0	1.52	37.0	30.23	36.35	0.44	2.50	1454.42	0.5	0.50	1.20	1.31	2.22	180.21	304.29	9.36	80.0	72.50	2.4	20.2	20.00	0.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
117071	4.70	3.99	7.0	1.40	47.0	20.29	42.92	0.51	1.26	2019.91	1.0	1.03	1.50	1.44	2.66	70.99	405.95	14.38	77.0	71.54	0.9	16.3	14.11	0.5	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
117072	4.90	4.40	6.0	1.47	38.0	24.92	49.51	0.40	1.20	1764.62	1.0	1.68	1.30	1.32	4.59	68.05	555.73	12.76	79.0	78.23	0.9	14.7	13.30	0.5	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
117073	2.50	2.52	7.0	1.84	29.0	20.02	39.44	0.42	0.81	1675.12	1.0	1.27	1.20	1.34	7.32	25.49	532.46	10.28	110.0	108.11	0.5	16.7	16.43	0.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
117074	3.50	3.44	5.0	1.32	25.0	17.43	48.43	0.32	1.42	3347.19	2.0	1.94	1.30	1.44	6.32	38.08	508.00	11.28	70.0	77.97	0.5	17.7	17.88	0.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
117075	4.40	3.96	6.0	1.32	34.0	24.09	39.70	0.40	2.00	1501.20	0.5	0.50	1.50	1.54	5.03	95.46	286.91	9.22	69.0	70.30	1.0	19.5	18.91	0.5	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
117076	4.70	4.42	6.0	1.52	23.0	16.09	50.91	0.32	1.67	1098.00	1.0	1.54	1.50	1.59	10.44	71.39	574.50	5.17	96.0	103.50	0.4	19.2	18.37	0.5	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
117077	0.60	0.74	8.0	1.78	17.0	10.75	5.16	0.27	0.22	279.10	0.5	1.17	2.20	3.69	6.67	8.14	160.40	0.50	33.0	36.01	0.5	7.5	7.23	0.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
117078	4.40	4.31	6.0	1.28	28.0	14.74	30.44	0.33	0.71	868.90	1.0	1.30	1.20	1.27	6.92	26.82	609.10	5.96	72.0	78.39	0.8	14.4	14.64	0.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
117079	1.60	1.86	6.0	1.80	27.0	20.97	48.29	0.28	0.61	608.30	1.0	1.37	0.52	0.57	16.10	43.38	1152.00	9.26	110.0	126.57	0.5	10.0	10.67	0.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
117080	3.60	3.74	6.0	1.57	27.0	15.09	47.43	0.34	1.00	742.13	0.5	1.28	1.80	1.76	5.19	54.32	601.58	16.20	120.0	93.54	0.6	10.8	9.80	0.5	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
117081	3.90	3.82	5.0	1.41	33.0	23.97	45.48	0.33	1.26	1213.00	0.5	0.50	1.20	1.30	4.73	65.71	394.10	5.33	71.0	73.51	0.8	13.1	13.62	0.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
117082	5.00	9.22	2.0	1.86	11.0	6.44	116.80	0.16	10.00	2196.00	0.5	0.50	1.20	1.16	8.08	362.06	313.10	0.50	16.0	32.59	0.3	20.3	19.36	0.5	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
117083	5.20	5.19	5.0	1.34	38.0	24.81	30.14	0.42	1.80	1286.94	0.5	0.50	1.70	1.62	2.49	115.17	293.04	15.36	70.0	60.27	1.6	17.4	15.87	0.5	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
117084	5.30	4.59	8.0	1.17	32.0	19.09	43.61	0.50	1.14	712.19	0.5	0.50	1.60	1.65	5.38	80.28	459.29	11.61	62.0	56.12	0.6	13.8	12.97	0.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
117085	4.70	4.39	7.0	1.35	29.0	18.22	43.18	0.45	1.02	504.76	0.5	0.50	1.30	1.44	7.34	65.97	451.43	11.05	59.0	60.78	0.5	14.5	13.76	0.5	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
117086	4.90	4.54	6.0	1.14	31.0	14.98	34.98	0.40	1.33	728.31	0.5	0.50	1.80	1.83	7.58	80.47	429.67	9.75	51.0	54.32	0.5	15.4	14.58	0.5	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
117087	5.20	5.43	7.0	1.19	48.0	43.00	34.10	0.37	1.23	743.04	0.5	1.13	1.30	1.20	13.11	128.80	336.10	16.55	100.0	100.12	0.7	16.1	17.27	0.5	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
117088	5.60	5.66	5.0	1.32	35.0	28.63	34.09	0.38	1.74	1334.57	0.5	0.50	1.30	1.39	2.93	123.80	492.87	21.69	68.0	68.86	1.0	14.2	14.84	0.5	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
117089	7.60	7.33	3.0	1.68	19.0	14.83	28.36	0.20	6.45	1504.58	0.5	0.50	0.73	0.67	1.00	270.01	173.40	5.12	33.0	38.42	0.6	65.6	73.55	0.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
117090	4.88	4.78	7.0	1.30	47.0	29.46	40.50	0.41	2.06	1810.85	0.5	0.50	1.50	1.45	1.67	103.76	423.02	18.54	67.0	61.59	1.8	20.4	18.53	0.5	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
117091	2.80	2.81	5.0	1.66	33.0	25.39	56.36	0.37	1.01	2477.65	2.0	2.82	1.10	1.30	4.91	49.23	565.41	9.17	100.0	96.65	0.6	14.3	14.74	0.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
117092	4.60	3.68	8.0	1.59	42.0	18.82	25.96	0.55	0.88	634.97	0.5	0.50	1.50	1.47	7.43	53.65	298.64	13.92	68.0	69.24	0.3	14.0	12.66	0.5	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
117093	4.70	4.54	6.0	1.02	21.0	8.38	28.55	0.55	0.58	610.95	0.5	0.50	1.60	1.72	12.45	19.73	178.05	16.38	46.0	51.15	0.1	13.6	13.29	0.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
117094	4.70	4.39	7.0	1.57	39.0	21.06	31.31	0.52	1.22	698.63	0.5	0.50	1.50	1.62	8.35	77.24	283.32	14.19	84.0	80.18	0.4	17.0	16.67	0.5	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
117095	5.00	3.32	8.0	1.57	51.0	34.59	35.53	0.52	1.73	522.89	0.5	0.50	1.30	1.39	2.92	90.07	123.03	4.88	93.0	85.08	1.1	16.9	16.63	0.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
117096	5.00	4.36	7.0	1.22	38.0	24.22	37.73	0.35	2.02	1058.12	1.0	1.61	1.40	1.33	2.92	120.49	170.44	10.95	65.0	61.22	2.1	17.0	16.22	0.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
117097	5.90	6.13	5.0	1.25	25.0	20.63	47.49	0.35	1.59	1703.41	6.0	5.74	1.00	1.13	8.14	85.85	820.01	16.78	62.0	60.72	1.0	14.8	16.09	0.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
117098	5.00	5.81	4.0	1.12	24.0	17.18	32.93	0.33	1.02	1862.82	8.0	8.32	0.76	0.80	5.92	53.37	878.62	12.74	64.0	62.72	1.3	14.2	14.43	0.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
117099	4.80	4.49	7.0	1.57	42.0	27.80	42.83	0.40	1.44	1541.37	0.5	1.37	1.20	1.24	5.19	82.80	461.57	12.33	83.0	79.17	1.5	15.6	14.72	0.5	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
117100	5.00	4.80	7.0	1.81	52.0	41.70	48.22	0.47	1.38	1790.22	0.5	0.50	1.20	1.24	5.63	89.98	568.20	15.21	94.0	89.13	1.4	17.8	16.70	0.5	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
117101	4.30	4.03	8.0	1.37	43.0	26.33	42.90	0.43	1.07	1761.29	0.5	1.04	1.30	1.31	5.70	73.85	423.81	14.52	73.0	66.09	1.4	14.1	13.33	0.5	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
117110	4.30	3.13	8.0	1.38	46.0	26.15	39.70																									



Sample	Fe1 wt. %	Fe2 ppm	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 wt. %	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 ppm	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
117137	5.70	5.23	10.0			1.08	40.0	24.18	35.20	0.45	1.96	609.84	1.0	0.50	1.20	1.22	4.08			131.25	244.95	5.04	67.0	60.39		1.4	16.0	15.92	0.5	6.7		60.14	1.3	0.9	
117138	5.70	5.36	7.0			1.09	34.0	23.26	31.54	0.38	1.80	512.05	0.5	0.50	1.00	1.03	3.08			108.54	266.60	7.69	63.0	61.38		1.4	15.7	15.54	0.5	5.6		49.76	1.0	0.8	
117140	4.80	4.41	7.0			1.36	40.0	27.97	49.05	0.42	2.11	1020.15	0.5	1.18	1.10	1.23	2.99			133.32	259.35	7.96	86.0	78.86		1.1	16.1	16.97	0.5	5.9		75.35	1.1	0.9	
117141	4.80	4.64	7.0			1.28	40.0	25.57	41.39	0.42	2.11	3227.32	2.0	2.70	1.10	1.20	2.79			146.79	244.82	20.99	67.0	63.94		1.7	17.7	18.38	0.5	7.5		69.65	1.1	1.1	
117142	6.00	6.40	5.0			1.69	36.0	19.63	53.15	0.38	1.45	823.96	1.0	1.60	0.82	0.89	2.37			104.59	448.69	15.34	95.0	90.13		1.7	16.1	16.61	0.5	5.6		60.57	1.0	0.8	
117143	1.00	1.07	28.0			3.44	83.0	23.17	17.47	0.32	1.13	572.02	0.5	0.50	1.20	2.73	10.06			5.33	211.44	25.45	100.0	156.60		0.1	6.7	7.56	0.5	12.1		209.49	2.4	0.9	
117144	2.20	1.98	14.0			1.97	42.0	30.27	22.28	0.46	0.39	671.02	0.5	0.50	1.70	1.75	9.36			18.14	249.26	17.14	120.0	90.34		0.3	7.0	6.59	0.5	7.6		129.44	1.9	1.1	
117145	2.00	1.80	14.0			1.80	50.0	33.01	23.20	0.56	0.50	679.16	0.5	0.50	1.60	1.64	10.38			18.74	464.11	15.85	100.0	86.53		0.4	9.0	8.23	0.5	8.5		119.71	2.0	1.2	
117146	1.70	1.51	14.0			1.83	37.0	24.97	13.80	0.50	0.23	660.04	0.5	0.50	1.80	1.79	7.58			11.68	440.94	17.50	92.0	80.10		0.2	5.0	4.32	0.5	6.2		136.17	1.3	0.9	
117147	1.70	1.53	19.0			2.66	47.0	31.97	15.68	0.59	0.21	526.78	0.5	0.50	2.00	1.92	9.20			9.78	413.80	21.63	130.0	106.02		0.2	6.6	4.70	0.5	7.5		163.53	1.4	0.9	
117148	2.20	1.92	25.0			2.53	54.0	31.21	17.69	0.70	0.23	650.58	0.5	0.50	2.00	1.90	11.00			9.79	555.92	21.87	130.0	102.77		0.2	6.3	4.86	0.5	9.0		163.11	1.7	1.2	
117149	2.40	2.08	20.0			1.91	56.0	35.04	19.45	0.78	0.42	817.24	0.5	0.50	1.90	1.89	9.86			18.67	1078.00	15.97	100.0	85.32		0.3	8.0	6.90	0.5	10.9		143.87	1.7	1.6	
117150	2.40	2.19	9.0			2.82	37.0	23.49	62.82	0.40	0.55	721.46	0.5	0.50	1.20	2.05	12.18			16.96	1181.07	25.54	190.0	153.42		0.1	7.9	7.26	0.5	6.8		128.26	2.2	0.9	
117151	3.30	3.17	11.0			1.74	40.0	25.90	40.93	0.39	0.68	723.92	0.5	0.50	1.50	1.63	10.75			32.11	530.39	20.45	93.0	86.45		0.4	11.0	10.54	0.5	6.4		113.72	1.7	0.7	
117152	2.30	2.21	11.0			2.48	41.0	31.24	45.35	0.40	0.57	719.19	0.5	0.50	2.20	2.31	11.70			20.29	1179.18	20.25	160.0	129.26		0.2	8.3	7.73	0.5	7.9		123.02	2.7	1.1	
117153	1.80	1.93	12.0			1.87	37.0	25.19	20.42	0.41	0.29	632.40	0.5	1.08	1.40	1.64	14.67			9.14	174.09	15.39	98.0	92.74		0.4	8.3	9.17	0.5	6.6		114.69	2.0	0.8	
117154	3.00	3.11	10.0			1.79	41.0	28.27	40.38	0.42	0.86	732.63	0.5	0.50	1.40	1.56	10.20			42.94	174.47	12.16	100.0	92.53		0.6	11.6	12.13	0.5	6.9		102.89	1.7	1.0	
117155	4.00	3.82	9.0			1.79	37.0	27.22	31.65	0.45	0.78	674.61	0.5	0.50	1.20	1.26	10.24			45.24	551.55	16.92	99.0	92.29		0.5	11.3	10.95	0.5	6.2		84.00	1.7	0.9	
117156	2.10	1.80	15.0			1.56	35.0	21.87	15.50	0.56	0.29	759.52	0.5	0.50	1.60	1.58	9.19			31.99	248.63	8.15	68.0	59.44		1.4	11.0	10.61	0.5	8.3		72.18	1.3	1.1	
117157	3.20	2.87	12.0			2.14	47.0	34.84	31.56	0.59	0.64	727.11	0.5	0.50	1.60	1.51	10.71			15.36	450.55	16.06	83.0	71.65		0.2	6.1	5.30	0.5	6.3		111.18	1.6	1.0	
117158	2.00	1.78	10.0			2.39	41.0	27.18	42.89	0.42	0.47	651.94	0.5	0.50	1.20	1.28	3.07			36.44	749.46	17.54	120.0	105.73		0.3	10.4	9.74	0.5	8.3		109.78	1.7	1.2	
117159	2.40	2.03	14.0			2.51	47.0	31.71	36.58	0.54	0.55	482.25	0.5	1.48	2.00	2.00	11.06			14.28	1402.36	20.57	160.0	124.03		0.1	7.1	6.30	0.5	7.7		135.04	2.0	1.2	
117161	5.80	5.50	7.0			1.06	36.0	24.45	42.65	0.37	0.94	627.25	0.5	1.02	1.00	1.11	4.41			52.73	339.24	5.61	64.0	65.19		0.3	8.9	8.03	0.5	8.4		144.97	2.0	1.2	
117162	3.30	3.06	10.0			1.22	49.0	32.66	40.52	0.42	0.92	853.06	0.5	0.50	1.40	1.41	4.47			66.11	236.40	14.53	70.0	67.60		1.1	13.9	13.50	0.5	5.5		62.68	1.0	0.7	
117163	2.70	2.78	8.0			1.67	46.0	35.12	44.92	0.32	1.00	772.46	0.5	0.50	1.40	1.41	4.74			86.18	668.80	16.48	92.0	83.42		1.7	15.8	15.16	0.5	6.3		69.52	1.1	0.9	
117164	4.40	4.32	7.0			1.61	49.0	27.97	42.44	0.46	1.27	1836.00	0.5	0.50	1.20	1.14	7.93			31.90	330.16	16.87	92.0	81.06		0.8	12.7	14.02	0.5	7.8		67.45	1.4	1.0	
117165	3.90	3.71	7.0			1.18	44.0	25.27	47.74	0.43	1.32	857.50	0.5	0.50	1.20	1.28	3.42			83.40	617.80	14.61	87.0	81.81		1.5	14.8	15.32	0.5	8.3		77.16	1.2	1.1	
117166	4.00	3.60	8.0			1.53	51.0	27.06	51.61	0.41	1.18	1312.00	0.5	0.50	1.30	1.29	3.42			75.14	203.40	2.55	76.0	75.64		1.1	13.8	13.49	0.5	7.0		71.44	1.2	0.9	
117167	5.30	5.00	6.0			1.20	37.0	20.03	51.78	0.36	1.24	910.90	0.5	0.50	1.30	1.23	5.02			66.43	409.50	6.08	89.0	77.92		1.0	14.6	13.66	0.5	8.0		76.78	1.3	1.0	
117168	5.50	5.07	7.0			1.51	40.0	23.37	53.62	0.36	1.30	1122.00	8.0	6.73	1.20	1.11	3.87			88.11	236.40	14.53	70.0	67.60		1.1	13.9	13.50	0.5	5.5		64.66	1.6	0.8	
117169	5.90	5.23	6.0			1.43	41.0	25.16	61.00	0.42	1.04	845.16	0.5	0.50	1.20	1.17	4.14			86.18	668.80	16.48	92.0	83.42		1.1	13.6	12.50	0.5	6.1		65.28	1.1	0.8	
117170	3.70	3.25	11.0			1.37	34.0	21.21	31.55	0.47	0.60	729.07	0.5	0.50	1.20	1.14	7.93			27.15	298.49	22.37	80.0	72.51		1.9	11.4	10.31	0.5	5.6		61.17	1.0	0.8	
117171	2.80	2.53	10.0			1.19	27.0	16.81	26.49	0.30	0.43	727.27	0.5	0.50	1.20	1.17	8.62			16.89	333.83	15.19	68.0	64.77		1.2	7.8	7.54	0.5	4.9		59.44	1.5	0.8	
117172	2.20	2.14	11.0			1.24	32.0	19.38	29.99	0.31	0.43	788.30	0.5	0.50	1.30	1.36	9.75			16.70	298.69	19.17	80.0	66.48		1.0	7.0	7.20	0.5	6.2		78.87	1.8	0.9	
117173	3.00	2.66	11.0			1.01	28.0	18.23	24.49	0.36	0.46	803.51	0.5	0.50	1.20	1.14	7.39			17.27	914.09	12.67	62.0	54.19		1.5	8.3	7.55	0.5	4.9		71.00	1.4	0.8	
117174	3.30	2.87	11.0			1.21	32.0	20.96	32.84	0.41	0.62	892.65	0.5	0.50	1.30	1.16	8.22			29.09	414.98	20.59	77.0	65.34		2.0	10.9	9.79	0.5	5.1		64.66	1.6	0.8	
117175	3.00	2.77	8.0			1.27	42.0	23.24	46.35	0.40	0.84	515.16	0.5	0.50	1.20	1.17	4.14			34.99	295.33	4.23	80.0	72.92		1.1	13.6	12.50	0.5	6.3		65.28	1.1	0.8	
117176	3.80	3.52	7.0			1.29	36.0	20.83	48.77	0.39	1.12	1217.62	0.5	1.28	1.20	1.21	6.76			58.23	364.80	3.84	73.0	68.36		0.8	14.3	12.61	0.5	5.6		80.34	1.4	0.8	
117177	5.10	4.40	6.0			1.52	38.0	25.43	45.65	0.40	1.57	2077.05	0.5	0.50	1.50	1.37	7.21			91.75	426.76	12.92	92.0	73.33		1.0	18.2	15.89	0.5	6.1		115.99	1.2	0.9	
117178	2.10	1.91	12.0			2.14	41.0	23.96	45.49	0.53	0.49	687.05	0.5	0.50	1.90	1.86	12.34			14.21	715.06	16.39	133.40		0.3	8.8	7.99	0.5	7.2		122.41	2.2	1.0		
117180	2.80	2.56	10.0			2.65	35.0	24.71	66.8																										



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
117213	3.00	2.65	9.0			1.70	34.0	19.22	25.07	0.38	0.69	526.60	0.5	0.50	1.60	1.63	5.58			36.10	373.20	10.90	110.0	98.49	0.7	10.6	9.81	0.5	5.9			94.26	2.1	0.9	
117214	0.90	0.70	15.0			2.84	29.0	10.77	20.48	0.34	0.09	413.30	0.5	0.50	1.70	1.87	10.94			0.50	289.40	16.06	210.0	190.83	0.6	8.1	7.09	0.5	10.0			81.03	1.6	0.6	
117215	2.60	2.41	18.0			1.97	64.0	17.43	10.51	0.56	0.20	308.11	0.5	1.27	1.30	1.40	15.57			7.63	240.33	16.39	110.0	100.57	0.1	6.3	5.27	0.5	16.5			203.66	1.9	1.2	
117216	1.40	1.33	35.0			3.95	105.0	22.47	6.44	0.79	0.06	580.47	0.5	0.50	1.80	1.96	14.58			0.50	202.71	27.12	180.0	160.09	0.1	8.8	8.42	0.5	10.5			136.84	2.2	0.8	
117217	4.40	3.56	52.0			2.29	52.0	32.50	21.89	0.45	0.39	494.20	0.5	1.07	1.50	1.84	18.67			19.91	1609.29	24.73	120.0	117.67	0.5	8.8	8.42	0.5	7.4			408.07	3.2	0.7	
117218	3.10	3.46	52.0			3.42	99.0	59.02	7.25	0.42	0.11	1425.92	0.5	0.50	2.60	3.74	24.88			8.69	213.52	31.07	160.0	148.46	0.1	5.6	4.06	0.5	10.5			219.43	1.7	3.7	
117219	5.50	5.41	21.0			1.21	155.0	51.50	12.59	1.20	0.26	10539.40	3.0	3.79	1.80	2.84	17.92			10.86	250.74	24.57	32.0	37.41	0.1	27.1	28.18	0.5	26.8			212.80	1.2	0.7	
117220	3.40	3.56	7.0			1.19	22.0	16.31	18.34	0.34	1.60	1406.43	0.5	1.65	1.90	2.67	11.15			54.67	192.28	15.19	57.0	60.52	0.3	14.4	15.48	0.5	4.1			125.80	1.7	1.0	
117222	0.50	0.56	13.0			2.03	46.0	25.33	13.28	0.40	0.11	679.95	0.5	0.50	1.70	2.10	10.06			1.25	323.46	19.64	110.0	95.97	0.1	6.4	6.33	0.5	7.6			125.78	1.7	1.0	
117223	0.20	0.18	9.0			4.01	37.0	26.63	21.31	0.18	0.04	138.24	0.5	0.50	2.10	2.78	11.16			0.50	388.57	33.44	120.0	197.36	0.1	3.3	3.39	0.5	5.6			126.21	1.6	0.6	
117224	1.50	1.31	6.0			1.99	22.0	11.79	14.74	0.23	0.13	341.75	0.5	0.50	2.00	2.34	6.19			8.01	299.70	19.23	120.0	101.49	0.5	3.7	5.15	0.5	3.7			95.92	1.3	0.3	
117225	0.60	0.49	8.0			1.78	30.0	13.94	21.89	0.40	0.11	336.49	0.5	0.50	1.60	1.89	10.96			1.70	257.35	17.34	120.0	99.88	0.2	7.1	7.13	0.5	5.1			104.13	1.8	0.8	
117226	0.20	0.24	5.0			3.52	17.0	11.15	37.99	0.14	0.04	149.47	0.5	0.50	2.50	3.17	7.31			0.50	384.32	31.53	120.0	185.09	0.1	2.5	2.73	0.5	2.8			83.54	1.4	0.3	
117227	1.00	0.74	9.0			2.07	27.0	16.45	15.58	0.27	0.05	308.24	0.5	0.50	1.80	2.23	5.97			1.30	198.16	18.00	130.0	111.61	0.1	3.9	3.64	0.5	4.8			83.46	1.6	0.6	
117228	1.10	4.54	7.0			1.03	22.0	12.40	30.60	0.35	0.50	700.51	0.5	0.50	1.50	1.84	8.53			45.35	329.71	17.18	60.0	53.98	0.5	10.2	11.24	0.5	4.2			138.30	1.3	0.7	
117229	5.20	0.94	13.0			2.40	38.0	19.99	16.26	0.37	0.06	383.06	0.5	0.50	1.50	1.91	10.04			2.62	193.33	19.88	140.0	112.79	0.2	5.5	4.92	0.5	6.5			98.97	2.2	0.7	
117230	0.40	0.35	8.0			3.82	18.0	13.00	21.24	0.10	0.05	181.66	0.5	0.50	1.70	1.96	9.06			0.50	547.38	31.24	250.0	211.17	0.1	7.0	2.74	0.5	3.1			80.19	1.7	0.3	
117231	1.70	1.84	35.0			6.34	53.0	25.39	6.86	0.57	0.29	507.01	0.5	0.50	1.60	2.06	11.32			6.16	226.59	48.79	280.0	240.90	0.1	7.0	6.51	0.5	7.4			296.82	1.6	0.7	
117232	4.30	4.15	15.0			1.89	51.0	39.77	38.80	0.43	0.82	712.88	0.5	0.50	1.60	1.93	15.44			43.58	611.66	20.55	100.0	91.42	0.4	10.3	9.80	0.5	6.9			141.60	1.8	0.8	
117233	4.30	4.01	12.0			1.37	40.0	33.64	26.50	0.32	0.53	553.59	0.5	0.50	1.40	1.66	12.04			27.09	494.45	20.92	64.0	65.02	0.3	9.0	8.64	0.5	5.6			112.92	1.5	0.7	
117234	3.60	3.66	16.0			2.16	38.0	27.62	9.32	0.34	0.18	469.20	0.5	1.06	1.60	1.83	22.44			13.30	413.90	19.36	110.0	121.40	0.4	7.0	6.44	0.5	4.9			159.15	2.4	0.3	
117235	3.00	2.93	13.0			1.67	43.0	30.75	22.19	0.48	0.73	550.00	0.5	0.50	1.70	1.96	9.06			34.16	256.90	16.55	84.0	88.00	0.5	10.0	9.94	0.5	7.7			131.44	1.5	1.0	
117237	1.00	1.01	11.0			3.42	27.0	22.37	13.55	0.23	0.10	351.70	0.5	0.50	2.10	2.62	10.56			4.59	195.70	19.54	200.0	216.70	0.2	4.3	4.42	0.5	3.9			226.43	1.9	0.3	
117238	3.70	4.42	17.0			2.99	52.0	59.83	49.46	0.37	0.75	630.80	0.5	1.74	2.10	3.17	35.66			14.30	1586.00	12.90	130.0	200.29	0.1	11.2	14.06	0.5	8.1			93.71	4.1	1.0	
117239	1.20	1.22	28.0			2.65	57.0	37.34	17.54	0.56	0.26	746.30	0.5	0.50	1.60	1.98	20.06			5.66	192.00	21.19	130.0	149.32	0.2	7.3	6.69	0.5	8.0			152.55	2.5	0.9	
117240	4.70	4.82	17.0			2.04	54.0	36.62	22.26	0.67	0.24	493.70	0.5	1.33	1.50	1.66	16.12			15.67	418.90	20.83	91.0	112.28	0.2	8.9	8.31	0.5	10.0			118.95	1.8	1.3	
117241	5.30	5.40	9.0			1.55	35.0	27.13	47.09	0.41	0.86	566.70	0.5	1.28	1.20	1.43	11.12			33.76	397.60	13.83	74.0	92.51	0.3	10.0	9.45	0.5	5.6			91.94	1.1	0.7	
117242	3.20	3.28	13.0			1.75	36.0	21.87	17.60	0.38	0.25	421.30	1.0	1.51	1.40	1.59	15.63			10.29	260.30	16.61	84.0	100.86	0.4	8.0	7.59	0.5	5.1			106.73	2.0	0.6	
117243	0.60	0.56	13.0			2.16	34.0	21.22	10.34	0.39	0.17	362.10	0.5	1.02	1.60	1.78	12.04			5.23	142.10	14.62	110.0	127.92	0.5	14.7	6.77	0.5	4.9			113.36	1.6	0.6	
117244	1.50	1.50	24.0			3.33	35.0	21.61	8.53	0.45	0.14	452.00	0.5	0.50	1.40	1.70	20.58			5.07	198.70	19.49	170.0	205.95	0.2	6.5	5.65	0.5	4.4			138.28	2.6	0.5	
117245	3.40	3.16	11.0			1.68	41.0	28.54	30.65	0.37	0.80	600.11	0.5	0.50	1.60	1.63	11.97			29.78	254.31	13.93	83.0	85.83	0.4	14.7	13.51	0.5	7.1			109.53	1.4	0.7	
117246	5.20	5.19	8.0			1.37	28.0	18.79	30.76	0.22	0.50	390.23	0.5	0.50	1.20	1.38	10.40			27.70	211.22	15.37	61.0	71.94	0.5	13.8	14.20	0.5	5.0			85.58	1.2	0.7	
117247	3.80	4.14	11.0			1.80	31.0	15.59	10.97	0.25	0.26	415.21	0.5	1.04	1.10	1.52	12.97			19.34	531.67	15.00	100.0	97.77	0.6	6.3	7.37	0.5	5.5			110.85	1.8	0.6	
117248	0.60	0.65	15.0			1.76	44.0	35.62	32.37	0.34	0.59	597.84	0.5	0.50	1.50	1.81	12.05			23.59	168.74	14.97	89.0	86.07	0.2	8.6	8.09	0.5	7.4			121.84	1.5	0.9	
117249	3.60	3.75	6.0			1.64	26.0	19.49	35.03	0.22	0.40	441.27	0.5	0.50	1.50	1.78	7.38			4.25	145.79	15.22	110.0	108.15	0.5	7.3	7.44	0.5	6.6			98.66	1.9	0.9	
117250	0.50	0.59	47.0			3.97	68.0	25.69	4.46	0.64	0.03	799.22	0.5	0.50	1.00	1.23	17.78			1.53	183.87	28.05	180.0	145.30	0.2	4.4	2.71	0.5	9.1			205.01	2.5	0.8	
117251	2.40	2.41	10.0			1.60	39.0	27.96	24.32	0.39	0.52	543.05	0.5	0.50	1.40	1.61	11.83			18.44	253.01	16.42	78.0	81.70	0.4	9.2	8.90	0.5	6.2			111.05	1.5	0.9	
117252	0.50	0.50	34.0			2.22	70.0	31.32	7.12	0.77	0.07	756.77	0.5	0.50	1.20	1.45	15.96			1.53	164.73	19.98	110.0	107.14	0.4	5.8	4.38	0.5	10.4			111.81	2.4	1.3	
117253	3.40	3.10	16.0			1.77	59.0	39.05	23.70	0.53	0.77	638.31	0.5	0.50	1.70	1.88	10.02			30.66	251.12	12.92	96.0	90.44	0.7	10.9	10.14	0.5	9.2			122.31	1.7	1.2	
117254	2.20	2.09	10.0			1.81	29.0	22.41	30.39	0.29	0.61	693.69	0.5	0.50	1.90	2.13	8.47			18.65	579.76	17.43	87.0	98.47	0.2	8.6	8.09	0.5	5.1			160.40	1.1	0.6	
117255	3.60	3.75	6.0																																



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
117290	4.90	4.24	12.0			1.38	41.0	19.83	35.51	0.64	0.58	536.91	0.5	0.50	1.60	1.39	10.12			26.12	211.05	15.25	71.0	62.52	0.5	15.4	14.35	0.5	7.5	93.73	1.5	1.0			
117291	4.90	3.79	10.0			1.52	36.0	18.11	37.94	0.49	0.60	664.39	0.5	0.50	1.70	1.31	9.72			29.95	219.48	20.70	86.0	69.54	0.4	11.7	10.37	0.5	5.3	88.18	1.5	0.6			
117292	4.30	3.46	9.0			1.32	27.0	13.81	26.98	0.45	0.45	689.23	0.5	0.50	1.50	1.02	9.49			19.37	215.75	13.88	72.0	62.82	0.4	11.7	10.37	0.5	4.4	82.38	1.5	0.6			
117293	4.80	3.97	10.0			1.21	28.0	13.70	20.32	0.59	0.32	689.58	0.5	0.50	1.50	1.03	10.79			10.92	210.46	10.14	62.0	54.27	0.8	11.5	10.16	0.5	4.6	57.21	1.4	0.7			
117294	0.80	0.57	27.0			1.41	55.0	11.79	7.12	0.77	0.48	598.08	0.5	0.50	0.83	0.72	13.92			0.50	119.14	7.73	48.0	42.00	0.2	10.7	8.74	0.5	8.2	57.31	1.7	1.1			
117295	3.30	2.52	10.0			1.50	32.0	17.92	25.85	0.47	0.47	906.88	0.5	0.50	1.60	1.28	8.59			21.07	362.43	17.28	85.0	64.20	0.8	10.0	8.10	0.5	5.3	91.51	1.2	0.7			
117296	0.30	0.31	8.0			3.22	26.0	7.53	16.83	0.08	0.04	260.32	0.5	0.50	1.80	2.09	8.19			0.50	124.44	31.44	190.0	144.92	0.1	3.0	3.35	0.5	5.1	90.28	2.2	0.3			
117297	3.60	3.14	10.0			1.34	27.0	14.54	38.39	0.29	0.34	696.61	0.5	0.50	1.20	1.25	10.38			12.89	329.61	16.97	81.0	68.00	0.4	7.4	7.57	0.5	5.8	81.75	2.1	0.8			
117298	2.60	2.23	15.0			1.50	38.0	19.93	24.97	0.52	0.43	878.46	0.5	0.50	1.50	1.44	9.43			18.40	322.56	18.42	85.0	67.70	0.6	7.2	6.67	0.5	6.7	97.90	1.6	0.9			
117299	2.60	2.34	11.0			1.70	33.0	19.07	24.81	0.54	0.45	649.05	0.5	0.50	1.40	1.30	9.73			16.57	435.48	16.79	98.0	81.35	0.3	8.2	7.85	0.5	5.8	85.71	1.5	0.8			
117301	1.30	1.01	13.0			2.53	21.0	6.93	24.73	0.38	0.07	350.12	0.5	0.50	1.30	1.27	9.57			0.50	776.71	22.96	140.0	128.34	0.1	3.6	2.92	0.5	3.4	71.76	1.9	0.3			
117302	4.60	3.99	14.0			1.74	29.0	12.06	20.91	0.45	0.10	381.06	0.5	0.377	1.30	1.25	17.55			3.86	327.40	31.09	86.0	85.08	0.1	5.8	4.61	0.5	4.7	79.29	2.2	0.7			
117303	2.00	1.60	12.0			2.51	32.0	18.99	41.63	0.35	0.44	470.63	0.5	0.50	2.30	1.96	12.63			8.16	200.16	21.77	150.0	123.02	0.2	8.7	7.46	0.5	5.7	128.48	1.8	0.8			
117304	2.60	2.27	9.0			1.34	28.0	16.39	38.33	0.19	0.37	581.06	0.5	1.16	1.30	1.22	11.79			10.12	205.19	17.12	69.0	70.72	0.5	7.9	7.43	0.5	4.8	69.94	1.9	0.6			
117305	4.00	3.73	11.0			1.47	40.0	25.52	28.60	0.05	0.24	671.74	0.5	2.03	1.30	1.28	10.86			7.77	171.31	14.98	81.0	70.95	0.5	8.0	8.66	0.5	10.7	75.14	1.9	1.5			
117306	3.50	3.19	14.0			1.33	30.0	10.12	20.11	0.40	0.16	625.53	0.5	0.50	1.10	1.09	13.04			4.23	150.76	12.03	74.0	64.52	0.3	6.6	5.98	0.5	5.3	57.13	2.3	0.8			
117307	2.30	1.87	19.0			1.18	39.0	18.43	25.06	0.61	0.42	871.03	0.5	0.50	1.50	1.36	10.17			10.86	195.51	14.90	66.0	56.90	1.2	8.3	7.10	0.5	6.8	79.04	2.1	0.9			
117308	2.50	2.19	12.0			1.20	24.0	13.04	25.57	0.30	0.36	607.11	0.5	0.50	1.30	1.27	9.05			10.15	275.24	15.62	63.0	57.62	0.7	7.3	6.69	0.5	4.2	67.78	1.5	0.5			
117309	0.60	0.58	18.0			1.38	53.0	15.91	8.17	1.10	0.10	581.69	4.0	4.01	1.50	1.50	14.02			3.98	160.33	14.50	57.0	61.88	0.4	9.1	8.66	0.5	9.2	102.51	1.6	1.4			
117310	3.70	3.30	9.0			2.80	14.0	4.04	38.87	0.36	0.16	603.93	0.5	0.50	0.85	0.30	18.65			10.03	988.45	31.81	110.0	107.53	0.3	14.2	13.43	0.5	2.2	53.20	1.9	0.3			
117311	1.00	0.88	25.0			1.22	3.0	2.29	5.52	0.50	0.13	568.36	0.5	0.50	0.31	0.76	13.66			4.13	54.57	2.30	53.0	46.60	0.2	8.2	7.59	0.5	0.7	19.23	1.6	0.3			
117312	3.50	3.19	10.0			1.36	45.0	35.46	45.04	0.47	0.52	605.73	0.5	0.50	1.00	1.01	12.41			25.86	550.36	16.81	62.0	63.16	0.8	10.5	9.68	0.5	7.3	53.99	1.3	0.9			
117313	2.60	2.11	13.0			0.75	22.0	14.69	24.57	0.38	0.36	698.51	0.5	0.50	1.20	1.00	7.53			18.60	394.96	10.90	44.0	40.03	1.4	7.4	6.35	0.5	3.7	55.51	1.2	0.6			
117314	3.50	3.40	9.0			1.32	26.0	18.23	40.32	0.31	0.62	644.91	0.5	0.50	1.30	1.24	8.48			27.22	224.03	15.34	71.0	75.04	1.1	10.3	10.34	0.5	4.9	61.63	1.3	0.8			
117315	2.90	2.66	11.0			1.25	26.0	20.78	29.07	0.27	0.54	680.07	0.5	0.50	1.30	1.29	8.59			21.58	198.00	12.85	76.0	68.54	1.4	8.7	8.74	0.5	5.4	66.00	1.5	0.8			
117316	3.40	2.93	12.0			1.29	30.0	20.38	32.33	0.47	0.62	758.02	0.5	0.50	1.50	1.33	9.16			29.40	253.83	18.75	77.0	72.37	1.5	10.4	9.64	0.5	5.5	68.75	1.6	0.8			
117317	3.30	2.89	12.0			1.20	35.0	26.71	27.13	0.34	0.44	657.53	0.5	0.50	1.40	1.36	9.85			17.86	102.88	12.46	65.0	63.33	1.4	9.3	8.96	0.5	6.2	76.94	1.4	0.8			
117318	0.80	0.70	19.0			1.84	40.0	11.34	10.09	0.65	0.13	583.59	0.5	0.50	1.00	1.04	12.99			3.77	102.54	8.89	79.0	81.23	1.3	10.0	8.52	0.5	6.9	59.87	2.1	0.9			
117319	1.10	0.91	29.0			3.46	71.0	17.09	5.87	0.88	0.07	396.34	0.5	0.50	1.70	1.66	12.28			4.79	203.67	23.90	150.0	152.10	0.2	6.0	4.77	0.5	11.8	161.68	1.2	1.3			
117320	2.00	1.63	49.0			3.54	29.0	18.57	3.21	0.50	0.09	141.75	0.5	0.50	2.70	2.70	23.56			8.41	206.59	15.71	150.0	162.99	0.1	20.0	9.47	0.5	4.0	265.67	2.8	0.3			
117321	0.90	0.70	25.0			3.62	18.0	10.45	7.50	0.28	0.04	238.87	0.5	0.50	1.90	1.80	13.97			3.36	132.79	25.76	210.0	192.64	0.2	4.1	3.02	0.5	2.2	144.25	2.2	0.3			
117322	1.80	1.62	17.0			2.74	39.0	21.56	8.63	0.42	0.09	510.56	1.0	0.50	2.10	2.06	22.39			6.22	194.77	25.00	160.0	154.60	0.1	4.7	3.70	0.5	5.4	141.85	2.8	0.5			
117323	4.60	4.03	12.0			1.72	40.0	31.74	28.16	0.14	0.35	484.47	0.5	1.33	1.50	1.31	17.56			14.63	1001.15	23.19	94.0	97.19	0.1	9.2	9.10	0.5	6.9	107.22	1.8	0.7			
117325	0.50	0.48	31.0			3.09	81.0	13.74	6.55	0.58	0.05	740.16	0.5	0.50	1.60	1.50	14.35			2.57	132.68	23.26	190.0	173.89	0.2	4.6	3.29	0.5	4.6	118.80	2.4	0.5			
117326	0.70	0.68	38.0			3.82	31.0	12.88	8.03	0.76	0.06	942.65	0.5	1.81	1.80	1.77	19.82			3.24	183.71	30.39	240.0	229.95	0.1	5.6	4.30	0.5	10.6	169.13	3.2	1.0			
117327	0.90	0.71	18.0			2.22	40.0	24.13	8.23	0.45	0.10	461.44	2.0	1.65	1.70	1.50	16.68			5.23	309.62	23.82	120.0	114.14	0.2	5.5	4.52	0.5	5.8	133.86	2.0	0.6			
117328	3.90	3.04	14.0			1.49	38.0	22.94	10.38	0.49	0.20	414.56	0.5	0.50	1.60	1.28	9.34			16.35	875.03	18.61	74.0	71.11	0.2	6.8	5.66	0.5	7.0	108.90	1.4	0.8			
117329	1.30	1.15	23.0			2.70	48.0	28.83	8.40	0.67	0.14	497.21	1.0	1.07	1.70	1.60	17.50			5.42	184.14	19.46	180.0	168.30	0.2	7.4	6.46	0.5	7.2	177.23	2.0	0.8			
117330	0.60	0.46	25.0			1.10	107.0	24.44	9.06	0.70	0.07	641.82	0.5	0.50	1.40	1.33	13.69			4.49	230.66	17.00	42.0	42.17	0.6	6.7	5.44	0.5	17.8	130.44	1.5	2.2			
117331	2.50	2.03	20.0			1.33	27.0	12.64	13.67	0.56	0.16	783.37	0.5	0.50	1.30	1.11	16.58			8.13	126.45	13.11	76.0	67.89	1.1	8.6	7.25	0.5	4.6	64.23	2.2	0.7			
117332	0.60	0.49	22.0			1.44	23.0	10.49	7.10	0.42	0.05	524.83																							



Sample	Fe1	Fe2	Hf1	Hg1	Ir1	K2	La1	La2	Li2	Lu1	Mg2	Mn2	Mo1	Mo2	Na1	Na2	Nb2	Nd1	Ni1	Ni2	P2	Pb2	Rb1	Rb2	Rb6	Sb1	Sc1	Sc2	Se1	Sm1	Sn1	Sr1	Sr2	Ta1	Tb1		
	wt. %	wt. %	ppm	ppm	ppb	wt. %	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt. %	wt. %	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt. %	wt. %	ppm	ppm	ppm	ppm	
117366	3.20	2.81	8.0	1.55	19.0	12.94	27.41	0.34	0.19	468.13	0.5	0.50	10.96	1234.87	14.36	1200	107.08	0.5	6.3	5.32	0.5	3.3	64.50	2.0	0.3	64.50	2.0	0.3	64.50	2.0	0.3	64.50	2.0	0.3	64.50	2.0	0.3
117367	1.80	1.56	8.0	1.83	40.0	16.32	29.25	0.36	0.35	844.53	0.5	0.50	15.68	479.48	14.74	1200	112.79	0.5	1.7	6.66	0.5	6.4	96.55	1.9	0.8	96.55	1.9	0.8	96.55	1.9	0.8	96.55	1.9	0.8	96.55	1.9	0.8
117368	2.80	2.32	8.0	1.32	28.0	16.25	17.12	0.32	0.64	436.13	0.5	0.50	33.77	335.56	14.78	890	73.34	0.5	8.1	6.70	0.5	4.8	103.80	2.1	0.7	103.80	2.1	0.7	103.80	2.1	0.7	103.80	2.1	0.7	103.80	2.1	0.7
117369	0.90	0.73	17.0	3.71	31.0	13.71	16.44	0.34	0.07	406.42	0.5	0.50	3.75	301.95	24.89	2500	220.11	0.5	8.2	5.3	0.5	5.4	108.40	2.3	0.6	108.40	2.3	0.6	108.40	2.3	0.6	108.40	2.3	0.6	108.40	2.3	0.6
117370	2.90	2.41	13.0	0.95	27.0	22.08	25.59	0.43	0.56	804.53	0.5	0.50	23.41	885.24	9.57	57.0	50.55	1.3	8.5	7.97	0.5	5.3	78.12	1.6	0.9	78.12	1.6	0.9	78.12	1.6	0.9	78.12	1.6	0.9	78.12	1.6	0.9
117371	3.60	3.27	11.0	0.76	20.0	13.02	25.82	0.28	0.38	830.09	0.5	0.50	20.54	865.46	8.56	41.0	41.36	1.0	8.1	7.13	0.5	3.5	49.04	1.2	0.6	49.04	1.2	0.6	49.04	1.2	0.6	49.04	1.2	0.6	49.04	1.2	0.6
117372	1.10	1.15	45.0	2.60	9.0	6.74	6.33	0.58	0.06	777.83	19.0	20.23	4.68	307.78	17.30	140.0	150.32	0.2	3.0	2.01	0.5	1.3	148.94	4.9	0.3	148.94	4.9	0.3	148.94	4.9	0.3	148.94	4.9	0.3	148.94	4.9	0.3
117373	2.70	2.90	65.0	1.98	9.0	8.49	4.41	0.63	0.22	337.94	0.5	0.50	8.54	48.93	35.65	520	57.93	0.1	16.1	15.89	0.5	2.7	353.65	0.7	0.3	353.65	0.7	0.3	353.65	0.7	0.3	353.65	0.7	0.3	353.65	0.7	0.3
117374	1.20	1.20	30.0	3.03	94.0	25.16	36.91	1.10	0.17	452.34	1.0	2.83	5.24	286.44	21.15	150.0	155.76	0.1	7.2	5.90	0.5	14.7	228.41	4.0	2.2	228.41	4.0	2.2	228.41	4.0	2.2	228.41	4.0	2.2	228.41	4.0	2.2
117375	2.60	2.58	9.0	1.58	27.0	18.82	37.99	0.34	0.41	873.10	0.5	0.50	16.16	186.18	17.81	95.0	96.50	0.5	4.6	6.70	0.5	4.6	85.38	1.8	0.6	85.38	1.8	0.6	85.38	1.8	0.6	85.38	1.8	0.6	85.38	1.8	0.6
117376	6.00	5.38	7.0	1.29	34.0	25.06	34.54	0.40	2.75	1622.60	0.5	1.17	24.74	312.48	11.44	66.0	62.19	0.5	5.9	68.15	0.5	5.9	68.15	0.9	0.9	68.15	0.9	0.9	68.15	0.9	0.9	68.15	0.9	0.9	68.15	0.9	0.9
117377	1.70	1.72	13.0	2.61	35.0	19.10	29.73	0.45	0.30	553.54	0.5	0.50	11.04	525.43	22.03	140.0	141.45	1.1	6.8	6.15	0.5	5.6	129.85	2.0	0.8	129.85	2.0	0.8	129.85	2.0	0.8	129.85	2.0	0.8	129.85	2.0	0.8
117378	0.80	0.86	17.0	3.16	49.0	18.91	17.34	0.28	0.12	201.13	2.0	2.26	3.92	474.20	28.59	180.0	197.31	0.1	7.2	7.88	0.5	6.3	58.64	2.6	0.7	58.64	2.6	0.7	58.64	2.6	0.7	58.64	2.6	0.7	58.64	2.6	0.7
117379	1.40	1.31	17.0	2.63	47.0	35.78	15.50	0.61	0.15	641.43	0.5	0.50	7.56	112.67	21.15	140.0	122.47	0.1	5.1	4.36	0.5	8.8	182.75	1.7	1.3	182.75	1.7	1.3	182.75	1.7	1.3	182.75	1.7	1.3	182.75	1.7	1.3
117380	1.60	1.66	27.0	3.24	119.0	29.70	12.57	0.84	0.16	630.45	0.5	0.50	6.58	84.13	19.80	110.0	106.47	0.1	18.7	20.00	0.5	17.8	185.63	1.5	1.9	185.63	1.5	1.9	185.63	1.5	1.9	185.63	1.5	1.9	185.63	1.5	1.9
117381	2.80	2.16	17.0	2.51	56.0	42.77	22.25	0.69	0.36	505.64	0.5	0.50	13.66	1107.47	24.73	140.0	113.66	0.1	7.3	5.82	0.5	10.0	195.14	2.6	1.4	195.14	2.6	1.4	195.14	2.6	1.4	195.14	2.6	1.4	195.14	2.6	1.4
117382	6.50	5.14	5.0	1.08	29.0	22.21	26.04	0.19	0.45	406.30	0.5	0.50	23.19	1734.81	42.93	74.0	71.59	0.2	10.5	8.64	0.5	4.7	125.25	1.6	0.8	125.25	1.6	0.8	125.25	1.6	0.8	125.25	1.6	0.8	125.25	1.6	0.8
117383	3.40	2.75	16.0	1.78	37.0	27.16	20.89	0.46	0.47	823.80	0.5	0.50	19.57	1414.72	16.53	94.0	75.40	0.2	8.5	6.89	0.5	7.3	180.38	1.2	1.1	180.38	1.2	1.1	180.38	1.2	1.1	180.38	1.2	1.1	180.38	1.2	1.1
117384	1.80	1.33	39.0	4.27	11.0	6.12	4.25	0.39	0.06	489.30	0.5	0.50	0.50	132.85	26.90	230.0	199.07	0.1	3.2	1.58	0.5	1.4	273.28	2.3	0.3	273.28	2.3	0.3	273.28	2.3	0.3	273.28	2.3	0.3	273.28	2.3	0.3
117386	3.20	2.38	47.0	3.17	91.0	30.33	6.75	0.85	0.21	1077.29	0.5	1.00	4.59	146.13	12.10	170.0	155.68	0.1	10.0	6.98	0.5	11.3	205.03	2.3	1.1	205.03	2.3	1.1	205.03	2.3	1.1	205.03	2.3	1.1	205.03	2.3	1.1
117387	7.40	6.04	7.0	1.88	74.0	55.77	55.39	0.69	0.58	989.82	2.0	3.10	24.67	726.45	57.27	120.0	108.27	0.1	13.9	12.31	0.5	12.1	106.88	2.2	1.7	106.88	2.2	1.7	106.88	2.2	1.7	106.88	2.2	1.7	106.88	2.2	1.7
117388	1.90	1.41	10.0	1.29	56.0	34.08	18.40	0.56	0.35	565.76	0.5	0.50	11.97	1253.38	38.64	59.0	85.43	0.1	11.5	9.38	0.5	8.4	106.74	2.5	1.3	106.74	2.5	1.3	106.74	2.5	1.3	106.74	2.5	1.3	106.74	2.5	1.3
117389	1.60	1.31	49.0	2.82	29.0	16.51	34.55	1.40	0.18	549.45	4.0	4.71	1.28	483.39	28.97	190.0	176.86	0.2	12.7	11.08	0.5	5.0	117.08	3.8	1.4	117.08	3.8	1.4	117.08	3.8	1.4	117.08	3.8	1.4	117.08	3.8	1.4
117390	2.30	2.00	14.0	2.08	36.0	21.92	27.96	0.50	0.32	553.92	0.5	0.50	9.77	632.35	16.56	120.0	102.18	0.2	6.1	5.41	0.5	6.7	128.91	2.2	1.0	128.91	2.2	1.0	128.91	2.2	1.0	128.91	2.2	1.0	128.91	2.2	1.0
117390	5.40	4.41	9.0	1.40	54.0	27.89	41.43	0.53	1.06	2023.68	1.0	1.94	67.08	481.34	20.30	85.0	68.28	2.3	16.2	13.67	0.5	9.2	63.76	1.2	1.1	63.76	1.2	1.1	63.76	1.2	1.1	63.76	1.2	1.1	63.76	1.2	1.1
117501	3.90	3.48	9.0	1.27	47.0	26.41	37.16	0.43	1.16	1238.31	0.5	0.50	1.4	131.11	11.84	60.0	58.56	1.4	13.1	11.84	0.5	7.5	63.76	1.2	1.1	63.76	1.2	1.1	63.76	1.2	1.1	63.76	1.2	1.1	63.76	1.2	1.1
117502	3.00	2.58	9.0	1.27	40.0	20.63	33.70	0.42	1.77	516.70	0.5	0.50	85.68	178.15	2.70	76.0	68.36	1.3	17.1	15.63	0.5	6.2	67.05	1.2	0.9	67.05	1.2	0.9	67.05	1.2	0.9	67.05	1.2	0.9	67.05	1.2	0.9
117503	5.10	4.22	7.0	1.28	43.0	27.49	28.47	0.45	2.21	966.03	0.5	0.50	243.63	282.30	5.61	69.0	64.56	1.9	20.2	18.42	0.5	7.0	72.28	1.1	1.2	72.28	1.1	1.2	72.28	1.1	1.2	72.28	1.1	1.2	72.28	1.1	1.2
117504	5.60	4.31	9.0	1.01	44.0	26.42	21.45	0.57	3.43	1068.98	0.5	0.50	307.23	523.12	5.28	56.0	48.68	0.6	13.3	12.93	0.5	7.6	69.86	1.1	1.2	69.86	1.1	1.2	69.86	1.1	1.2	69.86	1.1	1.2	69.86	1.1	1.2
117505	1.50	1.34	12.0	1.19	13.0	10.85	11.03	0.37	0.25	275.61	0.5	0.50	4.28	65.47	8.70	55.0	52.15	0.6	10.5	8.64	0.5	5.3	142.20	0.7	0.3	142.20	0.7	0.3	142.20	0.7	0.3	142.20	0.7	0.3	142.20	0.7	0.3
117506	2.70	2.03	10.0	1.07	18.0	9.87	6.56	0.44	0.29	438.81	0.5	0.50	7.95	279.18	14.80	49.0	47.65	0.2	11.7	10.20	0.5	3.0	165.47	1.5	0.6	165.47	1.5	0.6	165.47	1.5	0.6	165.47	1.5	0.6	165.47	1.5	0.6
117507	4.20	3.30	13.0	1.28	49.0	25.56	26.41	0.60	1.41	632.30	0.5	0.50	115.51	509.42	11.07	73.0	63.92	1.2	16.6	13.86	0.5	8.1	104.19	1.5	1.2	104.19	1.5	1.2	104.19	1.5	1.2	104.19	1.5	1.2	104.19	1.5	1.2
117508	0.80	0.79	11.0	1.72	39.0	16.29	22.87	0.41	0.21	392.56	0.5	0.50	2.40	267.49	16.41	110.0	98.54	0.3	6.7	7.14	0.5	7.1	134.16	2.8	1.0	134.16	2.8	1.0	134.16	2.8	1.0	134.16	2.8	1.0	134.16	2.8	1.0
117509	2.20	2.40	9.0	2.06	37.0	24.70	27.11	0.29	0.38	414.99	0.5	0.50	15.17	376.14	20.28	130.0	113.54	0.2	6.0	5.99	0.5	6.															



Sample	Fe1 wt. %	Fe2 wt. %	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
117550	4.20	3.47	7.0			1.47	31.0	13.06	48.71	0.41	0.50	426.35	0.5	0.50	1.80	1.70	6.75			31.30	568.21	28.23	12.00	106.04	0.4	0.4	8.7	7.24	0.5	4.5		90.98	2.2	0.7	
117551	5.80	4.81	9.0			1.00	28.0	13.93	29.50	0.38	0.54	505.69	0.5	0.50	1.50	1.40	6.48			34.98	418.67	11.32	34.0	56.40	0.2	0.2	10.5	8.79	0.5	4.2		103.63	1.4	0.7	
117552	3.30	2.51	9.0			1.53	36.0	13.67	23.56	0.40	0.62	449.99	0.5	0.50	2.00	1.76	6.99			41.68	376.20	16.06	90.0	84.32	0.2	0.2	8.7	6.88	0.5	5.4		107.97	1.3	0.7	
117553	5.80	5.06	4.0			1.21	21.0	12.27	49.44	0.25	0.44	437.91	0.5	0.50	1.40	1.28	7.97			22.55	637.91	21.15	84.0	80.60	0.3	0.3	10.0	7.93	0.5	3.2		73.41	1.4	0.3	
117554	3.80	2.68	5.0			1.16	27.0	12.58	29.49	0.32	0.33	276.32	0.5	0.50	2.00	1.80	6.48			15.48	471.29	12.57	73.0	70.77	0.1	0.1	9.2	7.27	0.5	4.8		118.22	1.2	0.6	
117555	4.80	3.89	15.0			1.32	33.0	20.42	24.40	0.50	0.44	552.13	0.5	0.50	1.90	1.76	8.07			21.11	302.83	18.19	69.0	70.77	0.2	0.2	10.9	9.39	0.5	6.8		133.57	1.4	1.0	
117556	3.70	3.27	11.0			1.25	24.0	15.32	22.65	0.26	0.31	444.78	0.5	0.50	1.40	1.41	10.21			14.46	829.06	15.90	66.0	68.05	0.2	0.2	7.2	6.57	0.5	4.7		129.30	1.3	0.7	
117557	0.50	0.31	19.0			1.96	17.0	5.89	9.19	0.33	0.05	377.29	0.5	0.50	1.50	1.55	6.19			0.50	130.46	15.41	110.0	82.01	0.1	0.1	3.7	2.42	0.5	2.8		130.74	1.3	0.3	
117558	0.50	0.45	12.0			2.71	31.0	13.40	15.91	0.30	0.09	348.61	0.5	0.50	2.00	2.13	15.80			0.50	312.85	26.40	170.0	137.32	0.1	0.1	4.9	4.13	0.5	4.1		141.57	2.5	0.6	
117559	2.70	2.25	17.0			2.25	32.0	15.27	14.73	0.34	0.21	584.89	0.5	0.50	2.10	2.06	18.54			6.02	497.10	21.74	130.0	114.18	0.1	0.1	6.9	5.26	0.5	4.8		189.15	2.8	0.6	
117560	4.70	4.40	7.0			1.15	20.0	12.97	19.22	0.38	0.20	332.81	0.5	0.50	1.20	1.28	10.39			9.46	536.57	18.22	49.0	56.21	0.2	0.2	11.5	11.13	0.5	7.1		101.35	1.2	1.0	
117562	1.00	0.76	13.0			2.93	21.0	15.29	7.74	0.29	0.07	233.17	0.5	0.50	2.00	1.95	18.29			0.50	194.17	26.27	150.0	116.30	0.1	0.1	4.1	2.91	0.5	4.0		205.26	2.6	0.6	
117563	4.30	4.30	36.0			2.54	59.0	52.29	28.30	0.74	0.52	711.66	1.0	1.78	2.20	2.32	38.10			9.16	678.71	31.43	130.0	112.20	0.1	0.1	9.1	7.72	0.5	10.2		211.19	4.6	1.3	
117564	2.80	2.10	13.0			1.99	34.0	19.53	19.90	0.29	0.40	425.81	0.5	0.50	2.00	1.91	8.22			21.66	479.92	19.45	110.0	84.89	0.2	0.2	6.5	5.23	0.5	5.4		146.73	1.5	0.7	
117565	3.80	3.63	12.0			1.55	35.0	20.21	20.97	0.30	0.36	413.76	0.5	0.50	1.30	1.52	11.20			16.06	734.46	18.74	81.0	69.34	0.2	0.2	7.0	6.07	0.5	6.3		114.71	1.5	0.8	
117566	2.30	1.78	7.0			1.24	24.0	13.54	20.59	0.30	0.40	396.51	0.5	0.50	1.90	1.91	4.44			14.00	328.46	13.20	70.0	58.34	0.2	0.2	7.0	6.37	0.5	4.2		127.46	1.0	0.6	
117567	1.70	1.32	10.0			1.49	34.0	17.70	15.79	0.37	0.37	482.96	0.5	0.50	2.00	1.92	6.59			13.71	215.47	16.16	94.0	88.96	0.2	0.2	6.5	5.53	0.5	5.9		122.98	1.3	0.9	
117568	0.50	0.39	10.0			3.46	22.0	10.90	19.32	0.28	0.07	214.57	0.5	0.50	1.90	1.96	15.19			0.50	374.20	20.81	250.0	192.47	0.1	0.1	4.6	4.29	0.5	3.4		92.55	2.0	0.3	
117569	0.70	0.55	11.0			2.88	30.0	18.27	12.09	0.22	0.08	281.28	0.5	0.50	2.10	1.99	11.00			0.50	542.06	18.47	190.0	141.94	0.1	0.1	4.5	3.50	0.5	4.0		145.57	1.6	0.3	
117570	0.50	2.26	12.0			2.01	39.0	21.55	20.26	0.33	0.40	462.70	0.5	0.50	1.80	1.94	8.88			22.69	484.93	19.72	220.0	87.70	0.2	0.2	4.9	5.48	0.5	6.3		150.98	2.1	0.6	
117571	1.00	0.88	21.0			3.17	23.0	16.06	10.32	0.40	0.11	459.24	0.5	0.50	1.90	1.94	25.34			1.37	285.36	32.67	170.0	145.69	0.1	0.1	5.6	4.52	0.5	5.1		196.08	2.9	0.6	
117572	2.70	2.37	13.0			2.14	47.0	31.76	22.59	0.46	0.58	543.72	0.5	0.50	1.90	1.77	9.30			34.58	425.75	18.17	120.0	101.50	0.4	0.4	8.8	7.88	0.5	7.4		142.42	1.6	1.0	
117573	4.50	3.72	22.0			1.60	65.0	28.79	28.81	0.67	0.66	606.04	0.5	0.50	1.80	1.56	10.36			35.31	145.68	15.44	97.0	78.61	0.2	0.2	12.8	10.75	0.5	10.4		115.19	1.9	1.3	
117574	2.40	2.13	18.0			1.83	46.0	27.78	15.75	0.46	0.36	556.93	0.5	0.50	1.80	1.65	11.19			14.12	265.09	21.37	99.0	82.03	0.2	0.2	7.3	6.36	0.5	7.5		138.08	1.6	1.0	
117575	0.30	0.35	7.0			3.80	25.0	9.00	26.28	0.21	0.09	181.84	0.5	0.50	2.50	2.58	12.56			0.50	374.35	36.56	180.0	164.37	0.1	0.1	3.3	3.19	0.5	4.2		93.54	1.4	0.3	
117576	8.90	7.26	12.0			1.91	62.0	15.55	32.68	0.71	0.47	692.01	0.5	0.50	1.60	1.38	17.24			15.70	287.89	30.83	82.0	74.55	0.2	0.2	16.1	12.86	0.5	9.2		151.63	2.2	1.4	
117577	2.90	2.16	14.0			1.99	41.0	25.72	20.34	0.44	0.26	479.70	0.5	0.50	1.60	1.63	9.66			9.64	274.37	20.89	110.0	99.66	0.2	0.2	7.3	6.02	0.5	6.3		140.79	1.5	0.8	
117578	3.80	3.33	11.0			1.85	42.0	28.39	41.24	0.50	0.36	490.56	5.0	6.17	1.60	1.50	15.79			10.35	312.24	21.48	100.0	91.32	0.1	0.1	10.6	9.23	0.5	7.4		118.50	2.2	1.1	
117579	2.20	1.66	19.0			1.98	59.0	27.61	21.16	0.67	0.54	596.02	0.5	0.50	2.10	1.78	9.18			23.87	907.44	17.09	120.0	92.99	0.5	0.5	9.5	7.59	0.5	10.1		138.90	1.8	1.4	
117580	3.40	0.97	13.0			3.11	51.0	17.18	8.35	0.58	0.10	462.12	1.0	1.89	1.50	1.35	11.25			0.50	189.36	27.46	200.0	138.67	0.2	0.2	11.7	3.27	0.5	6.4		222.04	2.5	0.6	
117582	4.20	2.52	12.0			2.10	42.0	27.41	34.47	0.54	0.63	698.74	0.5	0.50	1.60	1.39	12.44			23.15	206.43	17.76	91.0	90.28	0.3	0.3	11.1	10.11	0.5	7.2		107.46	1.7	1.0	
117583	3.90	3.74	10.0			2.07	38.0	26.62	39.92	0.41	0.58	547.90	3.0	2.77	1.50	1.41	16.34			21.70	466.71	20.46	100.0	98.70	0.4	0.4	10.5	5.84	0.5	6.5		159.78	1.5	0.9	
117584	2.70	2.86	8.0			2.15	23.0	13.92	54.22	0.27	0.38	556.04	0.5	0.50	1.60	1.64	11.78			11.39	666.55	23.02	120.0	107.39	0.1	0.1	5.2	5.55	0.5	4.3		114.43	2.2	0.6	
117585	6.30	1.92	16.0			1.69	54.0	33.54	22.55	0.57	0.59	682.64	0.5	0.50	1.80	1.50	10.30			20.21	165.03	14.16	98.0	76.90	0.5	0.5	9.1	8.32	0.5	8.7		109.89	1.8	1.2	
117586	2.50	5.87	26.0			2.12	68.0	44.40	54.62	0.77	0.69	740.68	0.5	0.50	1.60	1.35	22.16			15.20	2245.93	25.39	110.0	99.56	0.1	0.1	11.5	9.54	0.5	11.4		120.44	2.4	1.6	
117587	3.00	0.56	22.0			2.65	43.0	16.60	7.56	0.58	0.10	462.12	1.0	1.89	1.50	1.35	11.25			0.50	120.40	15.95	140.0	120.93	0.3	0.3	7.7	6.60	0.5	6.3		116.55	1.8	0.8	
117588	3.80	3.41	11.0			1.87	47.0	34.74	34.47	0.54	0.63	698.74	0.5	0.50	1.60	1.39	12.44			19.89	314.60	17.43	79.0	74.57	0.6	0.6	10.5	9.43	0.5	6.5		87.07	1.7	0.9	
117589	3.80	3.31	11.0			2.03	43.0	32.87	36.69	0.58	0.91	828.95	0.5	0.50	1.50	1.31	12.03			19.52	270.30	19.33	87.0	87.89	0.8	0.8	6.8	7.79	0.5	6.0		99.25	2.4	0.9	
117590	4.00	4.25	14.0			1.74	49.0	29.63	31.96	0.48	0.35	565.90	0.5	1.14	1.30	1.19	16.30			11.52	1927.00	21.54	81.0	93.77	0.2	0.2	10.3	9.21	0.5	7.7		100.97	1.6	1.0	
117591	3.30	2.94	11.0			1.73	39.0	28.11	30.05	0.51	0.57	1039.00	0.5	0.50	1.40	1.19	11.69																		



Sample	Fe1 wt. %	Fe2 ppm	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
117626	3.00	2.71	8.0	1.35	33.0	24.35	26.39	0.39	0.49	0.28	686.86	5.0	4.70	1.30	1.15	11.19	15.89	162.37	14.08	77.0	69.31	1.1	9.0	8.37	0.5	5.2	73.59	1.6	0.8						
117627	4.20	1.25	8.0	1.75	29.0	16.41	20.56	0.49	0.28	0.49	503.77	0.5	6.11	1.30	1.23	22.99	5.27	97.38	18.27	92.0	91.08	4.2	17.2	9.08	0.5	5.7	77.65	1.2	1.0						
117628	1.40	3.97	13.0	1.72	27.0	23.94	40.12	0.40	0.97	0.99	1.1	6.0	0.50	1.30	1.20	9.72	43.76	290.58	10.61	100.0	82.25	1.6	10.0	16.61	0.5	5.4	66.79	2.5	0.6						
117629	4.40	4.26	8.0	1.83	30.0	24.88	41.24	0.52	0.79	808.85	0.5	1.20	1.20	1.12	9.82	50.56	376.41	13.16	100.0	88.54	5.3	15.1	14.30	0.5	4.0	82.85	1.2	1.0							
117630	6.90	7.19	4.0	1.96	34.0	19.12	68.86	0.36	0.60	1178.63	0.5	0.50	0.50	0.50	0.48	2.92	42.17	763.45	20.43	100.0	111.31	0.9	17.2	18.26	0.5	5.3	51.08	1.0	0.6						
117631	5.00	5.63	6.0	1.73	36.0	26.16	49.67	0.39	1.02	2583.19	2.0	3.11	1.00	0.97	4.68	55.09	378.84	33.25	88.0	83.04	1.8	13.7	14.51	0.5	6.3	77.68	1.0	0.9							
117632	6.80	7.02	4.0	1.55	31.0	24.74	61.55	0.37	1.95	990.09	7.0	7.26	0.94	0.93	12.01	153.76	392.70	11.32	74.0	72.11	0.4	17.0	18.33	0.5	5.6	84.39	1.5	0.8							
117633	0.80	0.73	8.0	2.22	32.0	14.82	42.11	0.32	0.10	405.67	0.5	0.50	1.80	1.70	12.45	6.50	535.07	16.33	200.0	177.43	0.2	6.1	5.51	0.5	5.0	57.37	1.0	0.7							
117634	2.20	2.20	8.0	1.88	41.0	14.69	28.28	0.50	0.28	527.93	0.5	0.50	1.30	1.25	14.45	6.34	289.19	16.15	110.0	106.05	0.4	12.2	12.23	0.5	6.4	97.60	2.2	0.9							
117635	2.60	2.46	7.0	2.41	40.0	27.05	50.90	0.37	0.70	825.64	0.5	0.50	1.90	1.73	10.04	33.70	539.12	18.95	170.0	147.08	0.3	11.0	9.33	0.5	6.6	97.43	2.2	0.9							
117636	2.00	1.92	11.0	2.13	47.0	14.79	13.52	0.50	0.14	928.01	0.5	0.50	1.60	1.58	13.85	4.19	138.52	15.35	98.0	96.38	0.1	11.0	10.63	0.5	7.3	112.32	2.4	1.0							
117637	3.80	3.81	7.0	1.64	28.0	23.38	40.55	0.41	0.80	1221.62	0.5	0.50	1.30	1.20	10.43	38.36	282.01	11.80	85.0	82.95	1.8	14.1	13.70	0.5	4.9	82.95	1.2	0.8							
117638	0.60	6.30	6.0	1.95	47.0	20.01	158.58	0.47	0.69	423.77	0.5	0.50	1.00	0.87	17.16	28.03	1340.72	10.52	110.0	107.39	0.2	15.5	14.97	0.5	7.2	57.84	1.7	1.0							
117639	5.20	4.94	4.0	1.21	23.0	14.43	43.03	0.25	0.30	435.26	0.5	0.50	0.81	0.72	8.26	15.51	515.95	15.77	71.0	74.45	0.8	9.4	8.35	0.5	3.3	48.35	1.2	0.6							
117640	1.10	0.97	11.0	1.29	35.0	19.09	38.80	0.45	0.23	581.82	0.5	0.50	1.10	1.04	11.10	5.07	235.96	13.55	73.0	69.69	0.7	8.0	7.05	0.5	5.7	73.94	1.9	0.9							
117641	3.40	3.55	5.0	1.93	27.0	21.58	66.55	0.27	0.63	687.98	0.5	0.50	1.20	1.15	10.75	36.32	387.95	21.73	140.0	125.15	0.7	10.0	9.69	0.5	4.5	67.50	1.8	0.6							
117642	4.50	4.37	7.0	1.64	31.0	21.70	45.89	0.40	0.73	1025.68	0.5	0.50	1.20	1.11	10.97	40.12	588.09	9.12	88.0	85.48	0.9	14.2	13.66	0.5	5.1	85.35	1.4	0.5							
117644	0.80	0.83	11.0	1.29	21.0	7.66	7.94	0.42	0.12	627.34	0.5	0.50	1.40	1.52	9.96	0.50	128.68	11.28	62.0	55.48	0.2	10.3	10.47	0.5	3.4	118.01	1.4	0.8							
117645	2.60	2.25	8.0	1.73	37.0	14.43	34.06	0.42	0.36	624.47	0.5	0.50	1.90	1.79	8.18	14.58	335.04	17.31	140.0	110.16	0.3	8.1	7.03	0.5	5.7	104.06	1.9	0.8							
117646	1.70	1.56	7.0	1.72	32.0	17.22	28.93	0.42	0.36	638.74	0.5	0.50	1.30	1.20	10.34	10.15	232.34	11.63	120.0	100.31	0.3	9.0	8.51	0.5	5.0	103.34	1.7	0.7							
117647	2.10	1.74	7.0	1.68	25.0	14.24	30.23	0.30	0.37	586.22	0.5	0.50	2.00	1.86	6.45	12.09	442.66	14.42	130.0	101.10	0.3	7.5	6.64	0.5	4.1	107.17	1.4	0.6							
117648	0.00	0.90	10.0	1.58	22.0	8.74	22.04	0.42	0.24	757.02	0.5	0.50	1.70	1.68	8.31	32.11	407.41	8.98	74.0	78.56	0.3	8.3	7.09	0.5	4.6	104.14	1.5	0.7							
117649	2.90	3.70	10.0	1.58	22.0	15.16	48.69	0.42	0.64	742.54	0.5	0.50	1.40	1.38	8.19	20.48	413.16	5.44	78.0	66.50	1.4	10.7	9.75	0.5	4.4	81.53	1.2	0.8							
117650	3.20	2.92	10.0	1.30	25.0	13.91	30.33	0.43	0.34	833.10	0.5	0.50	1.30	1.44	7.44	17.96	388.23	9.57	85.0	67.38	0.1	12.3	10.06	0.5	5.3	77.83	1.4	0.7							
117651	3.80	2.69	7.0	1.35	31.0	15.56	27.48	0.38	0.52	833.10	0.5	0.50	1.30	1.44	7.44	17.96	388.23	9.57	85.0	67.38	0.1	12.3	10.06	0.5	5.3	77.83	1.4	0.7							
117652	3.90	3.46	7.0	1.46	38.0	13.32	51.71	0.44	0.37	573.68	0.5	0.50	1.50	1.51	9.86	14.41	730.00	6.80	75.0	69.88	0.4	13.0	11.71	0.5	6.1	66.98	1.9	1.0							
117653	3.50	3.26	8.0	1.83	34.0	21.76	35.99	0.50	0.70	1035.36	0.5	0.50	1.50	1.51	9.86	29.21	383.97	12.12	100.0	92.47	0.9	13.3	12.68	0.5	6.2	91.75	1.5	1.0							
117654	3.30	3.34	8.0	2.07	35.0	23.87	46.03	0.54	0.80	2307.84	0.5	0.50	1.30	1.31	11.92	33.06	280.41	16.01	110.0	104.05	0.8	14.3	13.72	0.5	6.3	77.41	1.7	1.0							
117655	2.90	2.53	9.0	1.71	36.0	23.29	29.44	0.52	0.56	969.52	0.5	0.50	1.80	1.70	8.92	22.02	504.42	13.05	100.0	92.66	1.1	12.3	10.95	0.5	6.5	100.41	1.6	1.0							
117656	2.20	1.89	9.0	1.37	29.0	14.67	29.66	0.45	0.43	725.64	0.5	0.50	1.70	1.61	7.47	14.59	446.18	8.70	89.0	75.10	0.6	8.5	7.32	0.5	4.8	97.71	1.6	0.8							
117657	0.80	2.51	9.0	1.45	23.0	11.93	23.79	0.35	0.28	542.83	0.5	0.50	1.30	1.33	8.70	9.96	519.91	12.85	100.0	89.10	0.5	7.7	6.79	0.5	3.7	70.43	2.0	0.6							
117658	0.80	0.79	11.0	3.96	27.0	11.68	41.70	0.37	0.13	408.43	0.5	0.50	2.20	2.30	15.03	3.82	500.23	24.98	280.0	244.86	0.1	7.5	7.35	0.5	4.4	105.43	2.1	0.6							
117659	5.20	4.44	7.0	0.89	27.0	13.91	28.50	0.38	0.74	548.22	0.5	0.50	1.60	1.55	6.49	59.66	635.42	11.33	54.0	55.80	0.4	10.4	9.18	0.5	4.3	114.21	1.5	0.6							
914000	3.43	3.98	9.0	1.67	33.41	56.41	0.92	0.92	829.94	4.0	1.59	0.86	9.24	2.46	0.86	51.38	776.81	47.22	83.0	83.0	2.9	17.0	17.19	0.5	5.3	62.30	0.1	0.8							
914001	4.13	4.08	10.0	2.5	2.06	44.0	39.10	40.80	0.76	0.85	1347.32	0.5	1.10	1.52	1.38	10.27	36.0	2.0	2.0	38.62	548.29	24.04	94.0	92.0	5.7	16.0	17.61	0.7	1.0						
914002	3.94	3.95	8.0	0.5	2.5	1.85	35.0	30.38	43.96	0.58	107.16	5.2	0.50	1.46	1.33	12.58	33.0	2.0	2.0	44.37	450.07	16.34	84.0	80.0	3.5	15.0	15.64	0.5	6.9	0.01	0.03	72.70	0.1	1.0	
914004	4.50	4.64	8.0	0.5	2.5	2.14	45.0	41.97	47.03	0.67	1.04	1366.89	6.0	0.50	1.47	1.35	11.08	37.0	2.0	47.43	670.92	16.99	110.0	96.0	4.2	18.0	18.45	0.5	7.2	0.01	0.03	92.85	1.1	1.2	
914005	4.02	4.31	8.0	0.5	2.5	1.73	35.0	32.88	41.85	0.52	1.14	1462.42	8.0	0.50	1.36	1.23	12.92	32.0	2.0	47.07	710.47	23.55	100.0	71.0	3.1	17.0	17.70	0.5	5.7	0.01	0.03	81.87	1.0	1.1	
914007	3.23	3.11	17.0	0.5	2.5	0.91	41.0	38.99	23.60	0.79	0.72	1798.52	0.5	0.50	1.60	1.42	17.68	36.0	81.0	29.87	978.74	14.64	41.0	56.0	0.9	10.0	9.80	0.5	6.8	0.01	0.03	117.10	1.5	1.3	
914008	3.72	4.37	14.0	0.5	2.5	1.48	35.0	36.65	37.22	0.53	1.21	2357.91	0.5	1.02	1.34	1.50	13.34	29.0	2.0	46.76	1040.00	29.54	60.0	81.0	2.7	15.0	15.84	0.5	6.2	0.01	0.03	102.11	0.1	1.2	
914009	5.38	6.04	10.0	0.5	2.5	1.96	40.0	39.13	47.89	0.55	1.26	2316.47	0.5	1.26	1.22	12.7	9.89	40.0	2.0	73.25	1231.26	37.96	110.0	111.0	3.5	21.0	20.82	0.5	7.7	0.01	0.03	91.17	1.7	1.4	
914011	6.29	7.03	6.0	0.5	2.5	2.34	40.0	41.68	52.09	0.60	1.99	2473.01	0.5	0.50	0.80	0.71	9.230	33.0	2.0	212.47	1024.06	36.73	130.0	110.0	4.9	26.0	26.62	0.5	7.1	0.01	0.03	61.60	1.2	1.3	
914012	7.43	7.45	6.0	0.5	2.5	1.71	42.0	40.69	44.70																										



Sample	Fe1 wt. %	Fe2 ppm	Hf1 ppm	Hg1 ppm	Ir1 ppb	K2 wt. %	La1 ppm	La2 ppm	Li2 ppm	Lu1 ppm	Mg2 ppm	Mn2 ppm	Mo1 ppm	Mo2 ppm	Na1 wt. %	Na2 wt. %	Nb2 ppm	Nd1 ppm	Ni1 ppm	Ni2 ppm	P2 ppm	Pb2 ppm	Rb1 ppm	Rb2 ppm	Rb6 ppm	Sb1 ppm	Sc1 ppm	Sc2 ppm	Se1 ppm	Sm1 ppm	Sn1 wt. %	Sr1 wt. %	Sr2 ppm	Ta1 ppm	Tb1 ppm
914045	2.91	3.00	10.0	0.5	2.5	1.97	34.0	31.94	40.23	0.69	0.61	743.68	0.5	3.43	1.16	1.07	16.88	30.0	2.0	41.79	235.02	14.20	98.0	94.0	3.2	120	12.68	0.5	5.3	0.01	0.03	64.40	1.3	1.0	
914046	2.27	2.68	11.0	0.5	2.5	1.66	36.0	35.91	165.33	0.56	0.60	859.08	2.0	1.41	0.70	0.64	9.53	31.0	2.0	94.74	1638.44	27.67	110.0	98.0	11.0	3.2	120	12.53	0.5	4.6	0.01	0.03	54.69	0.8	1.2
914047	5.72	5.80	12.0	0.5	2.5	1.86	36.0	32.98	29.75	1.41	0.22	257.34	0.5	3.71	1.20	0.95	22.69	22.0	2.0	4.08	599.73	104.96	150.0	133.0	3.7	180	11.51	0.5	5.3	0.01	0.03	103.21	0.1	1.2	
914049	5.46			0.5	2.5	2.34	29.0	22.78	29.75	1.41	0.27	2096.43	0.5	1.80		0.56	11.44			27.80	3097.70	39.29		91.0				15.06			66.87		1.3		
914050	4.72	4.23	13.0	0.5	2.5	1.99	38.0	30.35	52.60	0.64	0.52	170.85	0.5	0.50	0.99	0.86	12.83	30.0	2.0	47.21	721.57	32.70	140.0	109.0	8.4	140	12.27	1.0	4.8	0.01	0.03	63.26	1.1	0.8	
914051	2.42	3.28	11.0	0.5	2.5	1.92	30.0	36.80	37.73	0.50	0.78	1269.88	0.5	1.15	0.95	1.62	13.38	25.0	2.0	30.26	808.97	17.41	98.0	91.0	3.3	130	13.71	0.5	4.7	0.01	0.03	96.96	0.1	1.0	
914052	3.29	3.47	9.0	0.5	2.5	1.90	36.0	35.32	42.13	0.61	0.82	1405.38	0.5	0.50	1.60	1.54	12.50	32.0	2.0	34.15	825.79	23.69	86.0	94.0	1.8	140	15.38	0.5	5.9	0.01	0.03	94.32	1.3	0.9	
914053	3.53	3.67	8.0	0.5	2.5	2.27	43.0	41.24	58.56	0.66	0.95	1507.00	5.0	0.50	1.65	1.61	15.42	38.0	2.0	30.74	1101.91	23.20	140.0	136.0	1.3	160	17.76	2.0	6.7	0.01	0.03	106.01	2.1	1.0	
914054	4.81	5.01	6.0	0.5	2.5	2.11	35.0	31.32	61.03	0.54	1.23	1479.84	6.0	1.40	1.13	1.00	12.87	31.0	2.0	81.95	696.76	28.86	100.0	100.0	1.6	170	17.93	0.5	5.5	0.01	0.03	83.31	0.6	0.9	
914055	4.70	4.95	6.0	0.5	2.5	2.10	40.0	38.46	53.32	0.59	1.26	1793.06	4.0	1.33	1.26	1.12	13.21	38.0	2.0	56.67	763.31	23.78	96.0	93.0	2.4	170	18.55	0.5	6.6	0.01	0.03	86.19	0.8	0.9	
914056	4.15	4.69	5.0	0.5	2.5	2.05	42.0	41.80	51.76	0.56	1.16	1761.05	2.0	1.32	1.24	1.20	13.32	35.0	2.0	53.00	728.06	19.13	100.0	98.0	1.6	150	17.10	0.5	6.3	0.01	0.03	95.01	0.7	1.1	
914057	3.23	3.49	10.0	0.5	2.5	1.47	42.0	40.18	34.45	0.67	0.95	1474.13	0.5	1.17	1.59	1.59	15.15	39.0	2.0	42.73	926.94	18.85	70.0	58.0	1.8	120	13.10	0.5	6.7	0.01	0.03	105.63	1.1	1.1	
914058	2.28	2.55	24.0	0.5	2.5	2.74	29.0	31.01	24.43	0.97	0.40	775.00	0.5	1.69	1.70	1.93	15.75	28.0	120.0	13.36	466.08	26.27	130.0	150.0	2.8	140	13.37	0.5	5.8	0.01	0.03	62.44	1.3	1.2	
914059	1.67	2.02	27.0	0.5	2.5	2.88	27.0	32.69	24.23	0.99	0.24	499.62	0.5	1.67	1.72	2.09	16.10	34.0	170.0	3.53	360.62	32.96	130.0	151.0	3.0	100	10.91	0.5	5.0	0.01	0.03	62.44	1.3	1.2	
914060	4.79	4.66	11.0	0.5	2.5	2.05	43.0	44.00	37.87	0.75	0.88	1494.38	0.5	1.72	1.05	0.86	12.54	37.0	2.0	76.10	797.48	31.98	110.0	95.0	7.3	160	16.12	0.5	8.4	0.01	0.03	57.85	0.1	1.4	
914061	3.71	3.85	8.0	0.5	2.5	2.45	33.0	30.26	34.44	0.62	0.88	876.97	2.0	1.66	1.34	1.18	19.29	25.0	2.0	24.47	721.15	72.31	130.0	138.0	0.5	160	17.02	0.5	4.9	0.01	0.03	66.33	1.6	0.7	
914062	4.74	5.65	7.0	0.5	2.5	2.61	41.0	42.68	66.14	0.47	1.21	1080.90	3.0	1.86	0.88	0.96	17.48	33.0	2.0	60.38	1071.40	40.77	120.0	150.0	0.8	190	19.31	0.5	6.3	0.01	0.03	62.42	0.1	1.0	
914063	4.74	4.65	10.0	0.5	2.5	2.39	53.0	33.13	37.44	0.73	1.24	1295.90	0.5	0.50	1.38	1.19	15.72	43.0	2.0	54.28	895.73	18.62	130.0	113.0	1.8	180	18.83	0.5	8.2	0.01	0.03	80.73	1.5	1.1	
914064	4.62	4.73	10.0	0.5	2.5	2.31	49.0	40.48	36.89	0.68	1.16	1654.58	4.0	1.03	1.40	1.23	14.91	38.0	150.0	58.94	903.01	25.09	110.0	114.0	1.9	180	18.28	0.5	7.5	0.01	0.03	69.03	1.3	1.3	
914065	4.66	4.81	8.0	0.5	2.5	1.81	42.0	39.73	35.47	0.66	1.39	1262.76	0.5	0.50	1.57	1.43	13.79	32.0	2.0	81.89	718.89	19.60	95.0	83.0	1.2	180	19.76	0.5	6.2	0.01	0.03	100.42	1.6	1.0	
914066	3.78	4.08	7.0	0.5	2.5	2.05	22.0	19.65	46.07	0.52	1.35	930.24	2.0	1.08	1.45	1.33	16.30	24.0	2.0	36.03	529.23	40.40	120.0	118.0	0.6	170	18.34	0.5	3.4	0.01	0.03	83.97	1.3	0.6	
914067	6.34	6.56	6.0	0.5	2.5	2.11	51.0	43.31	55.08	0.64	1.42	3492.30	3.0	0.50	1.21	1.07	13.39	44.0	2.0	61.11	935.84	39.80	87.0	91.0	3.2	230	24.38	0.5	8.4	0.01	0.03	82.03	1.3	1.3	
914068	4.54	4.73	8.0	0.5	2.5	2.72	53.0	47.56	48.37	0.86	0.97	1099.91	1.0	1.37	1.13	0.93	13.68	50.0	2.0	59.69	550.85	16.87	140.0	150.0	5.0	190	20.55	0.5	8.6	0.01	0.03	74.96	1.2	1.7	
914069	4.13	4.22	7.0	0.5	2.5	2.13	49.0	29.94	45.24	0.87	0.98	1081.88	0.5	0.50	1.02	1.11	11.58	41.0	2.0	50.88	354.73	17.38	130.0	103.0	4.7	170	16.42	0.5	7.9	0.01	0.03	72.19	1.1	1.4	
914070	5.25	5.32	6.0	0.5	2.5	2.54	61.0	53.56	57.23	0.75	1.32	1695.03	8.0	1.97	1.29	1.14	14.21	57.0	110.0	86.32	881.98	57.26	140.0	140.0	1.7	150	18.63	0.5	11.0	0.01	0.03	69.60	1.5	1.3	
914072	3.90	4.36	9.0	0.5	2.5	2.14	60.0	63.09	67.57	0.63	1.15	1465.03	0.5	0.50	1.61	1.87	16.15	46.0	2.0	43.12	1448.30	26.00	130.0	113.0	0.7	160	17.49	0.5	9.1	0.01	0.03	146.49	1.8	1.6	
914073	3.80	4.43	10.0	0.5	2.5	2.12	59.0	65.97	65.30	0.69	1.05	1305.53	3.0	0.50	1.75	1.97	15.89	46.0	210.0	41.64	1452.27	24.72	130.0	111.0	0.4	150	15.64	0.5	9.2	0.01	0.03	166.46	1.7	1.4	
914075	3.55	3.83	16.0	0.5	2.5	2.48	85.0	78.52	106.77	0.72	0.72	700.38	0.5	1.49	1.73	1.80	20.17	69.0	120.0	29.39	1274.28	37.94	170.0	175.0	0.5	120	11.35	0.5	12.0	0.01	0.03	84.82	2.3	1.8	
914076						1.92		44.09	40.24			2490.37		5.31						562.08	1288.13	61.49		83.0				28.37			49.10				
914077	2.79	2.89	7.0	0.5	2.5	2.50	46.0	44.00	62.06	0.49	0.78	908.79	3.0	0.50	1.88	1.87	14.58	45.0	2.0	34.86	1204.03	30.11	200.0	195.0	0.4	110	11.04	0.5	6.7	0.01	0.03	95.57	1.8	1.0	
914078	3.92	4.53	8.0	0.5	2.5	2.11	37.0	37.98	73.07	0.41	0.78	699.69	5.0	2.26	1.70	1.98	14.58	29.0	2.0	23.69	1642.31	80.92	120.0	131.0	0.4	120	11.73	0.5	5.6	0.01	0.03	124.91	0.1	0.9	
914079						2.77		48.26	72.22		1.34	7374.97		14.68						82.80	2665.30	180.41		131.0				32.94			79.59				
914080	4.28	4.68	7.0	0.5	2.5	2.64	47.0	45.35	39.46	0.61	1.29	1444.89	0.5	0.50	1.46	1.39	16.10	37.0	2.0	40.27	882.69	16.88	140.0	137.0	0.6	160	17.59	0.5	7.0	0.01	0.03	98.02	1.1	1.1	
914083	4.44	4.81	7.0	0.5	2.5	2.09	40.0	36.94	37.94	0.52	1.72	1908.88	0.5	0.50	1.42	1.38	12.54	39.0	2.0	78.16	795.50	12.37	99.0	97.0	1.4	160	17.57	0.5	6.4	0.01	0.03	95.86	1.1	0.8	
914084	4.19	4.53	7.0	0.5	2.5	2.31	47.0	44.68	38.30	0.63	1.13	1339.14	3.0	0.50	1.42	1.38	14.73	38.0	2.0	46.67	849.70	16.41	120.0	113.0	1.2	150	16.34	0.5	7.3	0.01	0.03	85.08	1.1	1.1	
914085	4.21	4.84	7.0	0.5	2.5	2.10	39.0	38.26	36.73	0.55	1.32	1229.70	0.5	0.50	1.35	1.38	12.73	34.0	130.0	69.35	796.10	14.49	100.0	99.0	1.5	160	18.37	0.5	6.0	0.01	0.03	93.48	1.0	1.0	
914086	4.02	4.47	9.0	0.5	2.5	2.40	56.0	55.25	41.71	0.66	1.17	1205.02	0.5	0.50	1.49	1.53	16.38	47.0	2.0	42.43	984.60	26.04	110.0	116.0	0.8	140	16.28	0.5	8.4	0.01	0.03	94.19	1.3	1.0	
914087	4.55	6.15	7.0	0.5	2.5	2.20	41.0	36.18	66.89	0.54	1.31	2178.20	3.0	0.50	1.42	0.90	11.88	31.0																	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
97003	14.4	6018.00	3.1	89.00	3.0	17.00	2.6	82.00	250.00	82.00	82.00
97004	7.7	5902.00	2.4	109.00	2.0	7.00	2.9	36.00	350.00	73.00	73.00
97005	12.5	4953.00	3.6	97.00	5.0	24.00	3.3	72.00	300.00	63.00	63.00
97007	11.9	4175.00	3.1	82.00	2.0	14.00	2.8	58.00	310.00	61.00	61.00
97008	8.8	4871.00	1.9	91.00	3.0	7.00	2.0	50.00	230.00	44.00	44.00
97009	10.6	4848.00	2.7	82.00	14.0	15.00	2.9	53.00	270.00	63.00	63.00
97010	13.0	4634.00	4.7	86.00	6.0	17.00	3.2	75.00	250.00	62.00	62.00
97011	16.7	3749.00	4.5	50.00	3.0	12.00	2.5	41.00	50.00	53.00	53.00
97013	13.4	4563.00	3.8	84.00	3.0	8.00	2.3	53.00	50.00	62.00	62.00
97015	11.1	4727.00	5.0	50.00	4.0	8.00	2.0	19.00	300.00	52.00	52.00
97016	16.0	3398.00	5.4	61.00	4.0	8.00	2.5	27.00	390.00	44.00	44.00
97017	12.9	2646.00	5.0	33.00	2.0	12.00	2.6	31.00	160.00	43.00	43.00
97018	12.7	2681.00	3.2	34.00	2.0	6.00	1.8	25.00	170.00	47.00	47.00
97019	10.0	2471.00	3.3	22.00	2.0	11.00	2.0	17.00	210.00	43.00	43.00
97020	11.2	3337.00	3.2	21.00	1.0	11.00	2.4	21.00	210.00	56.00	56.00
97022	10.0	2703.00	3.0	34.00	2.0	6.00	1.9	23.00	230.00	42.00	42.00
97023	11.0	4321.00	3.3	60.00	2.0	9.00	2.3	33.00	270.00	58.00	58.00
97024	11.1	3645.00	4.0	49.00	2.0	12.00	2.0	32.00	340.00	52.00	52.00
97030	10.7	3202.00	4.0	44.00	2.0	11.00	2.5	35.00	190.00	59.00	59.00
97031	10.0	3934.00	3.2	42.00	4.0	7.00	2.5	17.00	370.00	64.00	64.00
97032	6.7	2226.00	2.9	26.00	2.0	9.00	1.7	19.00	210.00	40.00	40.00
97033	12.6	2798.00	4.6	34.00	1.0	11.00	2.2	23.00	280.00	38.00	38.00
97034	9.2	3012.00	3.0	47.00	2.0	15.00	2.7	35.00	460.00	48.00	48.00
97035	10.1	4574.00	7.3	61.00	3.0	22.00	3.1	48.00	440.00	52.00	52.00
97036	10.0	3312.00	2.6	55.00	3.0	12.00	2.5	55.00	300.00	52.00	52.00
97037	12.7	4202.00	4.4	70.00	3.0	13.00	2.7	64.00	360.00	56.00	56.00
97038	13.0	4036.00	3.3	83.00	4.0	14.00	2.9	65.00	330.00	65.00	65.00
97039	12.1	3666.00	4.8	79.00	4.0	13.00	2.8	59.00	260.00	58.00	58.00
97040	13.1	4051.00	3.6	71.00	4.0	13.00	3.1	48.00	380.00	63.00	63.00
97042	11.7	3856.00	5.2	66.00	2.0	18.00	2.9	55.00	370.00	51.00	51.00
97043	11.3	3865.00	4.0	75.00	4.0	15.00	2.6	58.00	260.00	59.00	59.00
97044	11.1	3647.00	3.4	58.00	3.0	14.00	2.7	49.00	380.00	48.00	48.00
97045	10.7	5233.00	3.3	89.00	3.0	19.00	2.8	57.00	190.00	35.00	35.00
97046	11.2	3563.00	3.6	41.00	3.0	14.00	2.3	42.00	270.00	56.00	56.00
97047	12.9	3814.00	3.2	66.00	3.0	13.00	2.5	57.00	270.00	63.00	63.00
97048	10.0	3707.00	2.7	72.00	3.0	16.00	2.5	50.00	230.00	51.00	51.00
97049	12.2	3924.00	7.5	85.00	3.0	13.00	3.0	60.00	280.00	59.00	59.00
97050	12.4	3999.00	3.6	67.00	3.0	19.00	3.0	48.00	310.00	49.00	49.00
97051	18.3	5133.00	5.2	94.00	4.0	34.00	4.4	56.00	560.00	37.00	37.00
97062	25.7	4256.00	4.3	58.00	2.0	37.00	3.5	40.00	620.00	60.00	60.00
97063	11.0	3170.00	3.4	44.00	2.0	15.00	2.3	26.00	370.00	44.00	44.00
97054	14.5	4128.00	3.9	72.00	2.0	18.00	2.8	53.00	450.00	39.00	39.00
97055	10.6	3123.00	3.4	49.00	1.0	18.00	2.9	27.00	370.00	34.00	34.00
97056	12.0	2869.00	3.9	36.00	2.0	14.00	2.7	26.00	270.00	51.00	51.00
97057	10.0	3216.00	3.7	42.00	2.0	17.00	2.5	51.00	310.00	39.00	39.00
97058	11.8	3284.00	3.3	54.00	4.0	11.00	2.7	39.00	170.00	53.00	53.00
97059	11.0	3011.00	3.1	47.00	2.0	14.00	2.8	44.00	330.00	50.00	50.00
97060	10.9	3282.00	3.1	49.00	2.0	17.00	2.5	34.00	440.00	42.00	42.00
97061	12.0	4047.00	3.5	80.00	3.0	11.00	2.5	53.00	310.00	61.00	61.00
97062	13.1	3401.00	3.5	48.00	1.0	16.00	2.5	33.00	460.00	42.00	42.00
97063	14.3	3261.00	4.5	45.00	2.0	17.00	2.9	29.00	340.00	50.00	50.00
97065	10.6	3515.00	3.0	66.00	1.0	9.00	2.2	26.00	240.00	41.00	41.00
97066	14.0	7964.00	9.3	163.00	5.0	13.00	1.2	124.00	300.00	41.00	41.00
97067	12.6	2583.00	7.4	46.00	3.0	16.00	2.2	33.00	170.00	29.00	29.00
97068	7.1	13583.00	5.5	171.00	1.0	12.00	4.3	24.00	3200.00	110.00	110.00
97069	8.4	2192.00	2.8	30.00	1.0	8.00	1.5	21.00	150.00	33.00	33.00
97070	13.9	3086.00	8.3	48.00	2.0	13.00	2.0	33.00	260.00	51.00	51.00
97071	9.0	2133.00	3.1	28.00	2.0	11.00	1.9	17.00	180.00	42.00	42.00
97072	14.6	3243.00	4.4	48.00	1.0	15.00	2.3	27.00	310.00	38.00	38.00
97073	10.6	3715.00	3.5	42.00	3.0	12.00	2.7	38.00	390.00	58.00	58.00
97074	10.4	3684.00	2.8	51.00	3.0	12.00	2.7	43.00	270.00	64.00	64.00
97076	8.7	5555.00	2.6	80.00	4.0	9.00	1.9	44.00	290.00	67.00	67.00
97077	10.8	4370.00	2.5	57.00	2.0	15.00	2.6	51.00	340.00	60.00	60.00
97078	10.7	4456.00	2.5	75.00	4.0	12.00	2.3	56.00	240.00	66.00	66.00
97079	8.1	4188.00	2.5	46.00	3.0	16.00	2.8	38.00	410.00	59.00	59.00
97080	10.0	4319.00	2.8	76.00	3.0	12.00	2.0	35.00	350.00	73.00	73.00
97081	12.4	4191.00	3.3	74.00	3.0	14.00	3.0	62.00	220.00	73.00	73.00



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
97083	12.2	4574.00	2.9	55.00	3.0	11.00	2.1	51.00	270.00	59.00	59.00
97084	11.1	4641.00	2.8	60.00	3.0	16.00	2.6	54.00	300.00	58.00	58.00
97085	11.5	4644.00	3.0	67.00	3.0	16.00	2.3	57.00	280.00	61.00	61.00
97086	18.7	3399.00	3.2	50.00	4.0	21.00	2.6	42.00	50.00	41.00	41.00
97087	14.0	7736.00	3.3	108.00	3.0	16.00	2.6	68.00	320.00	56.00	56.00
97088	10.8	5936.00	3.2	85.00	3.0	17.00	3.1	75.00	250.00	67.00	67.00
97089	10.6	4376.00	3.0	66.00	4.0	12.00	2.4	69.00	320.00	64.00	64.00
97090	16.1	3031.00	7.5	62.00	1.0	23.00	1.7	43.00	50.00	26.00	26.00
97091	10.6	4221.00	2.8	66.00	2.0	10.00	2.6	50.00	290.00	70.00	70.00
97092	12.0	4396.00	2.9	71.00	4.0	13.00	1.7	60.00	240.00	72.00	72.00
97093	8.6	3747.00	2.8	35.00	2.0	15.00	2.4	40.00	400.00	54.00	54.00
97095	8.0	5709.00	2.8	81.00	3.0	9.00	3.0	53.00	380.00	92.00	92.00
97096	13.1	4249.00	3.6	65.00	3.0	14.00	2.6	53.00	370.00	78.00	78.00
97097	12.5	4089.00	2.9	63.00	3.0	13.00	2.7	52.00	270.00	68.00	68.00
97098	12.9	4715.00	2.7	93.00	4.0	13.00	2.2	57.00	50.00	69.00	69.00
97099	14.3	3625.00	3.6	105.00	2.0	9.00	2.2	86.00	250.00	114.00	114.00
97100	14.9	3919.00	3.7	83.00	3.0	13.00	3.8	65.00	250.00	85.00	85.00
97102	13.6	1.00	3.1	1.00	3.0	1.00	2.3	1.00	320.00	1.00	1.00
97103	10.0	5052.00	2.8	51.00	3.0	18.00	2.8	65.00	460.00	61.00	61.00
97104	8.1	4476.00	2.2	50.00	2.0	13.00	2.1	43.00	330.00	54.00	54.00
97105	12.7	4409.00	3.3	100.00	3.0	8.00	1.7	81.00	50.00	66.00	66.00
97106	10.9	3767.00	3.2	57.00	3.0	10.00	2.3	47.00	410.00	58.00	58.00
97107	13.2	4186.00	3.0	29.00	2.0	5.00	2.5	11.00	340.00	50.00	50.00
97108	17.4	3349.00	5.4	45.00	2.0	19.00	2.8	44.00	430.00	51.00	51.00
97109	12.3	3019.00	3.3	42.00	3.0	7.00	1.6	29.00	150.00	46.00	46.00
97110	15.7	2676.00	7.7	34.00	3.0	12.00	2.3	22.00	240.00	40.00	40.00
97111	15.1	3161.00	4.2	40.00	3.0	9.00	1.7	30.00	310.00	47.00	47.00
97112	13.9	3864.00	5.0	54.00	4.0	12.00	2.3	17.00	210.00	62.00	62.00
97113	15.1	3887.00	3.8	46.00	3.0	7.00	2.2	26.00	350.00	53.00	53.00
97114	15.2	3500.00	4.1	54.00	2.0	9.00	2.0	43.00	270.00	52.00	52.00
97115	23.3	3034.00	6.7	30.00	2.0	12.00	2.6	25.00	360.00	54.00	54.00
97116	15.6	3359.00	5.2	39.00	2.0	11.00	2.9	26.00	290.00	60.00	60.00
97117	19.2	3740.00	5.6	42.00	3.0	10.00	3.1	27.00	380.00	53.00	53.00
97118	29.2	3535.00	11.1	42.00	3.0	27.00	5.8	56.00	500.00	63.00	63.00
97119	20.1	3732.00	5.9	48.00	2.0	11.00	1.4	42.00	50.00	66.00	66.00
97120	21.8	3489.00	10.0	45.00	3.0	16.00	4.6	55.00	350.00	56.00	56.00
97122	21.5	4194.00	8.9	60.00	2.0	27.00	3.8	48.00	450.00	46.00	46.00
97123	11.1	3204.00	4.0	29.00	2.0	12.00	2.1	23.00	240.00	46.00	46.00
97124	10.3	2897.00	3.9	32.00	1.0	11.00	2.2	23.00	260.00	41.00	41.00
97125	19.1	3792.00	7.1	40.00	3.0	11.00	3.1	40.00	220.00	65.00	65.00
97126	16.2	3312.00	10.6	39.00	4.0	13.00	2.9	44.00	220.00	48.00	48.00
97127	14.0	3584.00	4.3	46.00	3.0	8.00	2.7	39.00	260.00	56.00	56.00
97128	10.0	3132.00	4.3	42.00	3.0	11.00	2.0	30.00	220.00	38.00	38.00
97129	12.4	4100.00	4.1	43.00	2.0	13.00	2.7	32.00	360.00	57.00	57.00
97130	13.7	3637.00	5.1	39.00	2.0	12.00	3.3	30.00	320.00	60.00	60.00
97131	8.9	4043.00	2.3	91.00	2.0	12.00	2.5	82.00	50.00	52.00	52.00
97132	9.3	4326.00	2.6	90.00	2.0	14.00	2.3	60.00	350.00	50.00	50.00
97133	10.0	3842.00	2.6	76.00	2.0	12.00	2.5	53.00	310.00	58.00	58.00
97134	9.1	3536.00	2.3	62.00	3.0	12.00	2.2	46.00	360.00	58.00	58.00
97135	10.3	4309.00	3.1	111.00	4.0	17.00	3.0	72.00	340.00	63.00	63.00
97136	10.2	4384.00	2.5	90.00	2.0	13.00	2.5	70.00	270.00	60.00	60.00
97137	10.5	4206.00	2.8	75.00	2.0	13.00	2.5	51.00	350.00	58.00	58.00
97138	11.1	4058.00	2.7	72.00	2.0	12.00	2.7	60.00	280.00	57.00	57.00
97139	9.1	4139.00	2.5	94.00	3.0	13.00	2.6	61.00	250.00	51.00	51.00
97141	9.2	2760.00	2.3	55.00	4.0	10.00	2.5	42.00	360.00	55.00	55.00
97142	9.4	4116.00	2.8	88.00	3.0	12.00	2.9	59.00	270.00	60.00	60.00
97143	12.0	4450.00	3.4	111.00	4.0	15.00	3.0	80.00	260.00	66.00	66.00
97144	8.5	4423.00	2.3	109.00	3.0	11.00	2.4	65.00	50.00	56.00	56.00
97145	9.5	4532.00	2.7	107.00	3.0	13.00	2.9	60.00	250.00	65.00	65.00
97146	10.8	4213.00	3.5	96.00	2.0	14.00	3.1	63.00	370.00	63.00	63.00
97147	11.1	4132.00	2.7	110.00	2.0	11.00	2.7	85.00	50.00	62.00	62.00
97148	13.6	4156.00	3.1	84.00	3.0	18.00	3.4	72.00	360.00	73.00	73.00
97149	14.1	4097.00	3.3	101.00	4.0	15.00	3.2	79.00	50.00	75.00	75.00
97150	7.4	4623.00	2.5	92.00	2.0	12.00	2.7	50.00	320.00	57.00	57.00
97152	9.0	3968.00	2.3	70.00	2.0	12.00	2.5	63.00	340.00	54.00	54.00
97153	10.0	3948.00	2.7	70.00	2.0	15.00	2.6	52.00	310.00	56.00	56.00
97154	7.7	4464.00	2.6	85.00	3.0	15.00	2.6	54.00	300.00	55.00	55.00
97155	9.2	4790.00	2.8	107.00	3.0	18.00	3.3	74.00	370.00	61.00	61.00
97156	10.0	3985.00	2.5	82.00	2.0	13.00	2.8	64.00	50.00	60.00	60.00
97157	13.4	3823.00	3.0	80.00	8.0	14.00	2.8	59.00	300.00	67.00	67.00
97158	10.0	3927.00	2.9	77.00	2.0	13.00	2.6	65.00	50.00	57.00	57.00
97159	11.1	4486.00	3.7	105.00	2.0	15.00	2.4	65.00	360.00	61.00	61.00



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
97160	7.6	4602.00	2.7	120.00	3.0	11.00	2.0	69.00	59.00	50.00	59.00
97161	10.2	3920.00	2.4	96.00	2.0	11.00	2.4	63.00	50.00	50.00	58.00
97163	13.4	2659.00	6.6	29.00	3.0	9.00	1.2	22.00	50.00	51.00	51.00
97164	12.5	3492.00	4.2	39.00	2.0	12.00	1.4	27.00	260.00	55.00	55.00
97166	12.6	2975.00	4.7	30.00	2.0	13.00	1.5	20.00	170.00	52.00	52.00
97167	23.0	3631.00	8.0	53.00	4.0	28.00	3.0	55.00	100.00	58.00	58.00
97168	13.7	3266.00	3.8	45.00	2.0	10.00	0.7	31.00	50.00	54.00	54.00
97169	16.7	3187.00	8.0	40.00	4.0	16.00	1.4	34.00	250.00	50.00	50.00
97170	15.2	3369.00	7.4	41.00	2.0	25.00	2.5	41.00	200.00	46.00	46.00
97171	14.5	4941.00	3.2	95.00	3.0	13.00	1.4	68.00	50.00	72.00	72.00
97173	17.3	4365.00	3.9	69.00	2.0	12.00	3.6	48.00	540.00	54.00	54.00
97174	12.1	4626.00	3.9	56.00	3.0	12.00	3.0	37.00	400.00	70.00	70.00
97175	11.8	3981.00	2.8	58.00	2.0	10.00	2.7	35.00	460.00	46.00	46.00
97176	8.8	3509.00	2.4	60.00	2.0	7.00	1.9	21.00	50.00	45.00	45.00
97177	30.2	2484.00	10.0	12.00	1.0	16.00	19.0	12.00	50.00	191.00	191.00
97178	10.7	7009.00	2.9	62.00	4.0	6.00	2.7	9.00	510.00	71.00	71.00
97179	9.5	6062.00	2.9	100.00	5.0	9.00	2.5	33.00	400.00	60.00	60.00
97181	10.1	9314.00	2.9	59.00	9.0	5.00	2.8	10.00	840.00	65.00	65.00
97182	10.1	10117.00	3.1	112.00	2.0	7.00	3.0	17.00	510.00	66.00	66.00
97184	2.9	12820.00	2.9	126.00	1.0	16.00	3.4	19.00	2700.00	45.00	45.00
97185	6.5	3494.00	2.4	51.00	2.0	6.00	2.1	12.00	380.00	54.00	54.00
97186	8.2	3731.00	2.7	33.00	3.0	5.00	2.8	8.00	520.00	64.00	64.00
97187	7.7	3174.00	2.2	42.00	3.0	11.00	1.5	34.00	340.00	47.00	47.00
97188	7.4	4736.00	2.3	51.00	3.0	5.00	1.9	14.00	290.00	69.00	69.00
97189	5.5	4691.00	2.3	48.00	4.0	6.00	2.0	18.00	340.00	76.00	76.00
97190	5.5	6402.00	2.1	56.00	3.0	6.00	2.2	16.00	450.00	77.00	77.00
97191	8.6	4070.00	2.8	49.00	3.0	6.00	2.8	11.00	530.00	66.00	66.00
97192	10.2	4400.00	3.0	60.00	3.0	6.00	3.0	10.00	470.00	67.00	67.00
97193	16.9	5931.00	3.7	90.00	5.0	7.00	4.0	14.00	440.00	79.00	79.00
97194	8.2	5255.00	2.7	93.00	6.0	9.00	2.7	17.00	260.00	81.00	81.00
97195	8.9	4883.00	2.8	104.00	4.0	7.00	3.0	17.00	350.00	79.00	79.00
97196	11.8	5535.00	3.3	41.00	3.0	5.00	3.2	10.00	680.00	64.00	64.00
97197	16.8	5730.00	3.8	76.00	3.0	4.00	2.6	11.00	890.00	76.00	76.00
97198	10.0	3346.00	2.4	54.00	3.0	10.00	1.9	44.00	390.00	40.00	40.00
97200	7.6	3870.00	2.4	84.00	3.0	9.00	2.4	47.00	320.00	62.00	62.00
97201	10.0	4027.00	2.6	95.00	3.0	13.00	2.5	71.00	230.00	65.00	65.00
97202	15.4	4560.00	3.0	82.00	5.0	19.00	2.9	67.00	460.00	70.00	70.00
97203	9.2	4481.00	2.5	92.00	2.0	17.00	3.4	56.00	220.00	59.00	59.00
97205	8.1	4867.00	2.8	84.00	3.0	9.00	2.8	43.00	290.00	66.00	66.00
97206	7.5	6315.00	2.4	97.00	3.0	8.00	2.0	20.00	260.00	83.00	83.00
97207	10.0	3623.00	2.7	89.00	10.0	13.00	2.7	69.00	390.00	63.00	63.00
97208	10.2	4567.00	3.8	119.00	3.0	15.00	2.7	75.00	330.00	73.00	73.00
97209	10.3	5012.00	2.8	66.00	3.0	7.00	3.3	15.00	240.00	61.00	61.00
97210	7.5	6197.00	2.8	82.00	4.0	7.00	2.8	15.00	400.00	85.00	85.00
97211	7.4	5293.00	2.3	59.00	34.0	5.00	2.3	11.00	450.00	56.00	56.00
97212	6.3	6130.00	2.1	62.00	4.0	5.00	2.1	11.00	380.00	52.00	52.00
97214	6.6	2582.00	5.0	19.00	3.0	4.00	1.0	17.00	50.00	83.00	83.00
97215	9.0	6907.00	3.3	49.00	4.0	7.00	2.4	15.00	860.00	60.00	60.00
97216	7.5	4943.00	2.4	91.00	2.0	8.00	1.7	22.00	50.00	43.00	43.00
97217	8.4	4761.00	3.1	78.00	3.0	10.00	2.0	60.00	50.00	58.00	58.00
97218	10.0	6310.00	2.8	83.00	2.0	7.00	3.2	22.00	450.00	59.00	59.00
97219	10.0	4372.00	2.4	76.00	3.0	10.00	2.2	57.00	330.00	60.00	60.00
97220	8.5	3944.00	2.2	76.00	3.0	9.00	2.3	38.00	50.00	52.00	52.00
97221	6.3	3859.00	1.9	51.00	3.0	10.00	2.0	32.00	270.00	48.00	48.00
97222	9.0	5061.00	2.6	69.00	3.0	8.00	2.7	29.00	330.00	77.00	77.00
97223	6.6	4271.00	2.3	41.00	4.0	11.00	2.5	30.00	390.00	53.00	53.00
97224	8.9	4824.00	3.0	106.00	6.0	8.00	2.7	27.00	50.00	69.00	69.00
97225	9.4	3670.00	2.6	79.00	2.0	7.00	1.9	41.00	50.00	47.00	47.00
97226	9.2	4191.00	2.6	89.00	2.0	9.00	2.2	53.00	250.00	59.00	59.00
97227	7.9	4542.00	2.7	59.00	3.0	8.00	2.4	25.00	340.00	53.00	53.00
97228	9.1	4316.00	2.8	32.00	2.0	4.00	2.3	8.00	630.00	62.00	62.00
97229	10.0	4570.00	3.8	38.00	2.0	8.00	3.8	15.00	940.00	89.00	89.00
97230	3.0	1801.00	2.7	13.00	3.0	3.00	0.0	21.00	50.00	84.00	84.00
97231	13.5	4333.00	7.4	75.00	2.0	11.00	2.4	34.00	50.00	42.00	42.00
97232	11.4	3543.00	3.7	52.00	2.0	16.00	2.9	32.00	320.00	49.00	49.00
97234	9.4	6571.00	2.9	114.00	2.0	6.00	2.9	20.00	520.00	60.00	60.00
97235	4.8	15546.00	1.6	118.00	1.0	8.00	4.4	18.00	50.00	100.00	100.00
97236	6.9	6681.00	4.2	93.00	1.0	11.00	2.4	23.00	1500.00	106.00	106.00
97237	10.3	3450.00	2.6	78.00	2.0	6.00	2.2	63.00	50.00	41.00	41.00
97238	13.9	3309.00	6.3	48.00	3.0	8.00	2.4	27.00	250.00	48.00	48.00
97239	9.4	5457.00	2.2	79.00	1.0	5.00	2.6	30.00	230.00	54.00	54.00
97240	10.5	3701.00	2.6	24.00	3.0	4.00	2.4	9.00	380.00	48.00	48.00



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
97241	10.4	3053.00	2.7	57.00	1.0	4.00	2.2	17.00	290.00	31.00	
97242	10.3	3328.00	2.3	73.00	1.0	5.00	2.2	44.00	230.00	39.00	
97243	15.9	3842.00	3.3	78.00	4.0	9.00	2.8	35.00	340.00	75.00	
97245	8.1	5212.00	3.9	139.00	3.0	28.00	2.6	40.00	1400.00	36.00	
97246	12.5	3409.00	4.3	32.00	2.0	9.00	3.2	26.00	230.00	67.00	
97247	9.0	4818.00	2.7	46.00	5.0	6.00	2.3	16.00	300.00	69.00	
97248	11.8	4450.00	5.9	82.00	3.0	18.00	3.1	52.00	220.00	82.00	
97249	10.7	5122.00	3.4	98.00	3.0	16.00	3.1	64.00	250.00	85.00	
97250	12.5	2521.00	5.0	31.00	2.0	7.00	2.3	25.00	310.00	51.00	
97251	8.9	4375.00	3.4	48.00	4.0	10.00	2.7	36.00	360.00	67.00	
97252	15.4	3346.00	5.5	38.00	3.0	8.00	2.7	27.00	360.00	71.00	
97253	8.7	3988.00	3.3	37.00	3.0	6.00	2.6	15.00	410.00	83.00	
97254	20.7	3660.00	5.3	22.00	5.0	7.00	5.4	18.00	50.00	117.00	
97255	11.4	2396.00	5.3	36.00	6.0	7.00	2.0	39.00	270.00	60.00	
97256	9.4	3960.00	2.5	79.00	3.0	7.00	2.1	34.00	210.00	61.00	
97257	8.6	3314.00	2.6	45.00	2.0	8.00	2.0	31.00	340.00	61.00	
97258	39.5	10563.00	4.8	174.00	1.0	7.00	12.0	29.00	760.00	34.00	
97259	8.2	4638.00	2.4	31.00	2.0	8.00	2.5	20.00	460.00	57.00	
97260	18.2	4969.00	3.7	112.00	4.0	18.00	1.3	113.00	50.00	75.00	
97261	9.0	3280.00	2.5	47.00	4.0	12.00	1.9	36.00	210.00	61.00	
97262	10.0	3314.00	2.2	53.00	3.0	10.00	1.7	42.00	170.00	60.00	
97263	11.6	4251.00	3.2	99.00	3.0	13.00	1.9	68.00	50.00	69.00	
97264	10.1	4191.00	2.8	84.00	3.0	12.00	1.8	56.00	50.00	61.00	
97265	10.9	4229.00	3.5	86.00	4.0	16.00	1.5	60.00	50.00	65.00	
97266	12.7	4346.00	2.9	95.00	3.0	11.00	1.4	75.00	160.00	66.00	
97267	15.5	5268.00	3.8	71.00	88.0	21.00	1.9	62.00	220.00	78.00	
97268	13.7	5034.00	3.0	90.00	4.0	15.00	1.7	78.00	50.00	75.00	
97269	12.4	5003.00	4.1	111.00	4.0	20.00	2.0	97.00	50.00	65.00	
97270	9.0	5140.00	2.7	117.00	4.0	11.00	1.8	57.00	50.00	71.00	
97271	15.5	5751.00	3.6	85.00	5.0	24.00	1.9	70.00	50.00	83.00	
97272	13.2	4635.00	3.2	74.00	4.0	16.00	1.8	65.00	50.00	73.00	
97273	12.6	4463.00	2.7	74.00	5.0	12.00	1.7	59.00	50.00	66.00	
97275	15.9	5070.00	3.7	94.00	6.0	15.00	1.3	84.00	320.00	91.00	
97276	10.1	4864.00	2.7	74.00	5.0	13.00	1.5	51.00	230.00	67.00	
97277	12.4	4140.00	3.1	70.00	6.0	15.00	1.9	55.00	50.00	72.00	
97278	13.4	4004.00	4.7	91.00	2.0	18.00	1.0	100.00	50.00	94.00	
97279	10.1	3195.00	2.4	47.00	2.0	13.00	1.2	34.00	50.00	50.00	
97280	18.1	5854.00	4.8	67.00	5.0	12.00	2.7	50.00	50.00	100.00	
97281	64.8	7118.00	10.0	55.00	3.0	11.00	11.0	23.00	920.00	115.00	
97282	10.9	6086.00	3.1	90.00	3.0	7.00	1.9	32.00	50.00	63.00	
97283	13.5	2816.00	5.2	30.00	2.0	15.00	1.5	18.00	300.00	51.00	
97284	12.2	5330.00	3.6	47.00	5.0	8.00	2.5	26.00	310.00	73.00	
97285	12.4	2847.00	3.5	38.00	2.0	5.00	1.2	24.00	50.00	46.00	
97286	12.8	2738.00	3.9	33.00	2.0	10.00	1.2	29.00	220.00	49.00	
97287	13.3	2900.00	4.1	34.00	2.0	10.00	1.6	22.00	160.00	53.00	
97288	12.2	4309.00	3.4	77.00	3.0	10.00	1.4	55.00	50.00	59.00	
97289	14.3	4980.00	3.5	54.00	3.0	7.00	1.4	17.00	180.00	74.00	
97290	14.8	5814.00	3.8	64.00	4.0	9.00	2.0	28.00	50.00	93.00	
97291	13.4	4698.00	3.6	61.00	3.0	11.00	1.6	45.00	50.00	72.00	
97292	12.1	4693.00	3.2	77.00	5.0	14.00	2.0	54.00	50.00	68.00	
97293	12.4	4185.00	2.6	70.00	12.0	9.00	1.0	55.00	50.00	58.00	
97294	15.4	3252.00	4.1	49.00	3.0	8.00	0.1	38.00	50.00	61.00	
97295	16.0	3916.00	4.0	69.00	3.0	11.00	1.1	72.00	50.00	55.00	
97296	15.7	4233.00	3.5	60.00	2.0	8.00	1.2	50.00	50.00	49.00	
97297	14.6	3398.00	4.5	49.00	2.0	11.00	1.0	40.00	50.00	49.00	
97298	17.8	3539.00	5.2	50.00	2.0	16.00	1.4	37.00	170.00	40.00	
97299	14.7	3695.00	4.0	57.00	2.0	8.00	1.0	45.00	50.00	58.00	
97300	15.9	3983.00	5.4	63.00	2.0	10.00	0.9	30.00	50.00	54.00	
97301	14.0	3800.00	3.7	60.00	2.0	8.00	1.0	52.00	50.00	58.00	
97303	10.0	3783.00	2.2	57.00	4.0	13.00	1.7	36.00	440.00	50.00	
97304	10.2	3969.00	2.3	59.00	4.0	12.00	2.2	40.00	480.00	54.00	
97305	10.4	3907.00	2.6	51.00	3.0	11.00	2.4	37.00	400.00	59.00	
97306	9.0	4877.00	2.7	65.00	4.0	10.00	2.7	30.00	480.00	62.00	
97307	11.9	3858.00	2.3	69.00	3.0	12.00	2.3	56.00	290.00	57.00	
97308	10.5	3986.00	2.7	70.00	3.0	13.00	2.6	48.00	210.00	54.00	
97309	17.5	3455.00	3.4	62.00	3.0	11.00	1.6	32.00	310.00	55.00	
97310	18.5	4811.00	4.8	60.00	3.0	17.00	2.9	38.00	510.00	74.00	
97311	15.4	3548.00	3.2	50.00	3.0	10.00	1.9	34.00	350.00	57.00	
97312	14.0	6650.00	4.9	109.00	4.0	14.00	2.5	33.00	620.00	56.00	
97313	9.2	4652.00	2.8	59.00	3.0	5.00	1.4	17.00	280.00	55.00	
97314	12.3	3698.00	3.2	69.00	4.0	8.00	1.7	51.00	250.00	49.00	
97315	14.0	4814.00	4.8	61.00	11.0	6.00	1.2	30.00	50.00	60.00	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
97316	10.8	3515.00	2.6	44.00	2.0	8.00	1.6	104.00	190.00	50.00	85.00
97317	16.3	4175.00	5.1	90.00	4.0	12.00	1.8	48.00	200.00	50.00	55.00
97318	11.5	3420.00	4.1	54.00	3.0	10.00	1.6	35.00	50.00	44.00	
97319	16.3	3408.00	4.8	48.00	2.0	9.00	1.0	35.00	50.00	50.00	50.00
97320	16.1	3237.00	4.1	44.00	3.0	10.00	0.5	20.00	150.00	49.00	
97322	11.6	2747.00	4.8	30.00	2.0	10.00	0.8	15.00	180.00	37.00	
97323	10.9	2382.00	9.4	26.00	2.0	12.00	1.1	20.00	220.00	41.00	
97324	11.7	2689.00	3.8	33.00	2.0	9.00	0.9	26.00	50.00	56.00	
97325	18.9	3132.00	5.6	35.00	3.0	9.00	1.4	26.00	200.00	48.00	
97326	14.1	2791.00	4.9	33.00	3.0	9.00	1.4	35.00	320.00	101.00	
97327	10.3	5293.00	3.3	78.00	5.0	10.00	2.4	87.00	200.00	50.00	
97328	15.9	3290.00	4.6	69.00	4.0	15.00	0.6	66.00	230.00	63.00	
97329	10.0	4331.00	2.6	82.00	3.0	12.00	1.8	63.00	320.00	66.00	
97330	12.3	4470.00	2.9	76.00	4.0	12.00	1.6	64.00	50.00	73.00	
97332	12.8	4384.00	3.7	87.00	4.0	15.00	1.8	75.00	210.00	69.00	
97333	12.4	3839.00	3.1	87.00	4.0	14.00	2.1	55.00	50.00	65.00	
97334	13.0	4712.00	3.2	77.00	3.0	15.00	1.9	41.00	50.00	67.00	
97335	8.9	5365.00	2.8	71.00	3.0	11.00	1.9	50.00	50.00	58.00	
97336	10.9	4527.00	2.8	73.00	3.0	15.00	1.9	52.00	210.00	65.00	
97337	10.0	3792.00	2.5	87.00	4.0	12.00	1.7	55.00	200.00	58.00	
97338	7.8	5571.00	2.7	105.00	3.0	12.00	1.9	52.00	50.00	57.00	
97339	8.3	4234.00	2.5	88.00	3.0	16.00	2.4	24.00	200.00	55.00	
97340	13.2	3618.00	4.2	40.00	2.0	11.00	0.8	37.00	200.00	52.00	
97341	15.7	3484.00	5.0	49.00	3.0	13.00	0.7	16.00	290.00	42.00	
97342	11.3	4182.00	2.9	33.00	2.0	6.00	1.1	25.00	210.00	49.00	
97343	13.5	2933.00	5.4	33.00	2.0	9.00	1.3	23.00	180.00	43.00	
97344	12.2	2648.00	3.7	34.00	2.0	9.00	1.0	27.00	200.00	59.00	
97345	17.4	3178.00	5.4	37.00	3.0	9.00	1.2	23.00	280.00	55.00	
97346	8.8	3006.00	3.1	34.00	2.0	13.00	1.7	19.00	280.00	63.00	
97347	10.0	3475.00	3.2	37.00	2.0	7.00	1.5	25.00	230.00	54.00	
97348	10.2	2987.00	4.3	37.00	2.0	8.00	1.4	29.00	200.00	58.00	
97349	8.8	3636.00	2.9	53.00	2.0	8.00	1.4	21.00	240.00	41.00	
97350	8.1	2428.00	3.2	31.00	1.0	10.00	0.8	40.00	50.00	32.00	
97351	6.1	1907.00	2.0	188.00	6.0	4.00	2.3	47.00	50.00	67.00	
97352	13.7	3444.00	3.6	65.00	3.0	11.00	1.2	24.00	280.00	51.00	
97354	11.2	3163.00	3.6	41.00	2.0	15.00	1.5	22.00	270.00	63.00	
97355	10.4	3575.00	3.0	38.00	2.0	11.00	1.7	68.00	230.00	14.00	
97356	1.8	8945.00	0.6	159.00	2.0	22.00	2.4	27.00	230.00	40.00	
97357	11.3	3445.00	4.7	42.00	2.0	13.00	1.6	38.00	260.00	56.00	
97358	10.8	2912.00	3.0	40.00	1.0	14.00	1.2	25.00	290.00	49.00	
97359	13.4	4028.00	2.9	67.00	2.0	12.00	2.0	19.00	220.00	59.00	
97360	11.1	3024.00	3.7	42.00	2.0	9.00	0.6	25.00	230.00	49.00	
97361	10.2	2812.00	3.7	36.00	2.0	11.00	0.9	27.00	290.00	49.00	
97362	8.0	2539.00	3.5	26.00	2.0	11.00	1.3	23.00	190.00	53.00	
97363	10.1	2988.00	3.5	34.00	2.0	11.00	1.1	18.00	260.00	47.00	
97364	7.4	2487.00	2.7	26.00	1.0	10.00	1.3	21.00	240.00	42.00	
97365	10.7	3224.00	3.5	35.00	2.0	13.00	1.5	23.00	170.00	52.00	
97366	6.5	2739.00	2.7	31.00	1.0	14.00	1.3	48.00	50.00	57.00	
97367	9.2	3098.00	3.3	41.00	2.0	10.00	1.3	24.00	180.00	57.00	
97368	7.4	2826.00	2.7	34.00	1.0	10.00	1.4	48.00	240.00	65.00	
97369	12.4	3529.00	4.1	70.00	3.0	11.00	1.0	29.00	250.00	51.00	
97370	10.8	3099.00	4.0	37.00	2.0	10.00	1.2	19.00	190.00	56.00	
97371	9.2	2955.00	3.5	30.00	2.0	11.00	1.5	25.00	220.00	52.00	
97372	11.6	2564.00	4.6	30.00	2.0	17.00	1.8	27.00	150.00	45.00	
97373	11.7	3471.00	7.4	60.00	3.0	17.00	1.7	34.00	50.00	57.00	
97374	12.7	3476.00	3.2	45.00	2.0	12.00	1.3	24.00	180.00	57.00	
97375	9.4	3519.00	2.6	38.00	2.0	10.00	1.8	32.00	50.00	61.00	
97376	9.3	3807.00	2.9	50.00	2.0	13.00	1.8	27.00	280.00	59.00	
97377	12.8	3370.00	3.4	45.00	2.0	11.00	1.6	21.00	220.00	52.00	
97379	10.9	2999.00	3.1	36.00	2.0	14.00	1.2	25.00	220.00	59.00	
97380	7.7	3394.00	2.5	38.00	2.0	11.00	1.7	61.00	50.00	79.00	
97381	8.8	3235.00	2.3	42.00	1.0	17.00	1.7	31.00	50.00	43.00	
97382	8.2	3205.00	2.2	48.00	2.0	10.00	1.2	26.00	50.00	45.00	
97383	7.5	2909.00	2.3	35.00	1.0	12.00	1.5	46.00	50.00	57.00	
97384	10.5	3771.00	2.8	50.00	2.0	15.00	1.9	21.00	180.00	51.00	
97385	10.0	3016.00	2.6	36.00	2.0	9.00	1.5	26.00	190.00	63.00	
97386	10.0	3454.00	2.8	42.00	2.0	12.00	1.9	138.00	50.00	100.00	
97387	12.3	5629.00	3.5	60.00	2.0	56.00	5.4	55.00	50.00	63.00	
97388	10.0	6286.00	2.5	71.00	1.0	32.00	3.7	910.00	50.00	48.00	
97389	11.0	3493.00	2.6	31.00	1.0	20.00	1.9	34.00	50.00	66.00	
97390	4.3	11552.00	1.2	180.00	1.0	17.00	1.4				
97391	11.0	3595.00	4.7	46.00	2.0	16.00	1.8				



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
97392	12.0	4038.00	3.4	39.00	3.0	13.00	1.8	24.00	210.00	210.00	55.00
97393	13.8	3863.00	4.0	57.00	2.0	13.00	1.7	28.00	300.00	300.00	55.00
97394	10.0	3541.00	2.8	41.00	2.0	16.00	1.8	31.00	170.00	170.00	56.00
97395	13.1	3697.00	3.4	59.00	3.0	13.00	1.2	43.00	50.00	50.00	59.00
97397	4.8	12668.00	2.0	205.00	2.0	22.00	2.3	89.00	50.00	50.00	42.00
97398	13.4	3627.00	3.9	54.00	3.0	12.00	0.6	40.00	170.00	170.00	55.00
97399	10.0	2798.00	2.8	32.00	1.0	11.00	1.3	16.00	210.00	210.00	50.00
97400	10.7	3378.00	3.4	40.00	2.0	11.00	1.6	32.00	50.00	50.00	58.00
97401	9.4	2796.00	3.1	38.00	2.0	13.00	1.2	24.00	220.00	220.00	40.00
97402	9.3	2956.00	2.9	32.00	2.0	12.00	1.3	18.00	190.00	190.00	50.00
97403	6.5	2587.00	2.3	21.00	1.0	10.00	1.4	16.00	200.00	200.00	47.00
97404	8.4	3490.00	2.2	47.00	1.0	15.00	1.9	55.00	50.00	50.00	50.00
97405	11.3	2471.00	3.4	34.00	2.0	17.00	1.8	26.00	50.00	50.00	52.00
97406	9.2	3054.00	2.5	38.00	2.0	16.00	1.8	33.00	50.00	50.00	56.00
97407	8.8	3565.00	2.8	50.00	1.0	20.00	1.7	38.00	50.00	50.00	50.00
97408	10.0	3892.00	3.1	38.00	1.0	13.00	1.4	24.00	310.00	310.00	68.00
97409	9.1	3248.00	2.6	40.00	2.0	12.00	1.8	25.00	160.00	160.00	57.00
97410	11.8	3568.00	3.4	51.00	2.0	15.00	1.5	89.00	50.00	50.00	60.00
97412	9.3	3251.00	2.8	39.00	2.0	15.00	1.8	38.00	50.00	50.00	56.00
97413	8.7	5047.00	2.7	73.00	2.0	15.00	2.1	40.00	50.00	50.00	70.00
97414	6.4	5680.00	2.2	79.00	1.0	25.00	2.8	35.00	50.00	50.00	52.00
97415	8.0	4937.00	2.4	68.00	1.0	21.00	2.4	46.00	50.00	50.00	57.00
97416	8.4	3756.00	2.6	41.00	2.0	15.00	2.6	59.00	340.00	340.00	63.00
97417	8.9	2719.00	2.8	33.00	2.0	11.00	1.4	29.00	50.00	50.00	52.00
97418	10.0	3456.00	3.0	50.00	1.0	20.00	2.2	27.00	260.00	260.00	44.00
97700	8.4	3927.00	2.7	55.00	3.0	5.00	2.3	20.00	430.00	430.00	63.00
97701	9.3	4549.00	2.8	83.00	3.0	7.00	2.7	25.00	410.00	410.00	76.00
97702	15.5	4337.00	4.2	76.00	3.0	14.00	2.8	61.00	360.00	360.00	65.00
97703	12.1	4433.00	2.9	76.00	1.0	13.00	2.3	22.00	640.00	640.00	54.00
97704	12.0	4437.00	3.0	52.00	2.0	16.00	2.7	29.00	510.00	510.00	61.00
97705	5.9	1441.00	2.5	20.00	2.0	4.00	0.7	19.00	50.00	50.00	52.00
97706	13.4	4092.00	8.1	55.00	3.0	9.00	1.7	39.00	340.00	340.00	72.00
97707	11.1	4481.00	3.0	74.00	4.0	12.00	2.0	49.00	390.00	390.00	68.00
97708	14.8	6668.00	4.2	82.00	4.0	11.00	2.7	35.00	620.00	620.00	96.00
97709	16.6	4995.00	3.5	89.00	4.0	6.00	1.5	19.00	580.00	580.00	79.00
97710	10.9	3550.00	2.9	57.00	3.0	11.00	1.6	45.00	450.00	450.00	66.00
97712	9.3	5361.00	3.1	57.00	4.0	6.00	2.2	15.00	470.00	470.00	77.00
97713	10.2	5476.00	2.3	117.00	3.0	10.00	1.7	52.00	50.00	50.00	52.00
97714	13.2	4062.00	2.6	78.00	3.0	13.00	1.1	58.00	50.00	50.00	75.00
97715	11.7	4359.00	2.9	76.00	4.0	13.00	1.5	56.00	420.00	420.00	71.00
97716	7.3	6164.00	2.4	75.00	3.0	9.00	1.2	26.00	370.00	370.00	73.00
97717	10.1	4111.00	2.6	73.00	4.0	12.00	2.1	55.00	300.00	300.00	63.00
97718	9.1	4832.00	3.1	103.00	4.0	12.00	1.7	116.00	310.00	310.00	60.00
97719	9.1	3014.00	2.4	67.00	4.0	9.00	1.7	74.00	300.00	300.00	60.00
97721	6.9	3460.00	2.3	49.00	6.0	9.00	2.1	36.00	360.00	360.00	60.00
97722	8.6	4273.00	2.7	81.00	4.0	9.00	2.1	43.00	400.00	400.00	73.00
97723	9.0	4481.00	3.3	72.00	4.0	9.00	0.8	107.00	50.00	50.00	49.00
97724	6.0	6083.00	2.3	72.00	5.0	5.00	1.1	17.00	390.00	390.00	60.00
97725	12.7	4031.00	2.8	55.00	8.0	11.00	1.1	44.00	340.00	340.00	65.00
97726	11.1	4218.00	2.6	56.00	8.0	14.00	1.6	46.00	400.00	400.00	67.00
97727	9.3	3009.00	2.2	69.00	3.0	10.00	1.3	45.00	240.00	240.00	55.00
97728	8.1	3914.00	2.6	85.00	4.0	9.00	2.1	37.00	280.00	280.00	67.00
97729	8.3	4935.00	2.6	108.00	3.0	11.00	1.6	56.00	280.00	280.00	66.00
97730	12.0	5162.00	2.7	78.00	3.0	12.00	1.4	65.00	240.00	240.00	72.00
97731	7.1	5219.00	2.4	88.00	3.0	10.00	2.1	42.00	250.00	250.00	64.00
97732	8.9	3723.00	2.4	103.00	3.0	10.00	1.3	69.00	50.00	50.00	60.00
97733	7.1	4343.00	2.8	106.00	4.0	12.00	1.6	45.00	50.00	50.00	69.00
97734	10.6	4088.00	2.6	56.00	11.0	12.00	0.9	51.00	310.00	310.00	68.00
97735	8.3	4372.00	3.0	75.00	6.0	15.00	1.9	49.00	310.00	310.00	70.00
97736	8.8	5546.00	2.7	92.00	12.0	9.00	1.6	25.00	340.00	340.00	84.00
97737	10.9	3639.00	2.6	64.00	6.0	12.00	1.7	60.00	390.00	390.00	62.00
97738	10.8	3760.00	2.5	64.00	9.0	11.00	1.6	42.00	330.00	330.00	59.00
97740	15.8	4056.00	4.0	54.00	3.0	17.00	2.2	34.00	440.00	440.00	59.00
97741	10.0	4145.00	2.5	56.00	3.0	10.00	1.5	38.00	260.00	260.00	54.00
97742	11.1	4349.00	2.9	66.00	4.0	13.00	1.8	44.00	320.00	320.00	59.00
97743	10.6	3856.00	3.0	63.00	3.0	10.00	1.4	41.00	230.00	230.00	50.00
97744	8.8	4179.00	2.5	56.00	3.0	11.00	1.5	39.00	200.00	200.00	54.00
97745	7.6	4891.00	2.4	74.00	4.0	10.00	1.8	43.00	190.00	190.00	60.00
97746	8.3	6796.00	2.7	101.00	4.0	12.00	2.2	34.00	220.00	220.00	68.00
97747	10.5	4457.00	2.6	64.00	4.0	13.00	2.0	53.00	50.00	50.00	63.00
97748	10.5	4435.00	2.7	77.00	4.0	15.00	2.0	60.00	50.00	50.00	60.00
97749	12.9	4832.00	3.1	81.00	4.0	14.00	2.1	59.00	50.00	50.00	71.00



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	Y2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
97750	12.4	4316.00	3.2	74.00	3.0	12.00	2.1	54.00	66.00	50.00	66.00
97751	10.6	3841.00	2.3	81.00	3.0	9.00	1.8	73.00	50.00	50.00	48.00
97752	8.1	8548.00	2.8	79.00	4.0	8.00	1.9	15.00	640.00	82.00	82.00
97753	7.2	7511.00	2.1	137.00	2.0	12.00	1.5	47.00	100.00	53.00	53.00
97754	15.5	7536.00	3.9	41.00	3.0	7.00	2.4	9.00	430.00	86.00	86.00
97755	13.2	6591.00	3.9	56.00	3.0	7.00	2.3	13.00	520.00	88.00	88.00
97756	10.5	3901.00	2.6	56.00	3.0	10.00	1.6	39.00	50.00	49.00	49.00
97757	8.3	4378.00	2.5	53.00	2.0	10.00	1.8	25.00	280.00	47.00	47.00
97758	11.9	4174.00	2.9	59.00	3.0	11.00	1.7	34.00	190.00	52.00	52.00
97759	12.4	3771.00	3.4	65.00	2.0	15.00	2.1	33.00	260.00	45.00	45.00
97761	13.9	4146.00	2.9	66.00	3.0	10.00	0.6	41.00	220.00	48.00	48.00
97762	14.5	4783.00	2.3	140.00	2.0	16.00	0.1	50.00	50.00	26.00	26.00
97763	13.7	3017.00	3.4	46.00	4.0	12.00	1.8	31.00	300.00	49.00	49.00
97764	19.2	3377.00	4.7	54.00	6.0	9.00	0.8	29.00	50.00	50.00	50.00
97765	12.8	2605.00	3.5	41.00	2.0	10.00	0.8	25.00	50.00	40.00	40.00
97766	13.5	2954.00	3.5	32.00	2.0	12.00	1.4	24.00	50.00	51.00	51.00
97767	12.7	3007.00	3.4	39.00	2.0	6.00	1.5	16.00	220.00	55.00	55.00
97768	15.5	3301.00	3.4	59.00	2.0	11.00	1.7	39.00	280.00	56.00	56.00
97769	10.2	2815.00	2.8	31.00	2.0	7.00	1.2	23.00	250.00	43.00	43.00
97770	13.4	4289.00	3.6	50.00	3.0	10.00	1.6	34.00	260.00	61.00	61.00
97771	16.3	3388.00	5.7	40.00	5.0	9.00	1.3	29.00	250.00	64.00	64.00
97772	13.7	3667.00	3.8	57.00	3.0	8.00	0.1	36.00	50.00	39.00	39.00
97773	10.0	4041.00	4.5	49.00	2.0	12.00	1.5	16.00	220.00	55.00	55.00
97774	11.4	3974.00	3.7	51.00	3.0	12.00	1.6	38.00	280.00	69.00	69.00
97776	9.2	3116.00	4.2	41.00	2.0	11.00	1.6	29.00	160.00	45.00	45.00
97777	10.4	3773.00	4.7	46.00	3.0	22.00	1.7	30.00	50.00	46.00	46.00
97778	14.5	3118.00	6.7	33.00	2.0	10.00	1.3	24.00	50.00	52.00	52.00
97779	11.2	3529.00	6.0	38.00	2.0	8.00	1.4	25.00	210.00	52.00	52.00
97780	13.5	5278.00	4.7	54.00	6.0	8.00	1.8	26.00	320.00	81.00	81.00
97781	9.4	2985.00	3.7	38.00	3.0	5.00	1.5	21.00	250.00	50.00	50.00
97782	11.7	3234.00	3.7	41.00	3.0	10.00	1.4	31.00	180.00	58.00	58.00
97783	9.2	4021.00	2.5	119.00	4.0	7.00	2.8	51.00	50.00	54.00	54.00
97784	10.0	5113.00	2.7	46.00	2.0	9.00	1.6	21.00	440.00	61.00	61.00
107001	8.5	2498.29	2.5	84.29	3.0	8.54	2.2	56.56	50.00	54.25	54.25
107002	8.6	3130.29	2.6	99.79	2.0	11.30	2.4	65.12	50.00	54.87	54.87
107003	9.4	2944.00	2.9	109.45	3.0	16.96	2.8	74.61	50.00	59.19	59.19
107004	10.0	3386.29	2.8	97.46	3.0	13.24	2.8	62.82	50.00	58.54	58.54
107005	10.0	2835.43	2.7	108.21	2.0	12.18	2.7	67.05	50.00	59.29	59.29
107006	8.7	2509.71	2.8	69.16	2.0	12.01	2.6	43.72	350.00	50.80	50.80
107007	8.8	2654.86	3.2	82.51	2.0	13.91	2.4	49.57	50.00	54.76	54.76
107008	6.5	3235.43	2.1	76.09	2.0	10.41	2.2	46.41	290.00	53.62	53.62
107009	7.8	2739.43	2.4	80.23	2.0	12.49	2.7	51.89	270.00	54.83	54.83
107010	7.4	2493.48	2.2	78.48	2.0	9.30	2.1	46.01	320.00	50.60	50.60
107011	6.5	2585.23	2.2	76.07	1.0	9.99	1.7	45.65	50.00	47.92	47.92
107012	8.8	3158.95	3.5	105.46	2.0	20.30	2.7	60.85	240.00	59.28	59.28
107013	11.0	3598.11	2.7	82.34	2.0	12.27	2.1	58.09	50.00	56.89	56.89
107014	9.3	2514.38	2.7	64.96	2.0	11.16	2.4	43.83	260.00	58.35	58.35
107015	8.6	2839.57	2.7	88.98	2.0	12.70	2.4	48.75	50.00	53.49	53.49
107016	10.5	3636.09	2.6	74.67	3.0	12.81	2.8	43.98	50.00	65.11	65.11
107017	9.2	4601.98	2.7	92.25	3.0	15.28	2.5	48.07	300.00	70.58	70.58
107018	5.8	4003.62	2.0	106.91	2.0	8.15	2.0	58.18	50.00	59.57	59.57
107019	15.6	7402.16	3.5	136.36	4.0	15.06	3.5	72.55	410.00	113.11	113.11
107020	10.0	3630.49	2.5	50.58	2.0	14.74	1.8	33.06	300.00	61.05	61.05
107022	10.4	3910.62	2.5	58.03	3.0	12.02	2.1	50.61	50.00	69.25	69.25
107023	10.3	4511.22	2.5	79.66	4.0	10.94	2.4	44.15	50.00	69.93	69.93
107024	14.7	4565.00	2.7	94.98	3.0	13.54	2.4	71.62	50.00	82.38	82.38
107025	11.2	4984.08	2.6	74.29	4.0	11.72	2.5	57.36	50.00	78.81	78.81
107026	6.9	5092.37	2.4	88.43	4.0	10.15	2.7	42.53	50.00	73.96	73.96
107027	13.1	4485.98	2.8	88.65	4.0	15.06	2.5	68.64	50.00	72.18	72.18
107028	12.0	4514.15	3.0	84.29	4.0	17.51	2.3	50.24	50.00	70.49	70.49
107029	7.7	3647.39	2.2	86.30	3.0	10.45	1.8	69.95	250.00	58.20	58.20
107030	8.3	3438.87	2.4	82.14	2.0	10.55	2.0	55.24	190.00	58.21	58.21
107031	11.0	3595.54	2.6	86.23	3.0	15.01	2.7	54.50	300.00	61.55	61.55
107032	8.5	3858.17	2.4	88.75	2.0	11.35	2.7	45.37	50.00	61.09	61.09
107033	9.2	3964.12	2.5	100.92	3.0	10.87	2.7	51.82	50.00	62.39	62.39
107034	10.3	2973.03	2.7	89.28	2.0	13.29	2.8	52.02	50.00	55.07	55.07
107035	10.5	3162.58	2.9	78.69	2.0	13.48	2.6	48.71	50.00	53.41	53.41
107036	13.9	3960.44	3.6	111.41	3.0	11.83	2.1	74.75	240.00	89.55	89.55
107037	7.9	3022.76	2.5	95.57	2.0	8.83	2.3	56.33	50.00	56.68	56.68
107038	6.7	2856.31	2.8	85.14	2.0	9.46	2.0	52.43	50.00	51.53	51.53
107039	8.6	2512.31	2.8	98.59	2.0	9.95	2.5	65.28	50.00	54.98	54.98
107040	8.9	2739.79	2.9	92.14	2.0	11.31	2.5	52.20	210.00	59.43	59.43



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
107042	9.1	3334.58	2.9	113.59	2.0	11.85	2.4	61.29	50.00	65.65	
107043	7.4	3047.17	2.4	104.62	2.0	8.97	2.3	59.92	50.00	56.10	
107044	8.5	3062.71	2.8	98.66	2.0	11.19	2.3	61.00	50.00	60.12	
107045	10.5	3598.68	2.9	96.40	3.0	13.56	2.7	69.34	50.00	63.39	
107046	5.7	4152.41	2.2	83.65	3.0	8.88	2.2	33.17	180.00	59.45	
107047	10.0	3782.89	2.7	93.11	3.0	18.88	2.8	65.37	50.00	68.21	
107048	7.8	2947.30	2.3	95.94	1.0	9.87	2.1	53.82	50.00	57.90	
107049	8.5	3128.56	2.6	91.48	2.0	11.31	2.5	62.75	220.00	56.59	
107050	8.3	3750.15	2.8	98.69	2.0	10.79	2.3	58.53	50.00	63.04	
107051	10.7	3821.13	3.0	100.70	4.0	14.08	2.7	63.48	220.00	65.27	
107052	8.2	3824.65	2.9	92.71	3.0	10.31	2.7	39.18	210.00	66.15	
107053	7.5	2897.99	3.1	103.51	2.0	11.60	2.4	61.74	220.00	55.05	
107054	6.7	3123.10	2.1	76.71	2.0	10.03	2.3	44.06	50.00	56.04	
107055	9.4	3092.50	4.1	87.28	2.0	13.44	2.3	49.69	320.00	58.10	
107056	7.4	2976.67	2.6	99.07	2.0	8.69	2.1	58.20	330.00	56.36	
107057	7.4	2417.77	2.3	78.18	2.0	9.21	2.3	42.92	300.00	56.25	
107059	8.9	3282.64	2.9	108.48	2.0	16.64	3.1	57.44	210.00	60.21	
107060	10.2	3196.32	3.1	104.95	2.0	12.10	2.7	61.41	240.00	68.07	
107062	14.0	2704.26	3.3	90.36	2.0	21.25	3.0	50.04	240.00	55.25	
107063	7.8	2796.91	2.4	93.98	2.0	11.99	2.3	69.31	50.00	51.89	
107064	9.1	3310.29	2.6	100.84	2.0	11.05	2.8	63.50	260.00	61.40	
107065	7.5	3271.82	2.2	82.85	2.0	9.39	2.1	49.72	240.00	51.49	
107066	9.4	2951.69	2.2	103.69	2.0	12.53	2.3	89.29	50.00	56.11	
107067	7.7	3217.64	2.4	108.18	2.0	10.74	2.1	62.27	220.00	60.81	
107068	6.7	3102.10	2.3	90.49	2.0	9.26	1.9	49.34	230.00	56.22	
107069	10.0	3385.50	2.9	106.97	2.0	18.12	3.2	65.48	200.00	62.17	
107070	8.9	3039.97	2.6	109.01	2.0	12.21	2.6	64.45	200.00	62.35	
107071	8.0	2659.57	2.2	97.64	2.0	8.45	2.4	56.58	50.00	58.64	
107072	8.6	3302.66	2.9	92.52	2.0	14.73	3.0	54.27	280.00	66.06	
107073	7.9	2395.79	2.4	120.53	2.0	9.43	2.3	88.08	50.00	59.51	
107074	6.0	2986.57	2.0	100.08	2.0	8.27	2.2	49.10	50.00	53.05	
107075	7.3	2503.70	2.7	96.45	2.0	9.94	2.1	48.97	210.00	63.70	
107076	8.4	2576.73	2.4	93.15	2.0	11.38	1.8	56.70	270.00	61.44	
107077	8.3	2780.56	2.5	97.97	2.0	9.42	2.2	62.33	50.00	60.02	
107078	8.8	2201.82	2.6	78.48	3.0	10.14	2.8	43.71	50.00	53.64	
107079	11.2	2425.22	3.0	85.76	3.0	14.38	3.3	51.99	410.00	64.04	
107081	10.8	2574.55	3.3	86.78	2.0	17.16	3.7	51.95	320.00	64.30	
107082	10.7	2311.86	3.5	80.75	3.0	15.00	3.4	51.97	350.00	59.06	
107083	8.8	2513.51	2.5	85.86	2.0	8.90	2.9	54.74	330.00	56.00	
107084	10.3	2455.74	2.7	87.27	2.0	11.02	3.1	53.27	270.00	61.07	
107085	8.7	2680.28	2.4	107.01	3.0	8.66	2.7	59.61	50.00	60.73	
107086	9.2	2471.00	2.7	102.66	2.0	12.38	2.6	61.23	50.00	58.78	
107087	8.6	2514.60	2.3	86.67	2.0	10.44	2.0	55.84	50.00	60.84	
107088	8.8	2548.39	2.3	93.09	1.0	9.56	3.1	67.36	320.00	56.85	
107089	7.5	2810.92	2.3	108.93	2.0	8.48	2.7	51.02	250.00	57.48	
107090	7.3	3151.89	2.3	97.05	2.0	10.98	2.7	56.86	250.00	59.90	
107091	8.4	2848.68	2.4	95.94	2.0	9.41	3.4	49.57	290.00	55.02	
107092	8.2	3055.07	2.5	89.88	2.0	8.20	3.1	65.63	50.00	54.89	
107093	9.4	3466.55	3.5	100.46	2.0	13.39	3.4	69.35	50.00	64.87	
107094	7.8	3203.29	2.6	116.84	2.0	10.88	2.5	69.57	50.00	55.42	
107095	7.4	3584.90	2.9	106.94	2.0	13.93	2.1	61.28	50.00	57.12	
107096	8.3	3640.21	2.3	121.25	2.0	8.53	1.7	59.26	310.00	59.09	
107097	9.0	3788.42	3.0	112.22	2.0	12.32	2.8	69.13	330.00	61.44	
107098	7.2	3837.09	2.2	108.23	1.0	10.11	2.4	64.38	50.00	54.89	
107099	11.0	3121.44	3.5	108.28	2.0	11.36	3.4	94.82	50.00	66.13	
107101	8.6	3652.37	2.4	100.85	2.0	9.78	2.6	63.67	50.00	58.58	
107102	9.1	3342.66	3.0	106.86	2.0	13.28	2.9	66.81	50.00	57.97	
107103	9.2	2997.56	3.2	97.30	2.0	11.18	2.7	62.68	330.00	58.53	
107104	11.0	2824.93	3.6	96.20	3.0	12.95	2.7	69.07	50.00	64.65	
107105	8.4	2417.45	3.8	103.02	2.0	13.78	2.4	74.89	50.00	55.87	
107106	13.1	3359.82	3.4	58.35	3.0	10.25	1.9	53.61	220.00	52.65	
107107	13.6	4382.38	3.7	57.36	3.0	6.29	2.5	27.83	340.00	86.20	
107108	13.0	3208.25	4.9	53.50	2.0	10.61	2.0	49.54	50.00	47.02	
107109	12.6	3154.43	4.3	51.94	2.0	10.91	1.6	48.97	50.00	49.17	
107110	13.8	3665.16	4.6	60.53	3.0	8.13	2.0	44.80	320.00	55.59	
107111	8.5	3981.48	2.7	88.21	2.0	9.24	2.5	69.47	320.00	72.99	
107112	7.2	4642.68	2.9	94.60	2.0	11.26	2.6	51.10	370.00	86.77	
107113	8.8	4114.38	2.7	89.40	2.0	13.37	2.8	79.29	330.00	68.93	
107114	7.3	3916.68	2.3	57.11	2.0	12.80	2.3	50.65	310.00	70.93	
107115	7.9	4196.76	2.2	74.88	2.0	14.17	2.3	76.12	240.00	69.22	
107116	7.7	3620.13	2.8	59.07	1.0	13.19	2.7	53.69	360.00	72.75	
107117	9.1	4019.74	3.2	75.00	2.0	15.74	3.3	77.06	270.00	68.84	



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
107118	10.0	3041.08	5.3	95.21	2.0	11.96	2.6	113.51	480.00	74.20	
107119	12.5	2943.89	3.4	165.47	3.0	7.14	3.0	52.09	50.00	85.21	
107121	10.0	2983.44	3.1	97.20	2.0	11.80	2.9	98.28	290.00	68.62	
107122	10.0	3295.35	3.1	113.09	2.0	10.44	2.8	101.29	50.00	71.39	
107123	8.6	2577.74	2.9	96.77	2.0	8.51	2.1	108.81	50.00	64.31	
107124	11.1	3102.10	3.8	100.72	2.0	12.19	3.0	87.83	50.00	72.47	
107125	10.5	3789.20	4.0	91.52	2.0	13.35	3.6	77.91	50.00	75.53	
107126	11.1	3687.49	4.7	111.34	2.0	18.77	3.7	85.89	50.00	75.87	
107127	11.1	3211.72	3.8	86.26	2.0	11.32	3.1	76.32	50.00	72.08	
107128	11.0	3619.68	3.2	97.68	2.0	11.16	2.9	85.74	270.00	72.71	
107129	10.8	3053.51	3.2	116.91	2.0	9.00	2.9	122.82	50.00	69.88	
107130	11.3	3589.17	3.6	126.19	2.0	11.31	2.9	87.08	50.00	78.45	
107131	10.6	3339.49	3.6	122.53	2.0	10.10	2.8	104.80	300.00	68.61	
107132	10.0	3146.37	3.6	114.71	2.0	12.12	2.8	108.25	250.00	64.87	
107133	10.1	2605.41	3.8	146.82	1.0	9.83	2.1	110.21	50.00	74.73	
107134	10.1	3904.16	3.5	93.98	2.0	18.10	3.3	88.17	50.00	79.09	
107135	7.8	5077.56	3.2	101.48	2.0	10.41	3.1	70.39	300.00	92.35	
107136	10.2	2912.59	3.1	98.08	2.0	9.97	2.5	109.93	200.00	67.99	
107137	7.1	3917.20	4.0	120.83	2.0	10.66	2.5	73.16	50.00	60.24	
107138	8.4	7481.94	2.2	176.93	2.0	18.60	3.4	76.23	50.00	48.92	
107141	13.2	5408.59	3.2	126.79	3.0	17.90	2.8	110.87	270.00	67.50	
107142	8.3	4629.21	2.6	119.06	3.0	21.76	2.9	69.01	220.00	54.64	
107143	13.0	6245.31	2.6	95.07	3.0	16.47	2.6	110.77	50.00	62.59	
107144	8.2	8422.69	2.1	297.91	3.0	22.74	3.3	98.17	50.00	42.71	
107145	10.8	7730.40	2.6	131.81	4.0	23.71	3.7	74.02	50.00	55.46	
107146	8.3	3851.08	2.8	101.53	2.0	14.32	2.6	68.60	50.00	63.11	
107147	7.4	4004.67	2.5	94.22	2.0	10.47	2.8	65.10	220.00	63.07	
107148	6.9	3935.78	2.1	98.81	2.0	10.88	2.5	57.59	220.00	58.11	
107149	7.0	3349.65	2.3	89.09	2.0	8.52	2.5	45.43	240.00	58.68	
107150	6.5	2850.48	2.4	103.47	1.0	10.66	2.7	59.30	50.00	51.78	
107151	9.0	4859.68	2.5	105.30	3.0	14.28	3.0	66.27	200.00	61.03	
107152	9.0	4586.67	2.5	91.55	2.0	14.31	2.6	58.24	50.00	57.65	
107153	10.0	4955.59	2.6	103.33	4.0	17.74	2.2	210.94	280.00	64.76	
107154	11.7	4424.79	3.1	102.25	5.0	16.17	3.2	70.56	310.00	68.44	
107155	10.3	4153.75	2.4	98.02	6.0	15.19	2.7	64.44	50.00	57.53	
107156	10.0	4965.75	2.7	78.10	4.0	21.08	2.9	50.97	340.00	48.60	
107157	10.0	3342.88	5.2	127.11	2.0	16.74	3.0	77.31	50.00	49.61	
107158	7.6	3672.65	5.4	170.37	2.0	22.97	2.9	82.53	50.00	43.27	
107159	8.3	3802.05	4.6	126.67	3.0	18.96	3.2	58.18	50.00	39.07	
107162	13.5	3374.58	2.8	33.56	2.0	16.24	3.3	25.61	450.00	40.64	
107163	21.6	3638.50	5.8	47.37	2.0	20.06	4.4	37.52	510.00	43.13	
107165	19.8	3977.99	4.0	48.58	2.0	26.29	3.3	39.06	500.00	44.87	
107166	27.3	4205.82	4.3	67.37	2.0	25.36	3.6	56.81	50.00	42.54	
107167	27.1	4600.58	4.0	58.39	2.0	15.63	3.1	42.74	460.00	47.29	
107168	10.2	3809.94	2.3	49.78	4.0	15.03	2.1	62.38	50.00	40.54	
107169	11.9	4717.88	2.9	68.92	4.0	13.30	2.6	88.10	50.00	58.88	
107170	9.2	4738.18	2.5	75.71	4.0	9.90	2.3	56.74	50.00	60.87	
107171	8.4	2285.06	2.8	89.08	2.0	10.63	2.7	53.38	50.00	50.65	
107172	7.7	2876.07	2.4	105.38	2.0	7.00	2.4	46.22	50.00	57.69	
107173	7.3	2461.01	2.1	87.71	2.0	10.27	2.0	58.45	50.00	49.53	
107174	7.1	2530.69	2.5	102.39	2.0	10.66	1.8	57.63	50.00	50.23	
107175	6.9	2708.43	2.5	113.28	1.0	13.25	2.1	56.11	50.00	49.32	
107176	8.0	2364.43	2.2	122.49	2.0	12.26	2.4	68.78	50.00	58.50	
107177	7.0	2380.48	2.2	113.11	2.0	6.96	1.8	48.34	50.00	56.79	
107178	10.3	1794.53	3.4	169.51	2.0	10.51	2.3	74.13	50.00	80.98	
107179	6.1	5055.65	2.5	89.79	2.0	12.70	2.9	47.60	200.00	65.55	
107181	11.3	5413.41	3.1	127.97	3.0	11.02	2.5	104.72	50.00	75.88	
107182	10.1	5074.00	3.1	102.85	2.0	8.95	2.4	93.55	50.00	64.32	
107183	9.4	4965.07	2.4	85.87	2.0	10.33	1.8	67.04	50.00	64.37	
107184	9.0	5677.15	3.1	87.63	2.0	10.57	2.2	58.72	280.00	60.09	
107185	10.6	5243.71	3.1	91.51	2.0	10.19	2.7	60.63	330.00	63.61	
107186	10.0	4091.31	2.8	87.95	2.0	14.23	2.6	55.99	310.00	63.16	
107187	7.7	4219.73	2.6	69.98	2.0	14.55	2.5	43.10	290.00	53.57	
107188	10.8	3247.87	3.8	91.16	3.0	20.02	4.3	65.97	410.00	78.89	
107189	13.2	4768.89	4.4	117.17	3.0	14.66	3.5	78.52	300.00	98.98	
107190	10.4	3729.67	3.8	77.75	2.0	10.91	3.1	55.99	410.00	83.24	
107191	10.2	4653.92	3.3	94.06	2.0	12.52	3.1	67.47	380.00	88.56	
107192	9.5	3739.82	2.9	83.77	2.0	12.34	2.6	79.56	400.00	80.77	
107193	10.5	3926.92	3.7	96.62	2.0	17.65	3.6	72.18	50.00	84.96	
107194	11.1	2756.96	2.9	79.52	2.0	12.78	2.3	135.53	290.00	68.39	
107195	13.0	4789.87	4.1	113.02	3.0	14.60	3.9	96.79	330.00	102.39	
107196	12.1	4675.28	4.0	83.35	2.0	13.52	3.7	71.17	270.00	102.65	



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
107197	12.1	4842.58	3.9	96.02	2.0	22.87	4.2	72.35	360.00	105.15	
107198	7.4	4106.92	3.0	92.64	2.0	10.31	2.8	39.79	290.00	79.55	
107199	11.2	5520.96	3.5	120.54	3.0	21.68	2.9	92.12	50.00	70.98	
107201	5.7	3283.01	2.1	124.63	1.0	8.37	2.2	56.22	50.00	52.71	
107202	5.5	3103.10	2.1	128.74	0.5	8.42	2.3	96.70	50.00	50.01	
107203	11.0	2381.19	3.4	86.00	3.0	12.36	2.5	56.08	270.00	69.83	
107204	10.0	1930.85	3.7	125.19	2.0	8.77	2.1	70.73	50.00	80.46	
107205	8.8	2359.41	3.3	91.02	2.0	9.61	2.4	57.85	50.00	62.88	
107206	10.7	5839.39	3.0	62.87	4.0	16.74	3.6	61.49	390.00	72.31	
107207	11.0	4587.04	2.5	72.72	3.0	15.01	2.4	50.25	220.00	60.97	
107208	11.5	4915.42	3.1	83.86	4.0	15.18	2.9	64.17	290.00	69.21	
107209	10.0	4762.55	2.6	70.08	3.0	14.18	2.6	53.74	50.00	60.76	
107210	19.2	3965.40	3.2	49.27	2.0	13.00	3.4	58.31	350.00	45.35	
107211	21.0	3890.66	3.5	55.46	2.0	21.11	2.9	48.89	290.00	45.34	
107212	17.1	4507.78	5.0	80.88	3.0	18.06	3.1	77.99	280.00	43.57	
107213	13.2	2639.45	4.3	29.22	2.0	10.96	1.7	33.01	260.00	81.01	
107214	13.5	3600.79	4.4	48.36	2.0	9.37	2.3	32.09	290.00	49.71	
107215	17.3	4131.85	4.6	55.79	2.0	10.12	2.5	46.29	240.00	58.62	
107216	18.7	3633.63	10.3	62.92	2.0	10.19	1.4	53.03	50.00	43.51	
107217	12.3	2527.35	10.0	21.98	3.0	20.21	2.4	82.78	310.00	56.44	
107218	23.5	3879.34	5.8	79.47	2.0	10.86	1.6	62.94	50.00	40.25	
107219	17.0	3536.68	5.8	47.63	2.0	12.06	2.6	42.82	400.00	57.99	
107221	13.3	3888.55	6.6	45.81	2.0	27.46	3.3	49.66	460.00	43.85	
107222	18.5	5235.32	6.2	65.82	4.0	20.55	2.8	58.83	820.00	65.20	
107223	27.7	3713.18	7.7	45.31	1.0	24.92	2.8	51.41	380.00	59.41	
107224	10.4	3580.52	2.6	58.13	3.0	10.26	2.0	47.09	340.00	60.53	
107225	12.9	3219.66	17.7	59.93	3.0	16.54	2.1	110.45	50.00	47.23	
107226	23.5	9239.66	13.3	116.62	1.0	13.80	3.7	38.83	1300.00	288.12	
107227	15.2	4163.97	4.1	62.52	3.0	12.30	3.1	49.76	280.00	49.91	
107228	13.9	4567.56	4.2	72.16	6.0	11.15	3.5	64.95	430.00	33.69	
107229	6.4	2744.13	2.0	113.81	2.0	10.12	1.9	63.13	280.00	45.81	
107230	5.3	2767.74	1.8	98.17	1.0	7.10	1.7	43.17	50.00	53.21	
107231	5.8	3261.25	2.2	127.03	2.0	6.38	2.3	34.64	250.00	56.13	
107232	10.1	4592.29	2.4	98.58	2.0	18.77	3.0	87.79	50.00	44.61	
107233	11.2	4695.50	2.9	94.74	2.0	15.39	2.6	56.91	290.00	52.86	
107234	10.0	4780.77	3.1	96.03	2.0	22.13	3.2	60.96	250.00	52.00	
107235	7.5	3653.18	3.0	102.88	1.0	10.66	2.9	84.01	350.00	86.30	
107236	11.4	4202.95	3.1	89.18	2.0	18.96	4.0	76.52	250.00	92.48	
107237	11.0	2779.15	3.9	100.79	2.0	12.63	2.9	95.55	250.00	65.72	
107238	5.8	3694.69	4.2	145.49	2.0	18.05	3.0	59.16	50.00	37.41	
107239	12.4	5098.29	3.1	100.12	2.0	14.26	3.3	72.26	270.00	82.65	
107240	12.5	4605.74	2.6	78.42	2.0	19.61	3.0	82.55	270.00	70.00	
107241	10.4	4799.84	3.5	113.95	3.0	10.54	2.6	50.04	270.00	89.46	
107242	7.9	4228.75	3.0	111.99	2.0	9.18	2.8	53.71	240.00	75.06	
107243	12.9	4522.71	3.0	124.02	2.0	12.28	2.6	92.91	50.00	87.36	
107244	8.1	5359.71	2.9	108.65	2.0	11.48	2.6	63.36	50.00	84.55	
107245	10.0	5440.50	3.3	79.77	2.0	14.37	3.3	58.16	210.00	81.47	
107246	9.3	4312.48	3.1	141.88	2.0	9.43	2.7	94.59	50.00	79.52	
107247	12.3	4596.12	3.0	135.66	2.0	9.47	2.0	113.44	50.00	86.27	
107248	10.0	5410.74	2.8	127.15	2.0	11.15	2.6	102.38	50.00	84.53	
107249	6.9	5652.40	2.6	116.47	2.0	7.69	2.5	67.37	50.00	72.37	
107251	7.0	6265.07	2.6	111.55	2.0	6.70	2.1	80.49	50.00	69.50	
107252	8.7	4535.99	2.7	80.29	2.0	11.70	2.8	48.13	50.00	63.97	
107253	10.8	4346.52	3.3	80.57	2.0	8.89	2.4	83.63	210.00	55.43	
107254	11.6	4631.29	3.4	80.03	2.0	9.72	2.8	61.85	250.00	81.76	
107255	10.6	4439.55	2.9	62.21	5.0	13.93	3.1	48.41	420.00	55.83	
107256	9.3	4419.13	4.1	76.49	3.0	12.66	2.7	58.29	50.00	52.60	
107257	9.4	4084.43	2.5	59.25	2.0	14.99	2.6	41.35	200.00	46.89	
107258	10.2	4147.97	2.8	62.63	3.0	12.30	2.6	50.28	250.00	53.65	
107259	10.4	4767.44	3.2	54.36	4.0	14.10	3.3	41.19	50.00	57.15	
107260	10.9	4381.07	2.8	55.36	5.0	13.06	2.4	42.50	430.00	56.13	
107261	7.8	4847.07	2.7	84.43	5.0	9.48	2.8	25.67	280.00	105.75	
107262	7.3	4615.77	2.3	61.45	4.0	5.95	2.2	18.33	220.00	68.77	
107263	7.5	3419.59	2.3	54.98	2.0	10.45	2.5	20.02	230.00	88.32	
107264	9.3	3871.98	2.4	110.68	3.0	9.61	2.7	44.81	320.00	76.40	
107265	14.1	2523.88	3.7	67.57	3.0	4.96	4.8	23.17	300.00	77.56	
107266	6.6	3416.19	1.9	78.58	3.0	7.97	2.0	39.39	340.00	71.21	
107267	7.5	3065.84	2.0	76.26	3.0	7.29	2.4	42.86	290.00	69.51	
107268	10.8	3616.88	2.2	73.51	3.0	12.78	2.3	63.12	250.00	73.99	
107269	5.7	4063.60	2.2	86.07	3.0	9.21	1.6	26.81	50.00	70.98	
107270	6.1	4915.10	2.0	93.04	3.0	7.34	2.6	23.19	220.00	83.66	
107271	8.1	4163.38	2.5	99.17	2.0	13.63	2.3	58.40	330.00	69.04	



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
107272	10.6	2892.37	1.9	67.67	2.0	6.59	1.6	45.52	350.00	63.48	
107273	7.6	3179.08	2.2	64.61	3.0	5.85	2.8	18.17	50.00	80.72	
107274	6.1	3828.80	1.9	165.08	2.0	8.68	2.6	43.52	50.00	65.18	
107275	6.9	3425.12	2.0	71.07	3.0	5.74	2.5	17.79	50.00	69.18	
107276	10.0	2862.09	2.2	130.78	2.0	5.61	2.6	38.26	50.00	66.73	
107277	8.5	3849.69	2.4	90.26	4.0	8.23	2.7	42.58	50.00	87.64	
107278	13.7	3156.19	3.1	78.22	3.0	7.01	2.9	22.05	50.00	97.07	
107279	4.6	5886.41	1.7	80.17	3.0	7.75	2.1	23.54	50.00	74.11	
107280	11.3	4000.75	3.6	53.40	7.0	7.95	4.7	22.84	580.00	134.49	
107281	5.8	4317.74	1.9	83.74	3.0	9.64	2.4	45.50	50.00	66.04	
107283	7.3	3208.84	2.2	99.06	2.0	10.10	2.2	56.07	50.00	61.08	
107284	6.7	3356.46	1.9	78.06	2.0	6.33	2.4	20.58	50.00	64.63	
107285	2.6	6440.56	1.8	58.72	0.5	3.05	2.2	13.83	400.00	103.22	
107286	7.4	7356.06	2.3	72.99	4.0	8.34	2.8	21.27	320.00	102.08	
107287	9.2	4340.57	2.5	128.40	3.0	9.85	2.5	49.74	50.00	91.64	
107288	7.8	6908.57	2.4	103.96	3.0	8.38	2.3	36.17	200.00	90.45	
107289	12.0	5254.86	2.3	78.29	4.0	11.17	2.2	53.79	220.00	71.36	
107290	6.2	8914.29	3.1	95.64	4.0	7.08	3.2	24.65	520.00	124.63	
107291	4.2	5352.00	1.9	98.72	2.0	6.42	2.0	22.62	230.00	80.20	
107292	18.2	17211.43	5.0	160.18	13.0	6.10	5.0	24.77	500.00	168.18	
107293	5.2	7578.29	2.9	113.09	5.0	8.13	2.6	28.29	570.00	119.15	
107294	2.6	5676.57	1.2	135.27	2.0	6.15	1.3	27.46	220.00	51.76	
107295	8.2	3293.71	2.1	97.26	2.0	10.47	1.9	60.01	50.00	68.30	
107297	7.8	3156.57	2.2	103.57	2.0	9.66	1.9	60.81	50.00	62.47	
107298	6.3	5946.29	2.1	84.47	3.0	6.28	3.2	24.34	230.00	121.78	
107299	10.0	5441.14	2.9	42.32	2.0	6.47	3.1	21.26	610.00	73.04	
107300	50.8	5506.29	4.3	43.71	2.0	6.16	4.2	26.94	710.00	74.63	
107301	42.4	3514.29	4.3	18.70	2.0	5.35	6.5	20.50	500.00	80.74	
107302	15.5	9817.14	5.0	61.50	5.0	7.17	4.4	17.52	690.00	145.04	
107303	5.1	8244.57	3.7	110.10	12.0	7.87	2.5	20.64	640.00	158.76	
107304	11.2	6947.43	3.0	77.18	6.0	6.29	3.0	17.37	220.00	92.34	
107305	8.5	3578.11	1.9	103.92	1.0	8.50	1.9	47.06	50.00	61.78	
107306	1.9	5854.04	1.6	90.50	2.0	2.30	2.9	29.51	50.00	48.85	
107307	7.3	3478.30	1.9	92.14	2.0	9.22	2.1	42.82	240.00	60.12	
107308	7.8	3987.53	2.1	97.49	2.0	10.06	2.5	45.04	300.00	63.53	
107309	9.1	3504.88	2.7	101.46	2.0	9.19	2.5	53.86	370.00	78.82	
107310	6.4	3567.49	2.0	89.55	3.0	8.12	2.2	45.67	50.00	60.92	
107311	60.0	5601.67	4.5	41.75	1.0	14.81	5.3	23.31	510.00	70.34	
107312	81.3	5030.23	6.2	39.21	3.0	17.46	6.9	20.11	1200.00	86.48	
107313	83.1	5861.20	5.5	30.30	2.0	11.89	3.2	24.48	1300.00	81.48	
107314	10.7	3805.40	2.9	64.87	2.0	13.57	3.1	44.12	310.00	52.83	
107315	18.0	6415.57	3.7	63.81	3.0	6.66	3.8	17.38	750.00	76.66	
107316	43.9	5035.92	11.0	58.63	3.0	9.63	0.3	13.58	610.00	605.40	
107317	8.6	6223.19	2.7	88.59	5.0	4.13	2.5	17.44	220.00	55.33	
107318	11.3	5267.00	3.0	83.57	2.0	4.25	2.9	21.03	50.00	50.36	
107319	8.0	5095.12	2.3	99.38	3.0	6.27	2.6	21.76	50.00	64.30	
107320	11.0	3434.31	2.3	58.64	2.0	10.72	2.1	37.42	50.00	43.85	
107322	7.7	4712.05	2.4	117.36	2.0	8.00	2.4	35.96	310.00	59.91	
107323	10.1	3406.94	2.1	90.65	15.0	8.52	1.6	52.90	280.00	58.39	
107324	11.3	3518.65	2.2	97.76	1.0	13.09	1.2	44.10	340.00	55.47	
107326	9.1	3678.22	2.1	84.91	2.0	10.89	2.4	60.91	220.00	63.71	
107327	8.4	3226.85	2.1	83.22	2.0	11.14	2.4	86.03	50.00	58.92	
107328	8.8	4612.88	2.5	116.02	3.0	8.61	2.9	26.70	50.00	82.88	
107329	6.9	3425.18	2.2	86.35	2.0	9.10	2.3	44.45	50.00	62.88	
107330	6.5	4129.60	2.1	101.79	2.0	10.59	2.5	56.57	190.00	63.33	
107331	7.6	3152.76	1.8	99.52	2.0	8.94	1.8	76.71	250.00	55.70	
107332	5.7	3152.76	1.9	92.29	2.0	7.47	2.3	42.54	50.00	59.28	
107333	4.4	2759.52	1.5	90.90	2.0	6.88	1.7	45.26	50.00	45.80	
107334	4.4	3137.95	1.5	129.46	1.0	7.04	1.7	47.10	250.00	45.83	
107335	8.1	3054.48	2.3	107.76	2.0	7.38	1.9	49.53	270.00	58.62	
107336	6.5	3390.95	2.1	90.40	2.0	7.35	2.4	38.82	50.00	61.22	
107337	6.6	2741.96	2.0	76.57	1.0	7.57	2.5	50.98	50.00	57.41	
107338	33.9	3776.47	3.2	55.27	1.0	15.30	2.3	35.11	360.00	28.00	
107339	19.9	3900.80	3.0	30.16	2.0	5.20	3.4	16.88	690.00	56.07	
107340	10.1	4050.21	2.3	66.09	3.0	5.70	2.7	17.06	330.00	56.47	
107341	11.6	3405.78	2.7	52.22	2.0	14.61	2.6	34.86	440.00	44.37	
107342	10.9	3572.31	2.7	53.45	1.0	15.14	3.3	34.60	410.00	45.60	
107343	7.8	3901.94	2.1	98.23	2.0	5.12	2.2	19.70	330.00	52.46	
107344	11.4	3964.67	2.5	86.34	2.0	9.75	0.8	52.71	220.00	53.28	
107345	5.1	2647.29	3.2	31.28	2.0	5.27	1.1	25.50	50.00	56.20	
107346	16.4	6738.57	4.0	91.34	6.0	4.53	2.9	25.90	50.00	35.74	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
107347	8.8	4285.17	2.1	116.16	1.0	7.37	1.7	43.92	50.00	48.90	
107348	6.5	5504.46	1.8	103.93	3.0	11.34	2.1	31.33	50.00	47.66	
107349	8.7	3103.06	2.0	97.58	3.0	10.91	2.5	47.21	50.00	68.75	
107350	7.5	6475.90	2.1	120.23	2.0	9.41	2.2	38.46	50.00	61.54	
107351	10.5	3832.72	2.6	86.37	3.0	7.93	3.1	18.92	290.00	81.23	
107352	7.5	4425.78	2.1	136.46	2.0	9.78	2.4	42.48	320.00	74.69	
107353	2.5	8201.59	1.4	148.45	2.0	6.19	0.9	35.00	50.00	59.38	
107354	10.0	3901.02	3.1	12.67	4.0	6.45	2.5	18.19	310.00	97.37	
107355	11.7	6605.67	2.6	138.11	3.0	5.78	2.9	25.50	50.00	65.71	
107356	7.0	3450.24	2.2	66.07	3.0	10.22	2.5	44.49	210.00	65.52	
107357	6.4	4611.33	2.4	101.35	3.0	9.94	2.4	44.86	50.00	63.73	
107358	7.1	6107.08	2.5	131.27	5.0	8.31	3.2	33.51	220.00	96.98	
107359	7.7	3326.17	2.0	71.62	3.0	11.34	2.4	44.08	50.00	58.83	
107360	8.7	4018.27	1.9	70.05	5.0	12.33	2.2	79.69	50.00	60.58	
107361	7.7	3875.98	1.9	62.77	3.0	10.36	2.1	49.31	200.00	51.51	
107363	26.2	6066.07	4.3	79.44	1.0	4.61	4.7	36.16	480.00	50.67	
107364	11.5	4078.82	3.8	59.81	2.0	11.64	2.1	38.58	50.00	55.00	
107365	5.0	5551.80	1.7	68.41	2.0	7.02	2.4	21.40	260.00	51.63	
107366	8.7	3235.48	2.3	34.29	1.0	7.72	1.2	21.13	210.00	60.30	
107367	7.5	2203.71	2.5	31.66	1.0	8.26	1.6	20.80	50.00	36.26	
107368	11.7	3969.67	2.8	70.64	4.0	10.48	2.8	52.30	50.00	69.74	
107369	5.8	3284.89	2.0	89.36	1.0	8.17	2.1	48.58	50.00	52.36	
107370	7.1	2990.75	2.4	95.53	2.0	9.19	2.2	55.66	50.00	55.98	
107371	6.6	2656.41	2.4	77.94	2.0	8.18	2.0	45.76	50.00	55.10	
107372	6.4	2782.79	2.0	94.25	2.0	8.34	2.0	60.89	50.00	56.30	
107373	5.9	3512.38	2.0	106.92	2.0	7.76	1.6	49.68	50.00	56.03	
107374	12.9	5086.47	2.9	93.50	3.0	18.33	2.9	76.42	50.00	75.67	
107375	12.1	5072.68	5.6	81.35	3.0	25.45	3.9	54.84	50.00	61.18	
107376	5.2	3393.67	2.5	57.77	2.0	5.52	2.6	19.12	320.00	78.62	
107377	4.8	5873.09	2.2	97.73	2.0	9.07	3.0	34.35	240.00	79.86	
107378	10.4	3867.17	3.0	88.81	3.0	8.26	3.4	38.31	50.00	91.48	
107379	10.2	3338.29	2.4	83.92	4.0	14.59	3.2	67.71	50.00	64.37	
107381	10.6	2491.85	2.5	68.46	3.0	8.74	1.8	89.44	340.00	64.64	
107382	11.4	3375.58	2.8	69.34	4.0	10.73	2.3	56.44	390.00	66.46	
107383	12.8	2899.82	3.0	108.01	3.0	9.42	3.2	76.65	300.00	86.19	
107384	12.8	2530.28	2.8	89.19	4.0	10.35	2.8	108.91	50.00	74.18	
107385	11.8	4067.20	2.8	104.27	3.0	8.33	3.7	30.56	270.00	88.58	
107386	10.5	3365.41	2.2	67.28	4.0	11.89	2.4	53.76	50.00	58.75	
107387	8.3	3398.19	2.2	74.48	3.0	9.02	2.5	53.27	50.00	65.86	
107388	11.6	3794.85	3.1	97.44	4.0	7.82	3.4	23.32	370.00	89.07	
107389	11.3	3757.59	2.5	69.13	3.0	10.73	2.4	62.25	50.00	65.96	
107390	10.5	3718.89	2.6	79.92	3.0	10.65	2.6	62.96	380.00	67.53	
107391	11.2	4181.05	2.4	76.62	3.0	11.66	2.4	73.32	460.00	70.38	
107392	11.7	4831.46	2.5	75.46	4.0	15.21	2.8	66.07	300.00	68.98	
107393	9.0	3918.09	2.9	113.83	2.0	13.07	2.4	63.55	50.00	57.42	
107394	12.3	5002.91	2.6	109.18	3.0	15.43	2.2	72.39	50.00	61.56	
107395	8.9	4979.01	3.2	150.34	2.0	23.92	3.2	81.49	50.00	54.54	
107396	10.1	5062.10	2.6	144.10	3.0	17.90	3.2	72.61	50.00	57.62	
107397	9.3	2165.08	2.9	108.18	2.0	10.97	2.7	76.35	50.00	57.64	
107398	8.3	2630.66	2.5	93.72	2.0	9.68	2.6	84.51	50.00	59.32	
107399	8.6	2330.14	2.6	132.89	3.0	10.11	2.4	73.47	260.00	62.48	
107401	8.4	2647.73	3.0	121.25	2.0	10.19	2.2	98.26	50.00	52.19	
107402	11.4	2360.87	3.2	122.62	2.0	10.98	1.9	106.02	50.00	67.02	
107403	11.1	2535.04	3.5	109.60	2.0	10.17	2.5	78.23	50.00	65.72	
107404	11.8	4202.56	2.7	61.06	3.0	12.02	2.3	52.45	250.00	54.56	
107405	7.0	3903.43	2.8	18.74	2.0	3.70	2.8	11.46	590.00	79.75	
107406	12.7	4562.87	4.6	60.11	3.0	14.37	3.3	57.67	230.00	55.33	
107407	15.8	3358.55	3.5	35.74	2.0	18.13	4.5	45.75	490.00	37.44	
107408	8.7	3529.51	3.4	85.63	3.0	11.09	3.2	49.94	250.00	62.94	
107800	10.3	3109.14	2.7	76.85	2.0	6.93	2.1	49.79	360.00	59.69	
107801	10.0	2766.96	2.4	84.55	3.0	7.01	1.3	65.06	50.00	77.32	
107802	8.5	3042.29	2.5	83.40	3.0	5.73	3.4	26.77	510.00	72.05	
107803	12.4	2842.87	2.9	68.85	4.0	10.47	2.1	44.83	530.00	56.50	
107804	12.4	2370.38	2.6	73.51	3.0	5.75	2.4	77.91	490.00	49.32	
107805	10.8	2640.05	2.4	72.46	4.0	10.68	2.9	54.09	380.00	63.85	
107806	11.1	2749.96	2.5	79.82	4.0	13.17	3.2	58.82	340.00	68.91	
107808	12.5	2974.64	2.7	80.03	4.0	11.79	3.2	70.08	320.00	71.30	
107809	8.3	2814.96	1.9	64.52	3.0	8.76	1.7	41.14	250.00	55.19	
107810	8.1	3137.75	2.2	77.41	2.0	11.80	2.6	54.33	270.00	65.40	
107811	7.0	3432.02	2.0	101.87	2.0	9.81	2.4	54.44	400.00	65.62	
107812	8.7	4008.72	2.4	73.33	4.0	6.12	3.0	18.29	450.00	72.45	
107813	9.1	2581.14	2.3	89.23	2.0	6.10	2.5	52.17	270.00	67.77	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
107814	9.3	2779.60	2.1	64.31	2.0	8.80	1.9	47.61	50.00	60.44	
107815	9.1	3179.95	2.1	76.42	4.0	9.53	1.9	62.40	400.00	64.07	
107816	11.9	3106.95	2.6	63.78	4.0	11.88	3.0	56.89	250.00	67.20	
107817	11.6	3473.08	2.4	70.92	4.0	11.42	2.5	52.31	270.00	67.96	
107818	13.5	3937.29	3.1	104.85	4.0	9.71	2.8	65.74	260.00	87.95	
107819	7.3	6809.28	2.4	91.94	5.0	9.85	2.7	30.36	330.00	91.40	
107820	12.0	5653.50	2.9	107.65	4.0	8.27	3.6	27.16	420.00	94.15	
107821	5.2	4664.27	2.2	75.45	2.0	6.52	3.1	21.45	390.00	81.24	
107822	7.5	3472.31	2.3	88.16	2.0	10.33	1.8	48.11	50.00	55.86	
107823	11.3	4856.99	2.6	65.04	3.0	12.16	2.2	47.07	270.00	64.45	
107824	10.4	4012.59	2.9	81.02	3.0	10.52	2.4	76.39	310.00	74.49	
107826	10.0	4706.61	2.4	58.47	5.0	11.85	2.7	48.94	220.00	56.01	
107827	10.4	5021.87	2.6	87.67	3.0	16.66	2.8	61.69	220.00	68.04	
107828	11.5	5007.38	1.9	102.23	3.0	8.73	2.2	69.67	490.00	56.51	
107829	7.4	3807.62	2.1	90.31	3.0	10.80	2.8	55.56	50.00	59.05	
107830	7.9	4159.64	2.2	72.48	4.0	13.33	2.6	44.50	50.00	61.34	
107831	7.8	3580.36	2.2	81.24	2.0	8.71	2.0	35.60	300.00	61.29	
107832	9.0	3237.25	2.5	97.84	2.0	12.48	2.5	53.70	50.00	63.13	
107833	10.1	3146.10	2.4	75.60	2.0	13.85	2.8	49.06	50.00	63.03	
107834	9.3	3019.18	2.5	102.60	2.0	10.04	2.8	60.83	50.00	66.61	
107835	7.9	3264.10	2.1	89.32	2.0	9.53	2.5	46.79	260.00	63.98	
107836	7.8	3196.19	2.1	94.33	2.0	8.30	3.1	53.70	50.00	66.54	
107837	9.3	3979.94	2.3	64.56	2.0	12.89	2.8	45.94	50.00	53.08	
107838	11.3	3653.75	3.2	49.63	2.0	14.57	3.6	38.83	340.00	52.30	
107839	8.1	3713.86	2.3	71.70	3.0	11.84	2.8	47.74	50.00	51.69	
107840	11.8	4385.17	2.7	69.23	2.0	13.25	2.9	45.77	460.00	68.33	
107841	9.2	3373.20	2.2	61.66	3.0	9.89	1.4	40.80	50.00	47.39	
107842	10.7	3558.01	4.0	83.99	2.0	16.65	3.5	55.49	260.00	57.42	
107843	8.2	4009.99	2.0	107.56	7.0	7.15	2.0	36.94	50.00	49.78	
107844	10.0	3294.16	2.4	95.83	2.0	10.20	2.2	56.37	50.00	61.77	
107845	7.6	4671.28	2.2	106.50	4.0	6.19	2.5	22.57	350.00	78.55	
107846	4.8	5871.38	1.6	163.39	2.0	5.76	2.1	38.01	50.00	51.08	
107847	7.3	2973.63	2.1	89.50	2.0	7.35	2.6	30.90	50.00	77.30	
107848	6.9	2616.09	2.0	96.69	1.0	6.69	2.0	56.69	430.00	59.36	
107849	10.9	3870.83	2.8	75.23	2.0	11.35	2.9	42.22	480.00	55.43	
107850	12.9	3454.44	3.4	66.60	2.0	11.85	2.6	41.79	420.00	55.12	
107851	10.9	3315.64	2.5	68.81	2.0	9.97	2.3	43.73	260.00	50.07	
107852	11.5	3270.11	3.2	42.34	2.0	13.32	2.9	25.75	50.00	45.85	
107853	10.0	3318.97	2.4	79.10	3.0	11.66	2.6	50.74	50.00	45.69	
107854	12.7	4094.02	3.7	69.27	3.0	9.15	2.9	47.48	320.00	44.38	
107855	10.4	4026.29	2.4	103.90	2.0	10.92	2.0	49.73	50.00	47.12	
107856	9.0	3889.71	2.3	83.09	2.0	10.08	2.5	51.70	310.00	51.25	
107857	9.2	7381.90	2.2	171.06	2.0	5.73	2.8	40.73	50.00	42.58	
107858	23.9	8916.46	5.1	134.97	3.0	16.46	1.4	106.15	570.00	81.95	
107859	10.4	4179.52	4.1	130.43	6.0	9.33	1.8	89.43	50.00	51.26	
107860	6.5	3688.70	1.9	77.05	2.0	8.36	2.0	34.64	50.00	52.07	
107862	6.5	3769.95	2.0	101.28	3.0	16.84	2.5	27.45	370.00	36.78	
107863	8.1	4010.73	2.4	110.73	3.0	15.38	2.9	63.11	50.00	65.30	
107864	6.1	5051.87	2.0	92.00	3.0	10.87	2.9	41.88	270.00	65.70	
107865	7.4	3632.85	2.1	93.29	2.0	8.61	2.5	31.70	340.00	69.74	
107866	7.5	2959.56	2.3	91.16	2.0	11.65	2.6	56.04	50.00	60.54	
107867	7.2	3027.56	2.0	75.50	2.0	9.64	2.8	52.56	420.00	62.40	
107868	6.0	3198.11	1.7	97.97	1.0	9.05	2.7	59.36	50.00	56.49	
107869	10.0	3250.50	3.5	117.89	3.0	11.86	2.9	71.53	240.00	68.94	
107870	6.6	3271.68	2.1	90.86	3.0	7.83	2.3	38.47	240.00	60.26	
107871	6.3	2959.56	2.4	95.08	1.0	11.04	2.6	55.19	210.00	54.91	
107873	8.1	3441.11	2.3	113.14	2.0	8.31	2.5	54.42	50.00	69.57	
107874	7.6	3150.34	2.4	91.59	2.0	11.96	2.8	54.39	350.00	64.41	
107875	7.0	3550.03	2.3	119.79	2.0	11.46	2.7	74.80	50.00	61.78	
107876	22.5	4991.59	2.2	72.68	2.0	9.87	1.5	30.14	50.00	31.26	
107877	10.9	4785.01	2.2	60.04	2.0	6.44	2.5	20.54	310.00	56.71	
107878	10.3	2915.69	3.1	51.64	2.0	12.33	3.2	31.99	50.00	45.67	
107879	10.5	3252.51	2.5	92.89	2.0	6.04	2.5	35.64	50.00	36.18	
107880	5.4	3004.39	4.6	63.91	2.0	5.16	1.1	31.52	50.00	45.24	
107881	11.3	6732.92	3.7	119.76	3.0	5.81	2.1	42.58	50.00	43.03	
107882	19.7	2583.37	3.3	32.65	1.0	3.85	1.7	17.57	50.00	98.04	
107883	14.2	6526.34	3.3	94.88	3.0	5.46	3.6	36.72	290.00	62.67	
107884	10.2	4422.38	2.1	94.71	2.0	15.31	2.6	45.80	50.00	47.90	
107885	11.2	3050.42	2.4	83.84	2.0	9.06	3.2	52.63	50.00	71.12	
107886	10.4	3509.61	2.5	85.38	2.0	11.25	3.0	53.75	50.00	72.68	
107887	9.2	3705.65	2.5	98.84	3.0	6.27	2.2	22.80	340.00	80.29	
107888	10.7	3455.76	2.5	80.05	2.0	10.61	3.1	44.87	50.00	71.13	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
107889	8.7	2800.63	2.1	78.85	3.0	10.74	2.5	53.68	250.00	58.78	
107890	10.0	3644.87	2.4	92.10	2.0	12.31	2.7	72.27	240.00	65.79	
107891	8.1	3195.73	2.8	118.90	2.0	14.43	2.6	69.61	210.00	72.63	
107892	8.8	4393.43	2.5	118.35	2.0	11.66	2.6	43.22	50.00	82.81	
107893	7.5	5108.22	2.5	105.95	3.0	8.68	2.9	70.08	250.00	73.16	
107894	8.7	4769.40	2.6	91.20	3.0	11.14	2.8	62.97	380.00	75.77	
107895	11.0	4404.69	3.0	82.58	4.0	17.83	3.4	44.08	310.00	66.27	
107897	7.7	4314.63	2.4	70.32	3.0	10.51	2.1	34.09	340.00	57.45	
107898	8.0	3736.05	2.3	49.68	3.0	7.40	2.6	15.02	550.00	68.28	
107899	15.5	3893.64	3.1	17.35	2.0	4.02	3.6	28.69	290.00	62.46	
107900	9.4	3394.97	2.6	47.72	2.0	9.06	2.4	23.14	290.00	47.22	
107901	10.1	2881.82	3.0	38.88	2.0	10.99	2.0	31.11	240.00	65.61	
107902	10.7	3309.27	2.9	46.56	2.0	8.50	2.5	23.51	360.00	52.46	
107903	9.0	3046.66	3.2	38.54	2.0	11.87	2.5	37.33	150.00	36.22	
117001	9.4	3071.35	2.5	67.04	1.0	7.60	2.3	17.55	440.00	64.19	
117002	13.1	5549.27	3.8	58.92	2.0	6.89	2.2	12.85	970.00	91.36	
117003	10.8	8689.66	3.2	83.82	4.0	8.58	2.1	10.82	660.00	159.12	
117004	16.4	6385.76	3.1	56.85	3.0	5.89	3.0	12.99	580.00	45.80	
117005	16.6	4991.61	3.3	58.36	2.0	4.49	2.2	14.21	550.00	70.19	
117006	17.2	6920.46	3.8	51.02	3.0	8.41	4.3	16.42	760.00	57.57	
117007	9.4	4323.51	3.6	76.38	3.0	6.54	1.2	54.82	230.00	29.01	
117008	16.3	5981.18	4.5	57.45	2.0	20.13	3.7	12.85	970.00	91.36	
117009	9.4	4956.62	6.0	41.71	1.0	4.70	1.9	10.82	660.00	159.12	
117010	20.4	7509.24	5.7	80.48	2.0	8.31	3.3	16.28	870.00	128.13	
117011	14.4	5898.43	3.4	71.83	2.0	7.05	1.8	12.06	510.00	63.59	
117012	24.2	4311.26	5.6	59.18	2.0	17.77	3.9	38.10	540.00	63.31	
117013	20.2	3974.69	4.7	56.34	2.0	12.63	2.8	40.75	400.00	50.13	
117014	12.5	4526.26	2.8	69.58	4.0	11.27	2.8	58.42	360.00	64.31	
117015	9.2	3956.68	2.2	52.12	2.0	12.55	2.3	35.07	360.00	51.64	
117016	10.8	3724.79	4.3	110.75	3.0	13.59	3.2	72.13	240.00	45.34	
117017	6.5	3860.99	2.1	76.82	2.0	13.13	3.1	40.57	270.00	37.82	
117018	7.7	8733.95	2.6	150.44	6.0	12.63	1.4	66.10	260.00	44.98	
117019	5.9	4979.90	2.3	33.87	0.5	5.93	4.0	9.54	530.00	47.19	
117020	7.9	4075.99	2.5	90.05	2.0	13.87	1.9	50.18	150.00	37.67	
117021	4.8	3940.92	2.4	92.83	2.0	10.17	1.5	40.64	50.00	50.20	
117022	7.5	4480.10	2.3	122.59	1.0	12.44	2.4	98.45	170.00	36.46	
117023	6.4	4367.94	2.0	101.40	2.0	14.49	2.6	50.01	200.00	32.07	
117024	6.4	4212.18	2.1	102.35	2.0	8.77	2.4	50.88	240.00	38.75	
117025	8.2	3573.19	2.1	90.41	3.0	12.39	2.8	85.93	180.00	35.63	
117026	10.4	2725.27	2.7	94.28	2.0	11.28	2.6	85.35	160.00	49.32	
117028	10.0	2623.64	2.9	116.96	2.0	11.34	3.0	102.51	290.00	54.75	
117029	10.3	2783.82	2.8	96.02	2.0	10.78	2.8	75.71	320.00	51.91	
117030	8.8	3047.84	2.9	104.65	2.0	10.33	1.7	69.06	210.00	53.03	
117031	8.3	3630.01	3.1	112.60	2.0	9.90	2.1	69.40	210.00	51.98	
117032	9.4	4106.13	2.7	139.87	2.0	13.91	2.6	105.34	50.00	46.98	
117033	11.4	2496.60	4.5	94.39	2.0	12.50	2.9	74.17	190.00	49.15	
117034	11.8	2213.80	3.4	119.67	2.0	11.55	2.6	81.65	260.00	52.44	
117035	12.5	3051.15	3.6	124.65	2.0	13.39	3.4	108.94	140.00	63.77	
117036	5.9	3702.92	1.9	89.13	5.0	10.16	2.3	48.01	220.00	26.55	
117037	10.0	3351.74	2.4	88.47	3.0	14.26	2.8	69.45	240.00	39.97	
117038	10.0	4320.41	2.3	108.43	2.0	11.42	2.5	85.23	230.00	48.08	
117039	9.2	2506.63	2.8	100.90	2.0	11.17	2.1	105.06	210.00	51.97	
117040	13.4	2924.77	3.6	151.13	3.0	10.33	3.3	23.12	280.00	81.34	
117041	10.1	3271.20	3.4	109.26	2.0	15.27	3.2	62.18	240.00	51.37	
117043	11.3	2456.99	3.3	134.88	2.0	12.74	2.8	104.75	180.00	63.25	
117044	10.7	3394.77	3.6	104.12	2.0	15.04	3.0	73.57	210.00	48.54	
117045	3.8	14894.16	1.4	191.02	1.0	16.75	2.3	60.07	240.00	43.26	
117046	1.6	20002.31	0.5	242.19	0.5	12.69	1.5	88.90	190.00	37.13	
117047	8.1	3368.29	2.6	97.63	2.0	9.13	2.4	39.46	250.00	53.64	
117048	10.2	1267.66	2.7	80.72	2.0	8.13	2.3	77.57	260.00	51.15	
117049	8.7	1906.98	2.6	91.73	1.0	9.33	1.9	74.33	240.00	53.87	
117050	9.3	1914.87	2.5	83.97	2.0	8.54	2.6	79.95	300.00	51.45	
117051	10.0	1879.95	3.1	99.83	2.0	9.49	2.5	80.75	240.00	50.77	
117052	10.3	1743.65	3.4	106.53	2.0	10.63	2.9	100.78	170.00	50.99	
117053	15.1	953.94	2.9	141.83	3.0	9.50	2.8	112.18	220.00	55.89	
117054	11.9	2254.07	2.9	104.60	2.0	9.57	2.9	98.67	260.00	56.84	
117055	10.6	1846.16	2.8	96.95	2.0	10.26	2.9	127.36	190.00	54.78	
117056	11.2	1459.80	2.6	105.54	2.0	8.43	2.7	91.15	310.00	54.54	
117057	10.1	1804.48	2.9	92.39	3.0	8.08	2.8	48.27	290.00	50.79	
117058	9.0	1961.05	3.0	96.84	2.0	12.80	2.4	63.55	190.00	46.48	
117059	9.4	2196.46	3.6	107.77	2.0	13.11	2.8	65.01	180.00	48.95	
117061	9.1	2151.41	2.5	104.68	2.0	8.74	2.6	56.23	230.00	46.49	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
117062	8.6	1884.45	2.7	110.48	2.0	8.46	2.4	63.10	230.00	44.56	63.69
117063	13.7	1227.77	4.6	96.29	2.0	8.20	2.4	100.65	230.00	92.72	
117064	7.5	8011.73	2.6	170.89	1.0	22.29	3.5	71.94	260.00	43.78	
117065	8.6	1856.73	2.7	94.95	2.0	10.78	2.7	66.05	230.00	43.78	
117066	10.2	1695.87	3.0	115.99	2.0	9.64	2.8	77.35	180.00	53.32	
117067	7.6	2004.94	2.5	118.16	2.0	7.57	2.3	43.54	240.00	50.49	
117068	7.9	2207.16	2.6	108.95	2.0	7.88	2.1	45.02	210.00	48.87	
117069	10.8	1648.76	3.1	91.69	2.0	7.70	2.6	108.46	200.00	49.86	
117070	9.0	2176.14	2.9	119.78	2.0	13.16	3.1	70.51	230.00	51.30	
117071	11.1	3219.40	3.1	93.28	2.0	16.25	3.3	65.65	230.00	45.74	
117072	9.2	2518.53	2.5	97.18	2.0	11.93	2.8	102.01	230.00	43.67	
117073	7.8	4043.21	2.7	120.34	2.0	10.13	2.8	34.59	250.00	53.33	
117074	6.1	4166.15	2.4	129.48	2.0	9.67	2.2	52.39	180.00	39.02	
117075	7.9	3334.30	2.3	108.30	2.0	12.94	3.0	56.48	160.00	41.73	
117076	7.1	6721.99	2.7	135.30	2.0	12.87	2.6	68.03	210.00	55.22	
117077	4.9	9940.34	1.7	108.68	1.0	6.23	1.6	12.09	250.00	41.24	
117078	7.4	5433.12	3.1	161.03	2.0	19.94	2.7	80.27	180.00	41.03	
117079	1.7	13069.29	0.6	247.56	0.5	15.12	1.6	86.36	200.00	21.47	
117080	6.0	4706.30	2.1	120.43	2.0	12.47	2.0	52.47	220.00	41.80	
117081	8.0	2890.37	2.3	101.43	3.0	10.35	2.4	66.90	180.00	45.90	
117083	0.5	9355.04	0.4	235.93	0.5	13.87	1.3	94.04	50.00	22.73	
117084	9.1	3951.26	3.5	133.77	10.0	15.62	2.6	90.17	200.00	49.26	
117085	6.2	4490.73	2.2	123.37	3.0	9.28	2.2	43.81	210.00	50.72	
117086	10.4	6996.25	3.1	160.95	2.0	18.23	2.1	93.40	50.00	73.55	
117087	7.4	3266.19	4.4	160.86	4.0	9.43	2.0	31.08	260.00	64.33	
117088	9.3	2142.76	2.7	58.39	2.0	8.14	2.2	45.78	220.00	32.03	
117089	12.1	2726.46	4.5	65.68	2.0	9.10	2.3	65.30	220.00	36.63	
117090	8.6	2668.52	2.3	60.60	1.0	8.17	1.3	34.92	150.00	30.00	
117091	10.0	2109.49	3.2	96.24	2.0	11.23	2.6	57.77	230.00	40.81	
117092	10.1	2823.03	2.4	82.40	4.0	9.17	3.3	74.55	230.00	35.42	
117093	9.3	3121.32	2.0	87.73	3.0	7.92	2.4	50.08	190.00	34.24	
117094	9.4	3691.73	2.1	87.76	4.0	8.53	2.7	58.77	180.00	36.84	
117095	15.8	5824.44	3.9	120.33	3.0	20.88	2.4	84.59	160.00	66.32	
117096	10.7	4883.17	2.6	95.10	3.0	15.71	2.2	106.62	210.00	49.00	
117097	4.7	1028.46	1.3	186.43	3.0	7.97	1.4	60.11	50.00	25.64	
117098	10.7	1780.09	3.0	100.01	2.0	11.15	3.0	68.21	250.00	44.46	
117100	7.8	2571.95	3.3	104.77	2.0	10.73	2.2	59.53	120.00	48.22	
117101	12.5	2927.35	2.7	76.33	2.0	9.67	3.3	51.72	300.00	32.65	
117102	8.4	5603.60	2.2	94.83	1.0	5.82	3.5	28.66	270.00	30.41	
117103	10.5	3447.32	2.3	91.81	2.0	10.30	3.1	77.30	270.00	35.61	
117104	10.9	2191.85	2.8	106.12	2.0	8.57	3.4	52.28	300.00	61.01	
117105	9.3	2229.51	3.4	97.87	2.0	10.80	2.7	65.69	280.00	49.20	
117106	9.4	4406.72	4.0	132.25	2.0	19.59	2.3	143.43	180.00	53.18	
117107	8.4	3285.16	3.6	163.93	9.0	11.60	2.1	83.22	50.00	47.23	
117108	11.1	2863.53	3.6	102.24	3.0	12.30	2.9	78.32	200.00	56.35	
117109	10.9	3148.10	3.2	118.83	3.0	20.60	3.5	85.45	160.00	58.16	
117110	11.1	3126.13	2.9	91.69	3.0	10.84	2.7	82.19	230.00	57.09	
117111	10.1	2998.49	3.0	88.01	3.0	10.28	3.0	58.11	230.00	56.90	
117112	9.3	3497.54	2.8	99.96	3.0	10.08	2.7	55.86	290.00	55.50	
117113	9.3	3165.89	2.2	81.95	2.0	10.42	1.9	54.77	180.00	56.84	
117114	15.9	5463.29	4.0	55.71	3.0	13.47	3.1	27.62	430.00	50.76	
117115	12.6	2697.37	2.8	24.86	1.0	14.41	2.5	16.67	460.00	33.47	
117116	10.0	6944.40	3.7	87.81	2.0	9.80	2.6	18.97	960.00	72.63	
117117	13.1	3232.27	3.4	36.81	2.0	10.61	2.7	27.98	400.00	38.07	
117118	12.1	3433.77	3.6	36.48	2.0	9.30	2.6	30.86	380.00	46.61	
117120	14.8	3726.67	14.1	53.58	3.0	20.68	3.5	66.01	330.00	52.31	
117121	9.4	3483.62	3.4	41.65	3.0	11.35	2.3	30.47	380.00	50.15	
117122	11.7	2868.74	7.1	41.80	3.0	15.96	2.3	60.28	220.00	43.08	
117123	11.2	3495.05	4.9	39.43	2.0	11.36	2.0	36.03	340.00	57.83	
117124	9.0	3487.78	2.2	89.10	3.0	7.44	3.0	51.46	50.00	35.24	
117125	11.1	3912.58	2.7	93.59	2.0	9.84	2.6	58.49	270.00	45.55	
117126	10.0	3934.40	2.5	86.76	3.0	10.03	2.9	53.15	170.00	42.99	
117127	10.7	3698.62	2.7	85.21	2.0	11.71	2.9	47.08	240.00	39.64	
117128	10.4	3937.76	2.4	101.32	3.0	7.04	3.1	58.87	250.00	35.34	
117129	8.3	4284.03	1.7	109.28	2.0	4.67	2.8	67.46	50.00	30.68	
117130	10.6	4340.71	2.2	113.76	3.0	9.22	3.2	72.92	220.00	44.10	
117131	10.0	3080.34	2.7	72.79	2.0	9.24	2.6	46.83	230.00	37.54	
117132	20.0	3374.04	5.9	53.08	2.0	18.28	2.9	43.12	360.00	37.99	
117133	13.4	2035.35	3.3	15.17	0.5	12.25	2.8	10.14	550.00	29.75	
117134	41.2	5672.19	9.1	39.76	2.0	14.19	4.6	48.57	1300.00	189.45	
117135	10.2	2919.57	3.4	92.13	2.0	12.37	2.7	57.89	240.00	52.82	
117136	10.0	2790.75	2.9	99.71	2.0	8.89	2.8	51.77	290.00	60.31	



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
117137	9.4	3101.98	2.7	107.08	2.0	10.26	3.1	56.28	320.00	58.00	58.00
117138	10.0	2467.15	2.6	114.23	2.0	8.02	2.3	44.51	230.00	52.16	52.16
117140	8.2	2431.08	2.7	123.42	2.0	8.98	2.4	95.22	220.00	55.54	55.54
117141	10.0	2408.62	3.0	104.89	2.0	11.91	2.8	75.02	300.00	53.01	53.01
117142	10.0	1883.17	3.1	135.25	2.0	9.20	2.4	102.90	210.00	62.48	62.48
117143	37.6	4071.15	4.3	52.89	2.0	6.92	1.0	14.75	850.00	83.78	83.78
117144	18.3	3096.21	3.7	39.76	1.0	14.16	2.6	26.32	430.00	40.24	40.24
117145	16.9	3738.64	3.5	48.13	2.0	16.90	3.3	29.71	410.00	42.66	42.66
117146	13.9	2658.00	2.6	28.70	0.5	13.78	3.1	16.50	420.00	35.04	35.04
117147	20.4	2820.14	2.9	29.34	1.0	11.35	3.4	18.69	610.00	28.58	28.58
117148	25.7	3317.88	3.5	35.62	1.0	17.15	4.0	28.96	780.00	29.17	29.17
117149	25.1	3176.25	3.7	38.85	1.0	29.63	5.0	32.10	550.00	34.66	34.66
117150	15.1	2690.95	5.3	41.51	2.0	17.64	2.8	50.80	290.00	47.91	47.91
117151	17.1	3631.91	3.4	60.61	2.0	10.07	2.6	48.19	360.00	39.78	39.78
117152	16.1	3044.89	5.9	42.12	3.0	20.65	3.0	52.65	330.00	50.33	50.33
117153	13.9	5016.32	3.0	75.16	3.0	9.25	2.7	16.81	430.00	47.79	47.79
117154	15.1	3750.95	3.7	74.95	2.0	12.26	2.8	42.76	290.00	49.74	49.74
117155	15.5	3645.05	2.6	76.25	2.0	12.88	2.8	48.06	390.00	41.66	41.66
117156	15.8	3261.47	2.9	32.30	3.0	13.12	3.5	27.97	480.00	35.53	35.53
117157	24.7	3503.25	3.5	55.97	2.0	20.15	3.3	45.52	350.00	37.24	37.24
117158	15.5	2753.43	5.5	36.38	1.0	20.76	2.9	41.13	290.00	45.67	45.67
117159	19.6	3101.30	5.7	50.49	2.0	21.67	3.3	41.85	440.00	36.57	36.57
117161	8.4	2981.95	2.7	138.82	2.0	8.58	2.8	44.00	270.00	60.59	60.59
117162	11.2	2603.46	3.2	71.62	2.0	9.95	2.6	61.42	290.00	60.51	60.51
117163	10.2	2675.85	3.2	115.94	2.0	8.60	2.4	50.51	260.00	60.15	60.15
117164	11.0	1864.07	2.8	100.60	2.0	14.45	3.3	79.79	210.00	64.71	64.71
117165	9.2	2172.16	2.5	93.67	2.0	9.76	2.9	65.03	180.00	59.45	59.45
117166	10.6	2660.90	2.9	100.49	2.0	10.17	2.9	63.53	280.00	59.76	59.76
117167	9.3	1921.70	2.5	95.36	2.0	7.70	2.4	63.05	220.00	54.81	54.81
117168	11.2	2243.09	4.3	114.85	2.0	10.82	2.7	102.34	170.00	62.39	62.39
117169	10.3	2361.00	3.0	108.58	2.0	10.32	2.7	151.03	240.00	58.47	58.47
117170	11.9	3353.94	2.5	66.57	4.0	10.88	3.0	51.53	400.00	64.81	64.81
117171	9.4	3313.74	3.9	49.61	2.0	10.00	1.9	33.73	330.00	55.77	55.77
117172	11.9	3622.04	5.9	43.72	3.0	11.50	2.3	42.42	360.00	60.89	60.89
117173	9.4	2963.39	3.2	48.81	9.0	12.49	2.4	36.62	300.00	50.60	50.60
117174	12.0	3131.08	2.7	58.06	5.0	10.89	2.6	47.98	340.00	58.72	58.72
117175	8.7	2306.94	2.9	93.01	2.0	7.65	3.0	57.85	260.00	65.48	65.48
117176	8.6	3466.48	2.5	94.00	3.0	10.72	2.7	59.08	150.00	56.91	56.91
117177	10.2	3993.84	3.1	112.84	2.0	14.46	2.6	67.87	230.00	47.62	47.62
117178	13.9	3334.09	3.9	45.79	2.0	15.62	3.4	35.82	340.00	51.62	51.62
117180	15.1	3304.30	5.6	52.39	6.0	19.36	2.9	50.32	350.00	45.43	45.43
117181	10.0	1438.67	2.9	134.12	2.0	7.01	2.6	82.35	220.00	67.01	67.01
117182	10.1	2571.10	3.1	88.72	2.0	12.07	2.8	60.40	260.00	66.25	66.25
117183	8.4	2104.53	2.4	114.19	3.0	8.14	2.1	74.19	150.00	65.62	65.62
117184	10.0	2768.80	2.7	92.73	2.0	10.20	3.2	49.59	280.00	63.52	63.52
117185	12.1	3165.20	3.0	94.71	3.0	7.24	3.2	9.43	360.00	76.90	76.90
117186	10.1	2951.68	2.7	88.03	2.0	10.45	3.4	44.98	380.00	71.06	71.06
117187	4.0	3974.78	1.5	111.33	2.0	7.62	1.8	18.00	330.00	50.34	50.34
117188	7.6	4359.31	2.0	41.25	2.0	4.68	3.0	10.34	220.00	47.19	47.19
117189	17.8	5670.07	3.9	118.17	2.0	9.75	4.1	77.92	290.00	54.55	54.55
117191	9.2	3897.68	2.7	109.60	2.0	12.64	1.8	81.42	170.00	58.04	58.04
117192	6.1	5989.36	2.5	175.79	2.0	11.24	1.9	69.73	50.00	64.82	64.82
117193	13.3	6900.76	1.9	65.94	0.5	4.97	1.4	17.44	360.00	59.85	59.85
117194	7.4	4490.63	2.3	148.75	3.0	7.30	2.6	15.71	320.00	57.00	57.00
117195	4.2	5114.86	1.9	140.17	2.0	6.73	1.7	21.10	240.00	55.62	55.62
117196	1.8	16297.26	0.6	350.86	0.5	12.50	1.3	72.38	50.00	46.18	46.18
117197	1.2	3202.79	1.3	57.28	0.5	9.34	1.7	18.20	400.00	43.35	43.35
117198	10.6	3973.00	4.2	77.85	1.0	14.94	2.4	42.19	200.00	75.58	75.58
117199	13.9	3364.13	3.5	46.27	1.0	11.52	3.6	12.07	280.00	91.78	91.78
117200	7.0	5698.40	2.5	128.40	2.0	8.39	1.2	28.80	210.00	50.17	50.17
117201	7.5	1965.87	2.4	117.60	1.0	7.49	1.5	81.43	130.00	57.22	57.22
117203	6.1	2149.72	2.0	115.95	2.0	7.23	2.2	53.30	160.00	48.29	48.29
117204	7.4	2354.56	2.2	86.55	2.0	6.96	2.5	35.47	280.00	48.82	48.82
117205	7.0	2970.20	2.2	152.74	2.0	9.86	2.2	24.86	180.00	65.61	65.61
117206	7.8	2487.04	2.4	142.80	3.0	6.94	2.5	63.05	210.00	51.69	51.69
117207	7.7	3249.63	2.3	74.70	3.0	5.88	2.5	9.18	350.00	71.15	71.15
117208	7.0	2942.37	2.6	96.91	3.0	9.66	2.7	59.15	270.00	47.30	47.30
117209	4.6	2124.12	1.7	185.70	3.0	5.22	1.3	31.89	120.00	34.65	34.65
117210	2.5	1105.36	0.8	72.65	15.0	3.32	0.6	51.78	50.00	22.73	22.73
117211	8.8	5118.81	2.5	128.92	3.0	10.50	2.2	63.51	190.00	45.44	45.44
117212	18.2	2239.90	3.3	25.39	2.0	4.35	0.9	10.31	250.00	76.97	76.97



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
117213	12.4	2402.43	2.9	57.62	2.0	10.20	2.4	37.45	260.00	47.35	
117214	15.4	2846.63	2.8	27.40	2.0	4.39	1.8	10.17	420.00	76.05	
117215	27.4	5055.82	3.1	85.33	2.0	5.47	3.1	14.51	570.00	52.54	
117216	52.2	4816.44	4.0	41.25	1.0	5.13	3.6	10.23	1100.00	47.33	
117217	25.8	6013.80	3.3	108.11	2.0	9.37	2.2	35.03	630.00	47.04	
117218	38.0	8718.29	3.6	87.58	1.0	6.55	1.6	25.53	1700.00	80.49	
117219	68.7	10436.38	10.5	80.77	1.0	57.01	7.0	18.23	640.00	139.15	
117220	6.5	7574.49	2.5	147.87	2.0	11.83	2.2	37.22	150.00	63.18	
117222	16.7	4365.71	4.7	34.24	3.0	6.66	2.6	9.25	450.00	73.03	
117223	16.2	2500.95	6.4	10.08	0.5	6.76	1.4	11.14	230.00	93.85	
117224	9.2	2457.14	2.8	45.87	1.0	4.48	1.4	10.73	250.00	62.78	
117225	10.4	3660.00	2.9	41.62	3.0	4.05	2.3	9.81	320.00	38.93	
117226	7.3	968.57	3.1	9.07	1.0	3.30	0.9	8.41	140.00	57.91	
117227	11.7	1977.14	3.1	26.70	0.5	4.45	1.6	7.67	240.00	57.04	
117228	8.9	4232.38	2.5	104.28	2.0	8.07	1.8	36.11	230.00	42.69	
117229	21.0	2865.71	3.4	32.15	1.0	5.36	2.0	9.76	450.00	57.94	
117230	10.5	1553.33	3.5	12.19	0.5	3.97	0.5	10.64	170.00	70.75	
117231	24.5	3965.71	3.0	59.28	2.0	5.54	2.7	12.85	1100.00	50.36	
117232	23.9	5758.10	3.4	92.06	2.0	11.84	2.0	51.78	520.00	46.48	
117233	23.2	4270.48	3.0	77.80	1.0	10.25	1.8	36.51	350.00	41.86	
117234	19.3	8085.01	3.0	122.98	2.0	6.75	1.5	16.87	530.00	34.44	
117235	19.5	3404.10	4.3	53.90	2.0	13.40	2.8	32.31	390.00	44.32	
117237	15.0	3290.78	2.9	36.68	2.0	10.50	0.9	10.59	290.00	81.12	
117238	32.2	7826.95	9.5	94.33	5.0	25.95	1.9	79.18	360.00	56.62	
117239	26.4	6946.20	4.1	53.76	2.0	10.26	2.6	20.62	810.00	54.42	
117240	30.0	5216.10	4.0	68.54	1.0	17.03	3.8	21.70	590.00	44.91	
117241	20.8	5551.57	4.1	99.19	1.0	10.84	2.0	39.88	250.00	43.02	
117242	14.6	5576.26	2.9	101.98	2.0	7.13	1.8	15.13	500.00	44.08	
117243	12.4	4519.35	2.8	48.55	2.0	6.46	2.5	9.13	370.00	44.16	
117244	16.7	6363.89	3.6	64.71	2.0	6.54	2.7	11.17	670.00	56.69	
117245	25.7	4151.17	5.7	74.75	2.0	10.21	2.5	43.06	330.00	42.89	
117246	18.2	3886.48	3.9	106.49	2.0	7.94	1.8	29.33	240.00	41.75	
117247	16.6	4740.10	2.5	115.59	2.0	6.02	1.3	17.05	380.00	38.52	
117248	18.8	4250.04	2.9	65.46	2.0	11.51	2.1	41.59	320.00	42.82	
117249	15.6	5086.65	3.0	54.95	3.0	6.99	2.7	9.38	480.00	57.20	
117250	34.1	7108.55	4.3	32.04	1.0	5.65	3.0	9.48	1500.00	79.60	
117251	15.6	4218.15	2.5	68.53	2.0	9.80	2.3	28.57	440.00	40.23	
117252	29.0	5960.47	4.6	35.15	2.0	7.96	4.5	7.98	1100.00	79.86	
117253	19.7	3960.89	6.5	73.52	2.0	14.94	3.4	35.76	500.00	59.48	
117254	10.9	3495.28	2.2	63.50	0.5	12.51	2.0	32.21	290.00	29.94	
117255	11.5	2650.16	2.1	61.91	1.0	6.98	1.1	29.34	340.00	27.30	
117256	8.0	7391.32	2.5	90.52	2.0	9.68	2.4	15.08	1100.00	37.36	
117257	12.3	12607.66	4.5	139.30	2.0	25.54	3.0	96.85	1400.00	53.01	
117258	20.4	4067.77	3.2	27.36	2.0	6.36	1.4	8.75	550.00	53.38	
117259	12.9	4101.46	3.1	49.40	1.0	3.70	1.6	10.24	1000.00	65.83	
117260	24.5	11320.36	5.4	80.94	3.0	23.55	2.7	16.17	990.00	67.69	
117261	13.6	2988.82	3.4	54.74	0.5	6.41	1.4	12.98	1100.00	84.27	
117262	10.7	7199.50	3.8	60.77	0.5	25.40	3.6	25.07	1700.00	100.16	
117263	6.2	4669.01	3.5	74.49	0.5	8.88	2.6	16.35	1900.00	85.93	
117264	30.3	5000.76	4.8	47.19	2.0	28.12	3.7	28.51	890.00	60.07	
117265	8.8	4636.34	2.1	82.10	2.0	5.30	1.6	11.68	300.00	37.37	
117268	12.3	12545.28	2.9	84.50	2.0	4.51	2.6	15.51	1600.00	46.91	
117269	14.9	6976.97	3.6	56.11	2.0	6.77	2.0	13.10	1500.00	64.48	
117270	12.8	3920.78	2.6	27.97	0.5	4.76	1.7	9.25	790.00	48.79	
117271	17.0	3549.22	3.0	25.67	1.0	4.88	2.0	7.39	680.00	57.93	
117272	20.8	3577.80	3.4	21.05	2.0	5.17	1.7	8.26	770.00	75.03	
117273	11.4	3075.39	3.2	36.85	0.5	3.56	1.8	8.62	1100.00	64.10	
117274	21.9	3056.55	2.9	52.77	1.0	10.41	1.9	32.28	350.00	32.11	
117275	36.3	7044.02	3.4	80.18	2.0	6.70	2.9	20.43	1100.00	48.51	
117276	127.0	6710.44	8.2	53.12	3.0	7.29	3.5	28.09	1800.00	64.61	
117277	39.3	11370.62	4.9	122.49	3.0	6.07	1.2	21.97	1700.00	86.07	
117278	21.6	789.74	5.8	5.17	0.5	6.09	0.3	6.09	190.00	94.35	
117279	11.8	16102.84	5.4	127.31	5.0	10.85	2.9	12.21	600.00	47.71	
117280	18.8	3294.82	3.7	40.63	0.5	6.14	1.4	12.56	760.00	82.10	
117281	37.0	4812.01	4.2	32.60	0.5	4.45	0.3	13.23	780.00	101.45	
117282	16.6	8119.02	4.7	115.24	9.0	13.99	1.1	23.25	280.00	39.25	
117284	34.3	4075.03	6.6	33.90	2.0	4.77	0.3	12.03	740.00	179.93	
117285	22.7	3109.27	4.1	51.76	3.0	9.14	1.3	29.31	590.00	46.57	
117286	19.3	3487.56	4.3	54.59	2.0	7.05	0.8	41.50	430.00	49.98	
117287	15.5	2597.14	3.3	20.01	2.0	3.10	2.1	7.15	630.00	71.29	
117288	82.8	4446.56	5.3	32.22	3.0	5.93	1.9	12.35	1400.00	62.97	
117289	16.1	3209.93	7.3	62.96	2.0	7.38	2.2	15.37	450.00	39.79	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
117290	22.4	3338.24	4.4	76.86	2.0	11.13	2.6	33.90	350.00	39.42	
117291	21.0	3166.79	3.5	69.60	3.0	7.36	2.0	39.73	340.00	41.08	
117292	11.6	3449.95	2.7	71.49	3.0	6.75	1.7	29.37	50.00	43.28	
117293	10.2	4385.72	2.2	89.07	5.0	8.22	2.1	24.30	300.00	60.66	
117294	15.5	4967.54	4.5	52.62	4.0	4.95	3.4	8.24	790.00	107.31	
117295	10.8	3215.46	2.7	52.38	2.0	8.56	1.6	47.44	50.00	47.48	
117296	17.4	1634.83	3.2	15.98	2.0	3.23	0.3	6.21	260.00	79.49	
117297	13.0	2916.81	5.2	45.81	4.0	10.05	1.4	35.19	260.00	44.31	
117298	16.1	3481.14	3.4	42.78	3.0	11.00	2.2	30.53	430.00	51.10	
117299	14.4	3220.97	3.0	51.65	3.0	11.00	2.0	33.14	240.00	46.29	
117301	10.2	1979.06	2.7	20.29	1.0	3.73	1.5	10.28	340.00	50.68	
117302	16.1	4351.70	4.0	78.99	2.0	7.00	2.0	16.78	410.00	42.50	
117303	20.3	2699.52	6.1	45.26	2.0	10.58	1.5	34.17	360.00	38.46	
117304	16.9	3281.01	5.3	48.51	2.0	7.81	0.3	28.13	320.00	55.54	
117305	24.8	3631.23	38.0	71.01	3.0	23.33	2.1	17.78	320.00	66.56	
117306	12.1	4254.97	3.9	62.26	3.0	5.89	1.7	13.91	510.00	71.12	
117307	12.2	3993.69	4.3	45.42	3.0	11.30	2.7	26.47	600.00	70.73	
117308	11.5	3078.66	3.6	41.23	3.0	6.81	1.3	26.09	310.00	50.81	
117309	17.7	5820.24	4.1	59.42	2.0	4.79	4.1	8.41	590.00	57.54	
117310	5.4	7393.52	1.7	117.49	6.0	4.23	1.7	17.05	260.00	54.07	
117311	5.4	6088.85	2.9	51.37	3.0	5.90	2.0	10.43	860.00	100.40	
117312	12.5	4836.09	2.4	66.75	5.0	15.11	1.7	59.10	250.00	64.09	
117313	8.6	3155.59	2.8	38.33	5.0	8.14	1.7	35.77	400.00	54.70	
117314	12.9	3385.83	3.3	64.29	3.0	9.14	1.6	45.09	230.00	54.11	
117315	12.5	3414.04	3.0	54.44	4.0	10.48	1.5	39.62	310.00	53.87	
117316	13.7	3678.14	3.2	60.36	4.0	9.82	1.9	43.26	320.00	54.71	
117317	17.0	3805.67	4.4	58.36	4.0	12.81	1.7	31.24	300.00	54.89	
117318	13.6	5627.24	4.3	62.85	4.0	4.64	2.9	9.51	630.00	83.58	
117319	35.6	3803.41	3.3	30.76	2.0	4.33	2.3	9.11	970.00	35.00	
117320	19.4	9360.00	3.4	123.76	2.0	4.61	1.4	13.76	1500.00	41.58	
117321	15.4	3465.14	3.5	31.86	2.0	4.00	0.9	7.30	690.00	49.43	
117322	20.9	4876.57	4.2	60.86	2.0	7.57	1.1	12.29	480.00	54.54	
117323	31.3	3968.00	5.5	74.51	4.0	11.72	0.3	44.01	270.00	29.83	
117325	17.4	4083.43	3.5	29.82	1.0	4.83	1.8	7.61	1100.00	58.99	
117326	43.1	5983.43	5.2	43.31	2.0	6.94	1.8	11.61	1100.00	83.71	
117327	18.5	5193.14	3.6	50.52	2.0	7.07	1.3	10.78	630.00	38.79	
117328	20.4	2885.71	3.7	57.77	1.0	13.80	1.2	17.08	270.00	26.41	
117329	27.2	5137.14	3.0	58.96	2.0	10.49	1.5	13.38	690.00	33.66	
117330	34.0	5700.57	8.6	51.14	2.0	6.65	2.8	9.04	710.00	60.80	
117331	10.1	6228.57	3.6	82.61	4.0	6.78	2.2	15.69	510.00	71.16	
117332	9.0	4009.14	3.7	25.36	2.0	4.36	1.8	8.07	660.00	78.43	
117333	50.3	5018.29	14.3	52.60	3.0	14.25	0.3	41.58	520.00	89.46	
117334	15.4	3861.25	4.8	49.18	2.0	10.91	2.1	31.42	340.00	54.20	
117335	6.8	4919.62	2.4	62.69	3.0	5.68	2.3	10.42	370.00	58.33	
117336	21.5	4409.69	4.0	61.23	2.0	11.81	2.9	17.46	380.00	65.52	
117337	7.8	4592.89	2.4	102.82	2.0	10.09	2.5	47.02	260.00	59.77	
117339	10.2	4884.61	3.3	104.88	2.0	12.84	3.4	77.83	310.00	90.75	
117340	7.9	4499.54	3.0	126.04	2.0	8.51	3.1	53.25	50.00	73.20	
117341	10.0	1832.02	3.6	114.63	2.0	9.16	2.4	114.67	260.00	66.23	
117342	6.5	3518.18	2.6	124.32	1.0	8.56	2.6	94.05	50.00	49.88	
117343	15.4	4423.69	3.7	62.33	1.0	11.82	1.8	40.55	180.00	47.46	
117344	22.1	4068.96	4.6	31.09	2.0	6.39	2.0	10.39	310.00	84.21	
117345	11.8	10930.28	2.5	236.21	4.0	13.52	2.0	55.46	160.00	28.59	
117346	10.8	5268.52	2.8	103.23	3.0	4.81	3.3	17.81	340.00	48.59	
117347	9.4	4881.97	2.5	96.00	4.0	7.21	2.3	21.28	270.00	56.38	
117348	8.4	4721.75	2.5	95.93	2.0	9.18	2.7	53.63	230.00	66.71	
117349	7.5	5069.29	2.6	117.31	2.0	8.15	2.4	57.13	150.00	67.84	
117350	6.8	5519.32	2.6	91.31	2.0	7.86	2.8	21.43	240.00	67.00	
117351	8.5	4856.05	2.5	70.61	1.0	9.73	2.5	44.79	150.00	48.11	
117352	13.6	3230.30	3.9	16.17	0.5	4.78	2.6	4.92	350.00	58.43	
117353	19.6	6454.71	4.4	63.00	2.0	4.97	3.6	16.29	250.00	49.09	
117354	11.8	5763.18	2.6	102.63	3.0	8.02	2.6	34.03	240.00	37.04	
117355	18.3	3435.29	4.8	32.76	9.0	6.03	3.5	16.39	390.00	108.07	
117356	11.9	2724.90	3.4	43.37	2.0	5.98	2.1	30.12	220.00	34.06	
117357	12.4	2724.90	3.2	43.37	3.0	5.98	1.9	30.12	240.00	34.06	
117359	10.0	3786.36	2.2	86.02	1.0	4.75	1.8	31.74	170.00	34.82	
117360	7.3	5398.03	2.7	85.43	2.0	7.78	2.8	45.59	270.00	58.55	
117361	22.7	8083.28	5.0	98.64	3.0	5.66	5.0	14.12	300.00	88.34	
117362	12.3	4688.73	2.8	93.43	3.0	14.28	2.3	59.78	240.00	59.54	
117363	14.3	3857.44	2.9	72.27	9.0	14.15	2.4	46.27	170.00	41.36	
117364	4.2	7059.42	2.6	108.77	5.0	6.96	2.7	17.90	360.00	83.35	
117365	12.0	3661.28	2.8	41.69	3.0	13.86	2.5	28.77	280.00	47.80	



Sample	Th1 ppm	Th2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
117366	14.3	2973.52	4.0	54.98	3.0	7.80	1.7	22.18	210.00	42.37	
117367	15.4	3424.45	3.5	41.13	2.0	8.10	2.3	25.83	270.00	45.50	
117368	11.9	2052.52	2.5	47.24	1.0	8.23	1.9	26.76	240.00	28.96	
117369	19.4	3198.39	3.3	26.08	1.0	5.23	2.0	11.74	460.00	67.51	
117370	9.2	3462.73	3.1	50.42	2.0	18.22	2.5	32.48	430.00	47.01	
117371	9.4	2759.42	2.2	58.84	3.0	8.23	1.9	50.62	370.00	39.88	
117372	31.7	7066.59	9.1	52.47	0.5	6.50	2.2	18.71	1300.00	204.19	
117373	4.4	5045.01	4.4	89.15	0.5	11.44	3.2	19.83	2000.00	131.28	
117374	34.9	6459.17	14.2	50.40	2.0	9.64	6.0	16.76	880.00	113.02	
117375	11.8	3629.62	3.9	43.92	2.0	8.91	1.9	35.49	250.00	50.54	
117376	7.8	2772.06	2.9	129.73	2.0	12.95	2.8	66.72	250.00	49.51	
117377	15.0	3572.12	3.7	47.40	2.0	10.69	2.5	23.56	340.00	36.12	
117378	36.4	3146.40	8.9	36.27	2.0	10.21	0.9	17.42	410.00	64.93	
117379	16.8	3054.65	3.9	28.22	0.5	25.14	4.0	17.73	510.00	32.53	
117380	44.7	3886.51	4.7	88.47	2.0	7.21	4.1	12.15	850.00	39.80	
117381	34.5	3252.10	5.1	49.39	0.5	30.27	3.9	29.91	530.00	35.37	
117382	14.1	5162.22	2.4	116.54	2.0	11.31	1.1	50.95	50.00	23.16	
117383	11.5	3120.90	2.5	64.34	1.0	22.35	3.0	25.98	500.00	24.43	
117384	11.9	3393.84	3.2	46.36	0.5	3.27	1.7	11.67	1200.00	61.37	
117386	34.8	6671.18	4.1	81.06	2.0	4.68	4.5	15.90	1500.00	50.64	
117387	17.7	5497.41	7.8	131.81	13.0	40.28	4.2	139.32	310.00	33.35	
117388	34.5	7195.42	6.0	102.89	3.0	18.32	2.5	28.79	50.00	33.94	
117389	14.4	6349.16	6.7	51.92	2.0	20.83	8.9	26.07	1400.00	116.06	
117390	23.5	2676.17	6.1	39.09	1.0	16.61	2.7	25.12	440.00	37.96	
117500	12.5	2336.56	4.2	88.97	3.0	9.82	3.5	73.00	310.00	59.45	
117501	10.4	1498.09	3.0	80.32	2.0	9.38	3.1	51.79	300.00	57.64	
117502	8.0	2011.25	2.6	96.38	2.0	6.93	2.7	44.12	350.00	50.01	
117503	9.1	1863.97	3.2	98.50	2.0	12.19	3.1	54.34	210.00	53.14	
117504	9.5	1769.46	5.9	84.08	2.0	14.24	3.4	48.67	290.00	49.99	
117505	2.8	3920.28	1.9	89.11	3.0	12.46	2.2	14.18	340.00	48.70	
117506	7.3	4657.74	2.1	77.58	2.0	6.68	2.5	17.80	320.00	38.47	
117507	11.2	2562.15	2.9	76.75	2.0	13.13	4.0	44.47	370.00	47.74	
117508	15.5	4868.78	4.9	49.51	2.0	5.30	2.3	16.07	340.00	42.59	
117509	21.5	2407.74	3.3	38.45	2.0	8.12	1.3	33.39	260.00	35.68	
117510	10.7	3594.71	3.3	107.16	3.0	12.08	2.5	73.98	230.00	57.56	
117511	10.0	2744.46	2.7	101.57	4.0	12.84	2.6	90.92	220.00	55.54	
117512	9.0	4431.96	2.8	100.64	2.0	15.75	3.0	60.73	240.00	46.89	
117513	8.9	3622.01	2.8	86.72	2.0	12.61	2.3	37.78	230.00	45.44	
117514	6.5	7120.51	2.4	150.54	1.0	33.19	3.9	64.91	170.00	40.11	
117515	7.9	3815.72	2.2	109.65	1.0	8.31	1.7	24.38	50.00	28.36	
117516	5.5	4976.69	2.4	129.44	2.0	19.34	2.6	73.54	50.00	29.62	
117517	13.9	11672.79	4.1	88.15	2.0	11.76	3.0	13.14	360.00	81.85	
117518	7.2	5096.25	2.0	110.43	2.0	14.37	1.5	53.73	140.00	36.02	
117519	8.7	5356.35	2.7	119.63	2.0	10.24	1.1	35.41	150.00	36.84	
117520	12.7	2853.49	3.2	79.15	3.0	10.70	3.2	67.51	380.00	57.95	
117522	9.4	2975.89	2.9	89.83	2.0	11.11	2.6	107.44	320.00	55.46	
117523	7.4	3503.75	2.3	106.63	2.0	9.72	2.7	45.61	330.00	50.25	
117524	7.3	2905.77	2.3	119.15	1.0	8.30	2.2	80.95	150.00	51.32	
117525	8.7	2356.23	2.7	103.95	2.0	7.51	2.5	51.88	240.00	52.69	
117526	10.0	2180.28	2.7	87.03	3.0	10.15	2.2	55.68	200.00	46.63	
117527	8.8	4055.83	1.9	89.37	2.0	8.87	1.8	53.45	210.00	29.58	
117528	10.8	3918.13	2.9	78.85	3.0	12.33	3.4	39.34	210.00	38.53	
117529	13.8	3782.98	2.2	93.81	3.0	11.22	2.3	55.99	160.00	31.11	
117530	16.1	4195.03	4.0	58.37	1.0	4.09	4.8	13.54	460.00	36.38	
117531	15.0	3417.83	3.8	31.17	1.0	6.80	1.5	12.40	310.00	101.02	
117532	10.7	3605.61	2.5	49.52	2.0	5.59	2.1	9.91	270.00	53.62	
117533	11.5	3429.57	2.3	71.55	2.0	6.87	1.6	18.02	210.00	42.70	
117534	28.8	3969.43	2.8	45.37	2.0	24.94	3.2	37.51	470.00	27.55	
117535	56.1	4656.65	3.4	32.99	2.0	6.38	2.6	10.03	880.00	36.62	
117536	21.8	6289.28	3.1	89.59	2.0	7.38	1.7	27.24	820.00	40.90	
117537	17.4	9735.80	3.3	28.27	0.5	4.36	1.7	21.01	1500.00	59.15	
117538	10.7	9860.99	3.1	101.54	1.0	6.60	2.2	20.17	1600.00	62.19	
117539	46.7	5780.71	4.7	109.74	1.0	21.87	2.7	46.54	540.00	27.08	
117540	59.8	10510.39	5.2	71.38	1.0	8.80	2.8	38.59	1700.00	117.45	
117541	5.7	6166.70	2.6	163.37	1.0	8.80	1.3	50.53	50.00	38.57	
117543	10.4	2958.82	3.2	40.00	1.0	4.38	2.0	10.48	240.00	63.58	
117544	7.3	1365.29	3.0	34.98	1.0	3.86	1.0	29.84	180.00	27.25	
117545	5.1	801.55	1.8	12.67	1.0	2.02	1.2	4.49	130.00	26.67	
117546	10.5	3216.91	3.1	70.83	1.0	5.63	1.9	27.51	300.00	33.88	
117547	12.9	3050.71	3.0	64.18	2.0	8.07	1.6	38.23	170.00	29.04	
117548	5.3	1312.87	5.1	13.47	0.5	3.67	0.7	15.83	130.00	57.13	
117549	8.1	2633.54	2.2	77.51	2.0	4.89	1.9	24.49	190.00	26.82	



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
117550	10.1	1918.55	3.6	54.13	2.0	5.76	2.3			260.00	37.51
117551	9.2	2861.09	2.5	78.18	2.0	6.39	2.4		33.76	230.00	30.66
117552	14.9	2235.33	3.1	41.25	1.0	5.86	2.1		31.73	260.00	23.78
117553	7.8	2650.27	2.9	77.74	2.0	6.08	1.1		32.15	50.00	33.01
117554	14.8	1995.51	2.5	43.36	2.0	6.11	2.0		23.45	200.00	17.35
117555	16.6	3113.18	3.7	74.55	1.0	13.63	2.5		26.02	500.00	28.73
117556	13.0	3617.35	2.5	68.48	1.0	9.50	1.3		25.03	380.00	24.34
117557	7.0	2396.70	2.2	20.87	0.5	3.14	1.8		5.14	580.00	33.72
117558	14.9	3225.14	3.6	26.11	1.0	5.26	1.7		10.64	420.00	53.90
117559	16.8	5103.52	3.1	71.58	2.0	10.10	1.8		19.22	540.00	42.11
117560	29.7	2673.59	5.2	67.96	0.5	13.10	1.9		18.16	270.00	27.81
117562	11.2	4050.25	2.4	44.98	0.5	10.31	1.7		8.26	400.00	29.50
117563	30.4	8485.92	6.6	134.52	3.0	32.74	4.0		43.13	1100.00	61.36
117564	21.6	2179.63	3.2	40.10	2.0	8.04	1.7		26.31	400.00	30.61
117565	23.9	3444.43	3.8	64.54	1.0	9.00	1.6		29.94	380.00	33.28
117566	10.0	1872.84	2.3	36.93	1.0	7.61	1.9		19.61	240.00	21.73
117567	11.6	2377.88	3.2	36.41	1.0	8.03	2.4		17.36	290.00	35.18
117568	13.3	2365.69	2.4	18.96	1.0	4.09	1.3		8.54	300.00	47.85
117569	16.4	2663.62	2.6	24.23	1.0	4.66	1.1		9.84	330.00	26.70
117570	28.6	2478.45	3.7	42.94	1.0	8.46	1.3		26.98	320.00	34.18
117571	18.5	5681.45	3.3	42.76	1.0	14.88	1.9		15.13	540.00	36.09
117572	19.6	3034.43	3.1	52.07	1.0	12.37	2.7		30.84	390.00	46.87
117573	29.0	3934.19	5.3	73.13	2.0	9.90	3.6		31.17	760.00	70.46
117574	24.3	3542.25	3.2	46.96	1.0	11.46	2.3		21.75	530.00	38.70
117575	12.6	2035.83	4.9	18.32	2.0	4.55	0.9		11.04	150.00	76.52
117576	21.2	6954.98	7.2	136.15	3.0	4.78	4.0		41.98	330.00	59.52
117577	20.2	2944.68	3.6	41.53	1.0	10.31	2.1		21.48	430.00	37.62
117578	37.1	3286.63	7.2	52.76	2.0	17.66	2.7		32.78	330.00	39.25
117579	21.9	3088.96	5.5	42.75	2.0	18.73	4.2		31.42	590.00	49.91
117580	20.4	4903.23	5.7	50.45	3.0	11.65	1.7		8.90	400.00	38.45
117582	20.1	2981.94	3.7	67.65	2.0	9.91	2.5		27.94	340.00	38.90
117583	26.0	4041.29	4.6	65.05	2.0	9.93	2.1		44.16	380.00	41.71
117584	13.5	3196.41	3.5	45.35	2.0	6.61	1.2		30.24	230.00	42.64
117585	20.1	3599.51	4.0	50.20	2.0	14.16	3.3		28.70	400.00	46.78
117586	33.5	5955.08	3.3	85.43	2.0	27.27	4.4		78.38	740.00	27.39
117587	19.2	3895.04	3.1	41.97	2.0	5.84	3.3		39.82	420.00	53.68
117588	19.6	3943.26	3.0	59.93	2.0	12.73	3.3		40.02	320.00	45.46
117589	18.2	4199.22	6.5	74.35	2.0	13.28	3.4		50.41	280.00	53.84
117590	26.6	4735.35	3.2	64.06	2.0	13.39	3.0		46.84	530.00	31.37
117591	14.5	4773.42	3.6	61.98	3.0	12.30	3.3		46.52	330.00	59.64
117592	18.0	4497.46	3.3	54.27	2.0	13.59	3.2		39.82	420.00	53.68
117593	12.7	5051.76	3.6	53.35	3.0	12.15	3.0		46.97	380.00	64.27
117594	13.3	4460.58	4.3	47.56	3.0	11.47	2.1		42.13	340.00	59.26
117595	15.1	4181.05	4.6	40.29	2.0	14.73	3.1		33.67	430.00	53.58
117596	12.8	3916.29	4.1	43.51	2.0	8.54	1.7		25.21	300.00	39.28
117597	17.6	5075.55	6.0	70.21	2.0	16.60	2.7		41.03	490.00	49.94
117598	17.5	4141.80	5.0	42.37	2.0	25.56	4.9		31.10	470.00	58.67
117599	19.0	4517.68	5.2	77.02	2.0	9.69	2.1		19.95	330.00	40.03
117600	16.0	3538.73	4.1	32.22	1.0	15.74	3.2		21.40	410.00	50.51
117601	18.2	5269.43	5.0	42.62	3.0	17.03	4.1		27.25	740.00	74.39
117603	12.9	4975.63	4.8	50.84	3.0	14.65	2.7		32.12	430.00	62.23
117604	13.3	4211.32	4.0	42.94	3.0	11.61	2.6		29.69	370.00	61.80
117605	14.6	4141.30	4.2	49.99	3.0	10.42	2.3		42.09	190.00	60.91
117606	14.1	4492.54	4.0	45.88	2.0	11.40	2.8		30.08	460.00	65.97
117607	11.7	4340.84	3.5	58.74	3.0	15.52	3.1		45.18	400.00	66.47
117608	12.5	4557.88	3.3	60.20	3.0	14.53	3.2		43.97	390.00	72.64
117609	11.1	4787.76	2.6	67.99	3.0	10.66	2.7		55.63	380.00	70.62
117610	11.4	3896.26	2.9	52.91	4.0	11.01	2.9		38.27	480.00	66.92
117611	15.3	4562.55	2.9	88.84	2.0	12.53	1.8		38.20	280.00	35.87
117612	30.0	3298.81	3.5	40.51	1.0	20.94	2.8		33.70	570.00	30.92
117613	10.3	5182.17	3.2	67.84	3.0	10.59	2.1		30.19	410.00	66.38
117614	26.6	11544.07	4.9	84.05	2.0	7.98	4.2		24.23	2400.00	85.15
117615	66.0	3764.40	9.4	61.40	1.0	28.52	3.1		44.59	400.00	51.99
117616	42.6	4515.86	5.6	83.16	1.0	25.67	2.8		30.33	440.00	32.58
117617	48.0	5686.51	5.5	126.79	2.0	31.92	3.6		45.70	670.00	28.71
117618	38.7	3655.86	3.0	57.19	1.0	12.84	1.0		21.78	300.00	25.67
117619	22.6	4253.17	4.5	78.36	0.5	13.64	2.0		24.10	240.00	30.13
117620	32.8	4523.85	5.0	76.56	1.0	12.91	2.6		39.19	490.00	34.98
117622	25.9	14584.59	2.8	142.15	2.0	11.50	1.4		33.59	500.00	49.30
117623	65.3	7519.58	7.3	103.37	2.0	20.07	4.8		57.95	940.00	68.01
117624	13.6	3629.59	4.6	63.94	2.0	8.10	1.9		26.44	220.00	44.20
117625	13.8	4960.13	4.3	42.50	2.0	8.30	2.8		13.06	450.00	57.49



Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
117626	13.1	3886.56	3.5	53.13	2.0	11.57	2.2	32.93	310.00	51.47	
117627	10.4	6463.13	3.5	78.93	2.0	7.95	3.3	17.72	310.00	61.70	
117628	12.0	4940.72	3.5	101.63	3.0	14.30	3.3	59.70	390.00	76.27	
117629	10.3	4414.63	3.2	97.44	2.0	15.81	3.6	73.82	270.00	81.70	
117630	10.3	1960.78	3.5	152.61	1.0	7.45	2.6	116.64	50.00	84.48	
117631	10.2	2849.00	3.5	111.08	2.0	9.97	2.5	78.00	200.00	69.13	
117632	10.2	6903.04	4.4	197.05	3.0	13.76	2.4	132.38	160.00	61.79	
117633	11.7	3065.59	3.2	33.11	3.0	4.30	1.8	16.51	220.00	49.22	
117634	13.6	6332.78	3.2	103.22	2.0	6.66	3.0	21.88	230.00	59.00	
117635	16.3	3289.08	4.4	59.33	2.0	9.71	2.1	45.62	130.00	57.66	
117636	14.6	5026.36	3.5	79.81	2.0	6.23	3.1	14.89	360.00	66.91	
117637	10.0	5014.84	2.8	94.30	2.0	12.21	2.5	60.87	290.00	73.84	
117638	14.1	5976.80	3.5	134.27	2.0	7.82	3.1	93.78	140.00	47.71	
117639	10.4	2778.73	5.4	73.62	0.5	5.84	1.5	37.76	170.00	51.14	
117640	11.7	5280.96	5.1	47.01	2.0	6.93	3.1	17.36	350.00	70.77	
117641	15.5	3337.47	5.1	70.01	2.0	7.35	1.3	66.82	140.00	62.09	
117642	10.9	5289.03	2.8	98.33	2.0	9.04	2.6	78.04	210.00	65.12	
117644	7.1	5042.99	2.3	51.91	3.0	3.50	2.5	10.85	400.00	57.66	
117645	16.3	2963.99	3.9	49.46	5.0	6.00	2.4	37.22	170.00	60.61	
117646	10.6	3642.22	2.6	54.06	2.0	6.79	2.4	25.03	240.00	57.68	
117647	10.6	2603.86	2.8	43.40	2.0	7.85	1.9	28.12	230.00	38.65	
117648	9.4	4221.41	2.6	39.83	2.0	5.31	2.7	15.66	300.00	53.62	
117649	8.6	3916.08	2.5	80.01	2.0	7.96	2.9	65.66	360.00	66.05	
117650	9.4	4199.92	2.7	64.74	2.0	9.85	3.0	44.06	290.00	71.28	
117651	10.5	4141.12	2.7	59.85	2.0	13.26	2.8	49.30	230.00	67.32	
117652	11.9	4149.03	2.9	82.20	3.0	8.07	2.9	43.09	280.00	64.24	
117653	14.2	4521.08	3.1	75.36	3.0	13.31	2.9	56.19	290.00	71.64	
117654	15.4	4849.02	3.2	91.80	4.0	14.32	3.3	72.07	240.00	80.86	
117655	12.0	4271.16	3.7	61.06	2.0	12.66	3.3	41.45	310.00	75.81	
117656	9.5	3661.64	2.6	47.08	2.0	9.46	2.7	31.29	300.00	52.55	
117657	13.8	3400.42	3.2	50.25	2.0	6.80	2.1	29.58	310.00	60.86	
117658	16.4	2971.83	4.0	32.46	4.0	7.67	1.8	16.51	300.00	95.60	
117659	10.1	2968.44	2.6	67.56	2.0	7.67	2.2	38.54	260.00	33.24	
914000		4617.03	120.38	17.98				113.70		129.49	
914001	9.8	5157.77	2.6	119.32	3.0	17.77	3.2	55.0	74.28	0.01	117.00
914002	12.0	5244.15	2.7	104.82	0.2	26.80	4.4	78.0	78.68	0.02	133.36
914003	10.0	5442.93	2.9	108.76	0.2	17.32	3.9	88.0	73.81	0.01	115.01
914004	11.0	5118.72	2.6	125.54	0.2	30.09	4.2	135.0	90.44	0.02	122.86
914005	9.2	6123.30	1.8	114.79	0.2	19.39	3.4	71.0	72.70	0.01	111.69
914007	8.9	10892.96	2.9	70.68	0.2	20.13	4.9	55.0	46.62	0.03	124.30
914008	11.0	6989.43	3.1	99.95	3.0	22.86	4.1	63.0	79.93	0.01	132.26
914009	12.0	5119.91	3.2	135.63	2.0	22.64	4.3	75.0	111.18	0.04	127.50
914011	12.0	4944.79	2.7	162.73	0.2	31.03	4.6	150.0	127.27	0.04	115.34
914012	9.6	4828.45	9.2	161.19	0.2	36.71	5.1	119.0	101.93	0.01	93.33
914014	15.0	9426.47	3.0	84.75	0.2	20.06	3.5	91.0	90.38	0.01	116.32
914015	11.0	6867.62	3.3	124.69	0.2	16.15	3.5	100.0	95.48	0.01	115.55
914016	16.0	6523.15	3.7	142.69	0.2	24.75	4.7	206.0	139.49	0.02	136.59
914018	11.0	5941.05	2.4	122.70	0.2	23.66	4.1	110.0	97.90	0.02	121.49
914019	13.0	4452.79	3.5	126.09	0.2	23.38	3.8	150.0	107.71	0.01	118.96
914022	16.0	7003.24	5.5	210.55	6.0	28.57	5.7	209.0	128.73	0.02	169.63
914023	11.0	4762.44	2.0	118.92	0.2	19.10	4.0	106.0	81.04	0.01	111.36
914024	16.0	2921.32	4.0	194.29	4.0	18.16	3.9	150.0	158.33	0.01	143.86
914025	15.0	3873.95	3.4	41.78	3.0	16.78	3.3	25.0	29.50	0.01	107.35
914026	33.0	9005.43	3.8	107.98	3.0	29.29	4.0	99.0	89.69	0.01	153.21
914027	22.0	6827.68	4.6	108.83	0.2	31.83	5.2	132.0	116.10	0.03	139.06
914028	15.0	7145.94	2.9	123.95	9.0	23.48	4.5	140.0	107.50	0.03	151.99
914029	17.0	7415.33	3.2	90.36	4.0	21.77	4.6	106.0	65.13	0.03	136.96
914030	9.7	6359.23	2.2	90.62	4.0	23.15	3.8	102.0	61.66	0.01	105.49
914031	12.0	6930.19	3.3	99.21	0.2	34.90	4.8	98.0	84.83	0.02	95.31
914032	11.0	4633.24	2.4	174.88	0.2	23.90	3.8	226.0	119.10	0.01	92.24
914033	12.0	5648.81	7.3	131.91	3.0	24.11	3.5	110.0	109.70	0.01	109.77
914034	15.0	5403.05	4.0	166.28	0.2	16.61	5.2	171.0	115.99	0.01	117.60
914035	13.0	5798.17	2.5	112.38	0.2	23.48	3.7	191.0	102.48	0.02	137.68
914036	13.0	5210.26	2.5	117.29	0.2	29.83	4.7	143.0	107.69	0.02	131.73
914037	12.0	4617.59	2.6	86.41	0.2	24.76	5.1	134.0	98.44	0.01	159.31
914038	13.0	5065.07	2.3	64.00	0.2	34.70	4.5	110.0	67.49	0.03	205.75
914039	12.0	6939.47	3.4	136.98	2.0	27.26	5.9	83.0	99.77	0.04	128.42
914040	22.0	5962.40	3.6	122.87	0.2	18.04	4.6	146.0	95.72	0.02	116.83
914041	15.0	6192.09	2.6	110.20	0.2	15.38	3.9	111.0	67.97	0.02	115.95
914042	10.0	6219.46	3.4	113.77	0.2	16.69	3.5	108.0	86.94	0.01	117.60
914043	13.0	1162.34	2.7	117.87	0.2	17.87	3.8	110.0	74.48	0.01	113.74
914044	10.0	6002.05	2.1	97.15	3.0	18.28	3.4	95.0	70.11	0.02	112.55



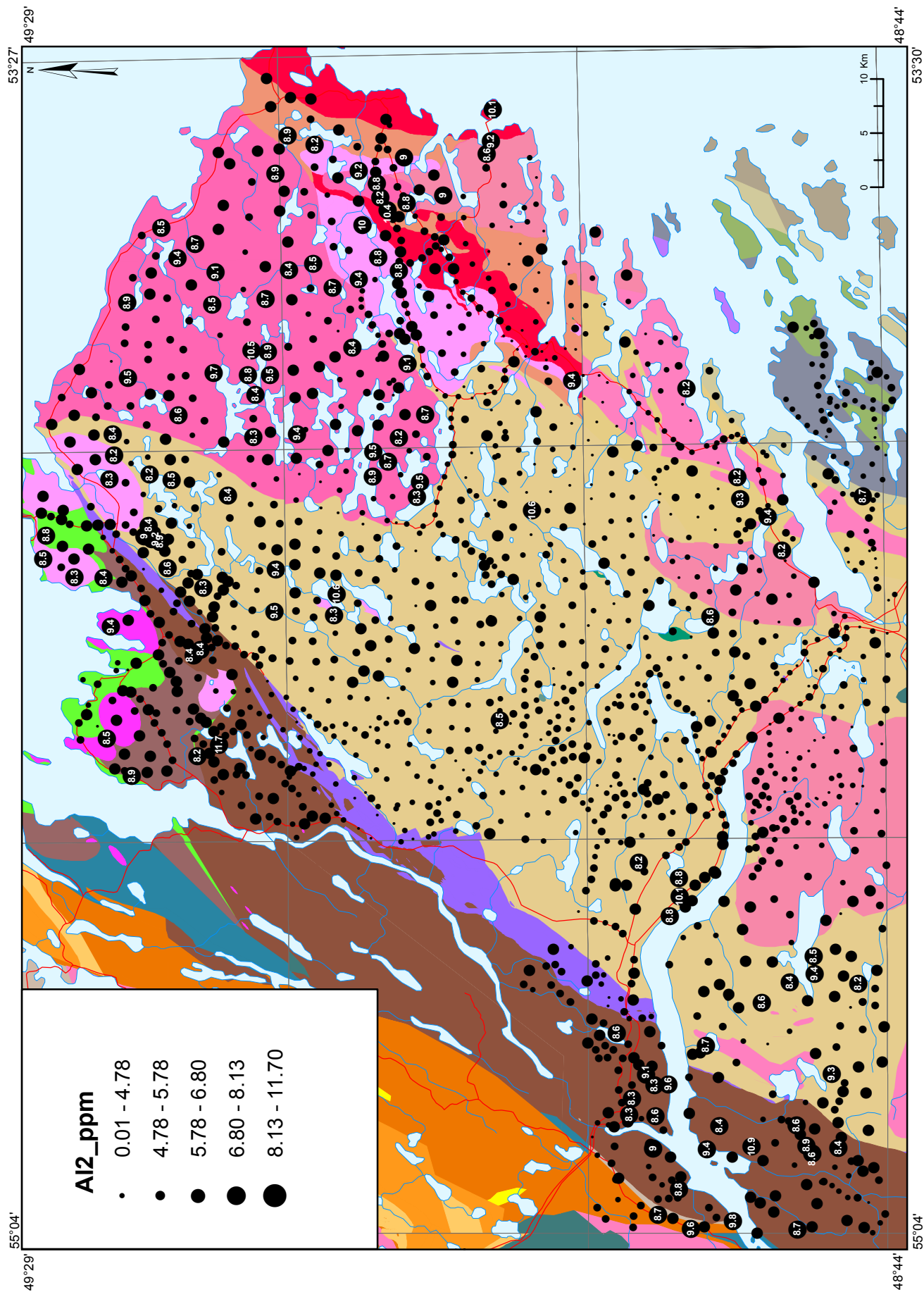
Sample	Th1 ppm	Ti2 ppm	U1 ppm	V2 ppm	W1 ppm	V2 ppm	Yb1 ppm	Zn1 ppm	Zn2 ppm	Zr1 wt. %	Zr2 ppm
914045	9.9	6152.16	2.9	76.70	3.0	18.62	4.2	72.0	54.95	0.02	142.14
914046	9.7	5238.39	2.6	86.51	0.2	20.14	3.8	93.0	63.92	0.04	136.33
914047	11.0	3937.43	3.3	129.46	0.2	25.80	4.4	210.0	170.03	0.04	129.97
914048	18.0	5062.07	6.5	41.24	8.0	27.16	10.1	25.0	44.68	0.09	256.44
914049		4604.59		99.54		20.55		126.63			129.97
914050	12.0	4483.07	1.9	95.35	0.2	15.55	4.2	150.0	102.70	0.01	136.77
914051	9.7	6184.32	3.6	80.37	3.0	20.63	4.0	65.0	62.14	0.02	111.45
914052	11.0	6135.48	2.6	84.02	0.2	18.35	4.0	92.0	64.90	0.02	111.01
914053	12.0	6497.65	3.4	102.71	4.0	19.46	4.0	103.0	78.31	0.02	107.50
914054	12.0	5978.88	2.5	138.07	0.2	17.14	3.4	145.0	125.19	0.01	114.57
914055	10.0	5906.52	2.0	135.13	0.2	21.85	3.8	137.0	102.40	0.01	114.02
914056	9.0	5889.70	2.3	128.42	0.2	22.00	3.4	122.0	89.56	0.01	106.66
914057	9.9	7797.66	2.5	88.20	0.2	20.25	4.2	73.0	64.17	0.03	127.64
914058	20.0	3976.93	4.3	43.56	0.2	38.71	7.3	84.0	61.82	0.05	224.64
914059	14.0	3772.67	4.4	27.42	0.2	45.26	7.2	70.0	58.68	0.07	263.63
914060	12.0	4870.83	3.1	87.56	0.2	24.78	4.9	116.0	113.05	0.01	128.41
914061	9.2	7451.63	2.3	126.07	0.2	17.66	3.8	115.0	67.12	0.01	131.60
914062	21.0	5883.69	2.6	134.29	0.2	23.62	3.4	190.0	180.23	0.01	123.58
914063	13.0	6514.47	2.6	124.54	0.2	25.53	4.7	116.0	83.16	0.01	133.24
914064	14.0	6576.40	3.2	120.94	0.2	18.50	4.3	94.0	89.08	0.01	125.18
914065	9.8	6528.49	2.8	123.24	0.2	25.77	3.8	100.0	81.36	0.01	91.86
914066	6.6	6990.79	2.3	144.31	0.2	15.28	3.2	102.0	78.10	0.01	100.19
914067	11.0	6238.65	2.4	159.42	5.0	20.32	4.0	148.0	110.84	0.01	118.75
914068	13.0	4736.78	2.2	137.97	0.2	39.16	5.6	140.0	104.38	0.02	130.62
914069	12.0	4850.56	2.9	119.94	0.2	17.12	5.2	133.0	78.06	0.01	123.96
914070	15.0	5421.84	4.2	134.44	0.2	27.32	5.0	187.0	165.70	0.02	120.19
914072	21.0	6539.27	3.8	117.63	0.2	20.63	4.9	79.0	75.44	0.01	100.35
914074	19.0	6791.98	4.2	113.59	0.2	21.37	5.2	130.0	73.96	0.01	92.26
914075	30.0	5787.28	6.5	82.10	0.2	16.49	5.5	92.0	81.89	0.03	170.02
914076		3418.18		157.68		33.66		114.96			92.69
914077	18.0	4398.91	4.9	72.10	6.0	14.06	2.9	53.0	61.94	0.01	103.05
914078	13.0	4910.85	5.2	88.77	6.0	14.34	3.0	75.0	83.59	0.03	82.33
914079		4466.05		180.82		45.82		144.28			141.88
914080	12.0	5945.54	2.2	123.19	2.0	21.93	4.0	128.0	92.43	0.01	113.86
914083	10.0	5620.39	2.6	131.06	0.2	20.58	3.6	126.0	86.50	0.01	99.66
914084	12.0	6098.92	2.4	120.76	0.2	21.23	4.1	115.0	88.11	0.01	111.48
914085	9.8	5754.23	2.5	130.56	0.2	23.58	3.5	109.0	87.95	0.01	99.37
914086	15.0	6462.56	3.0	120.27	4.0	24.41	4.3	104.0	92.86	0.02	127.33
914087	9.8	4745.05	2.1	152.57	0.2	12.49	3.7	131.0	117.38	0.01	103.04
914088	14.0	5005.64	3.2	157.79	0.2	16.35	3.4	150.0	120.77	0.03	112.92
914089	12.0	5318.14	1.8	130.63	6.0	30.91	5.1	115.0	105.09	0.01	133.62
914090	11.0	5522.73	2.6	177.43	6.0	34.40	4.5	118.0	119.95	0.01	124.74
914091	13.0	4866.14	2.6	116.28	0.2	32.65	5.3	137.0	104.18	0.01	139.61
914092	11.0	5114.74	2.3	115.12	0.2	26.76	4.0	122.0	115.30	0.01	129.85
914094	13.0	4362.99	3.1	89.50	0.2	25.76	6.0	127.0	89.16	0.02	167.02
914095	14.0	4438.12	3.3	78.84	0.2	33.21	6.1	128.0	96.95	0.02	171.02
914097	20.0	4594.94	3.6	65.88	0.2	14.72	2.8	71.0	53.42	0.01	106.58
914098	29.0	8047.98	3.9	74.94	0.2	26.12	5.9	74.0	44.38	0.10	115.42
914100	9.7	5847.45	2.2	103.82	0.2	17.19	3.6	75.0	69.75	0.01	119.30
914101	9.6	5966.40	3.1	84.51	0.2	16.54	3.5	77.0	67.91	0.02	115.20
914102	18.0	6583.79	2.1	114.36	5.0	21.56	4.2	112.0	80.82	0.01	103.42
914103	11.0	5817.85	2.7	79.53	0.2	16.47	4.2	101.0	63.76	0.02	119.16
914104	9.2	7861.54	2.0	83.50	0.2	15.58	3.7	57.0	54.35	0.02	114.51
914105	7.4	5414.78	2.1	82.84	0.2	11.88	2.7	97.0	74.83	0.01	89.66
914106	10.0	6446.67	2.4	156.23	0.2	13.02	3.6	63.0	130.27	0.01	116.61
914107	11.0	6025.88	2.1	164.67	0.2	17.96	3.5	102.0	107.63	0.01	117.61
914108	15.0	4036.56	3.9	32.48	0.2	44.90	8.6	87.0	51.48	0.02	228.01
914109		6566.06		61.50		43.10		68.75			310.26
914150	16.0	4958.53	3.2	81.97	0.2	11.94	2.7	77.0	62.63	0.01	101.43
914151	24.0	4593.28	4.1	51.47	0.2	15.54	3.1	25.0	44.63	0.01	117.50



## APPENDIX B: Figures 16-67. Symbol Plots of Element Distributions

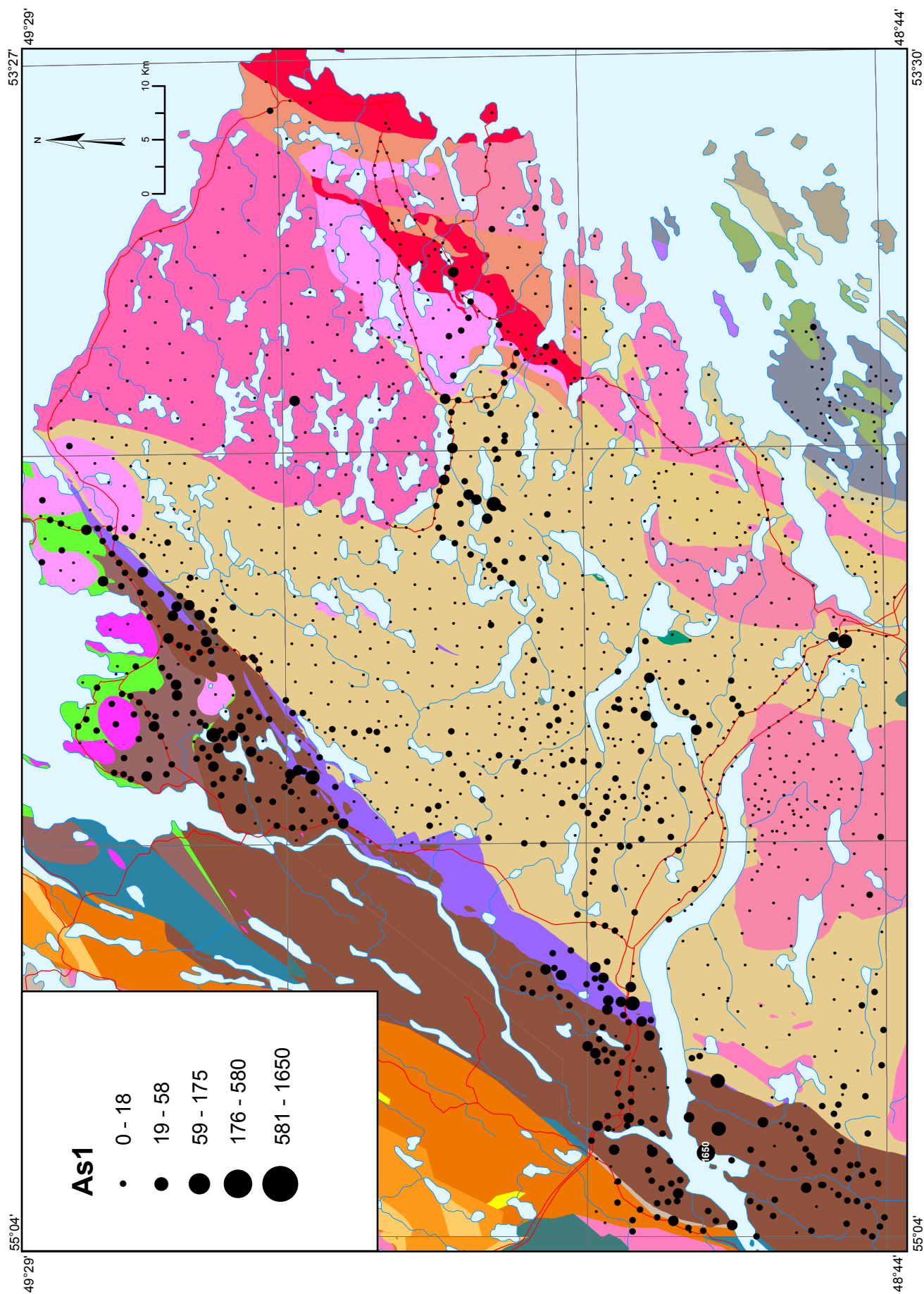
Figure 16.	Distribution of aluminum (Al2) in till . . . . .	110
Figure 17.	Distribution of arsenic (As1) in till . . . . .	111
Figure 18.	Distribution of barium (Ba1) in till . . . . .	112
Figure 19.	Distribution of barium (Ba2) in till . . . . .	113
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Figure 25.	Distribution of cobalt (Co1) in till . . . . .	119
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Figure 66.	Distribution of zirconium (Zr1) in till . . . . .	160
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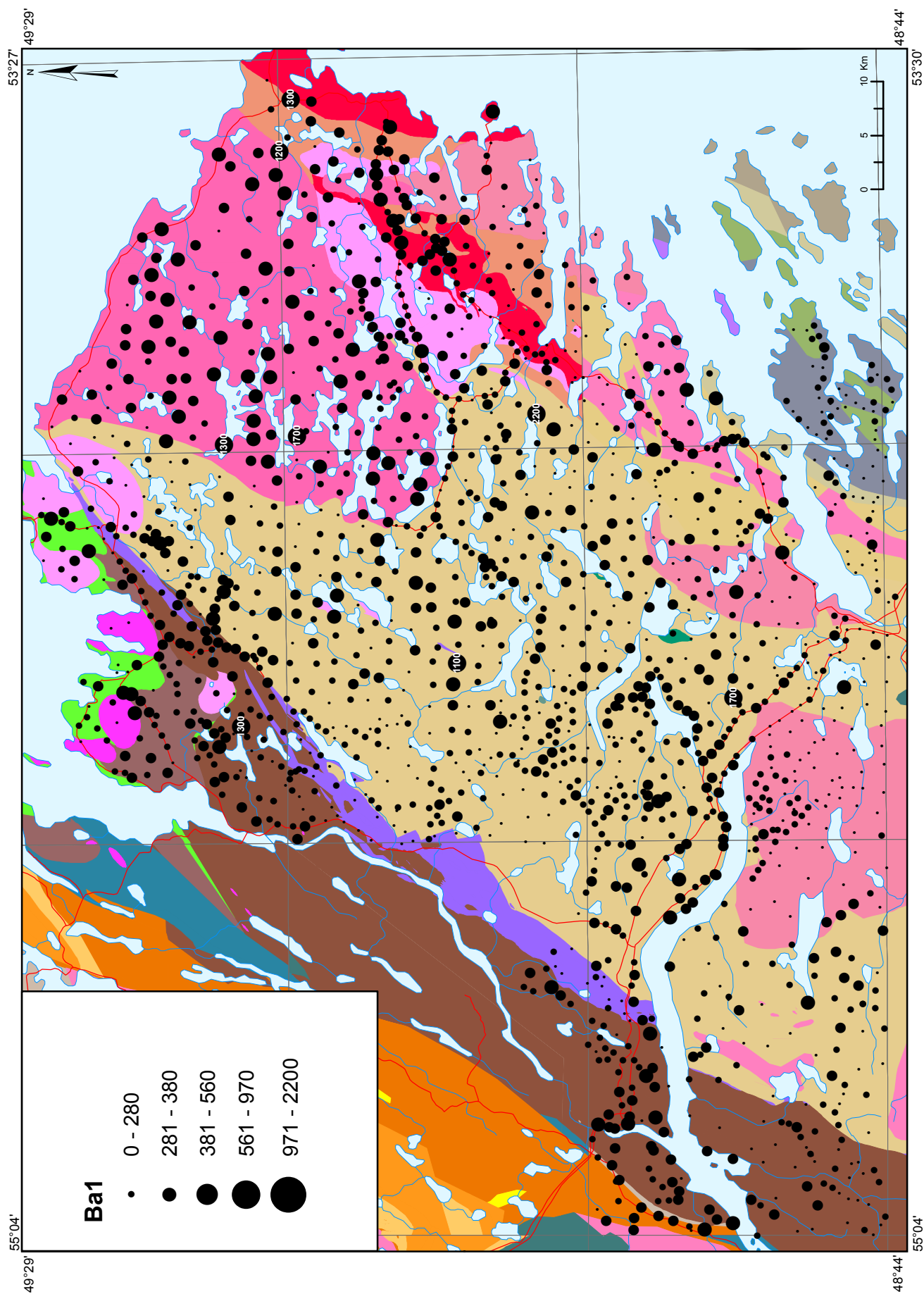
**Figure 16.** *Distribution of aluminium (Al<sub>2</sub>) in till.*





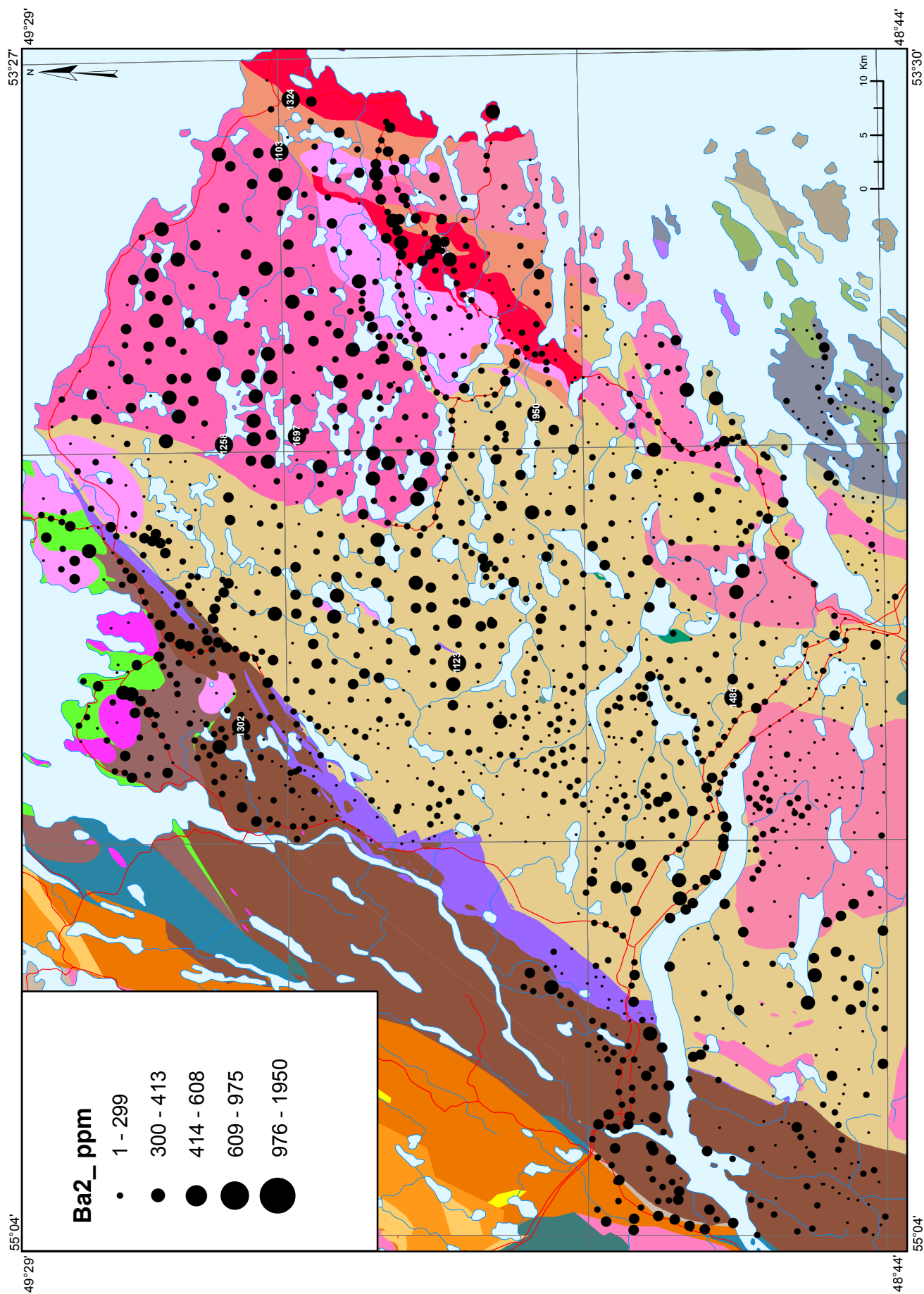
**Figure 17.** *Distribution of arsenic (AsI) in till.*





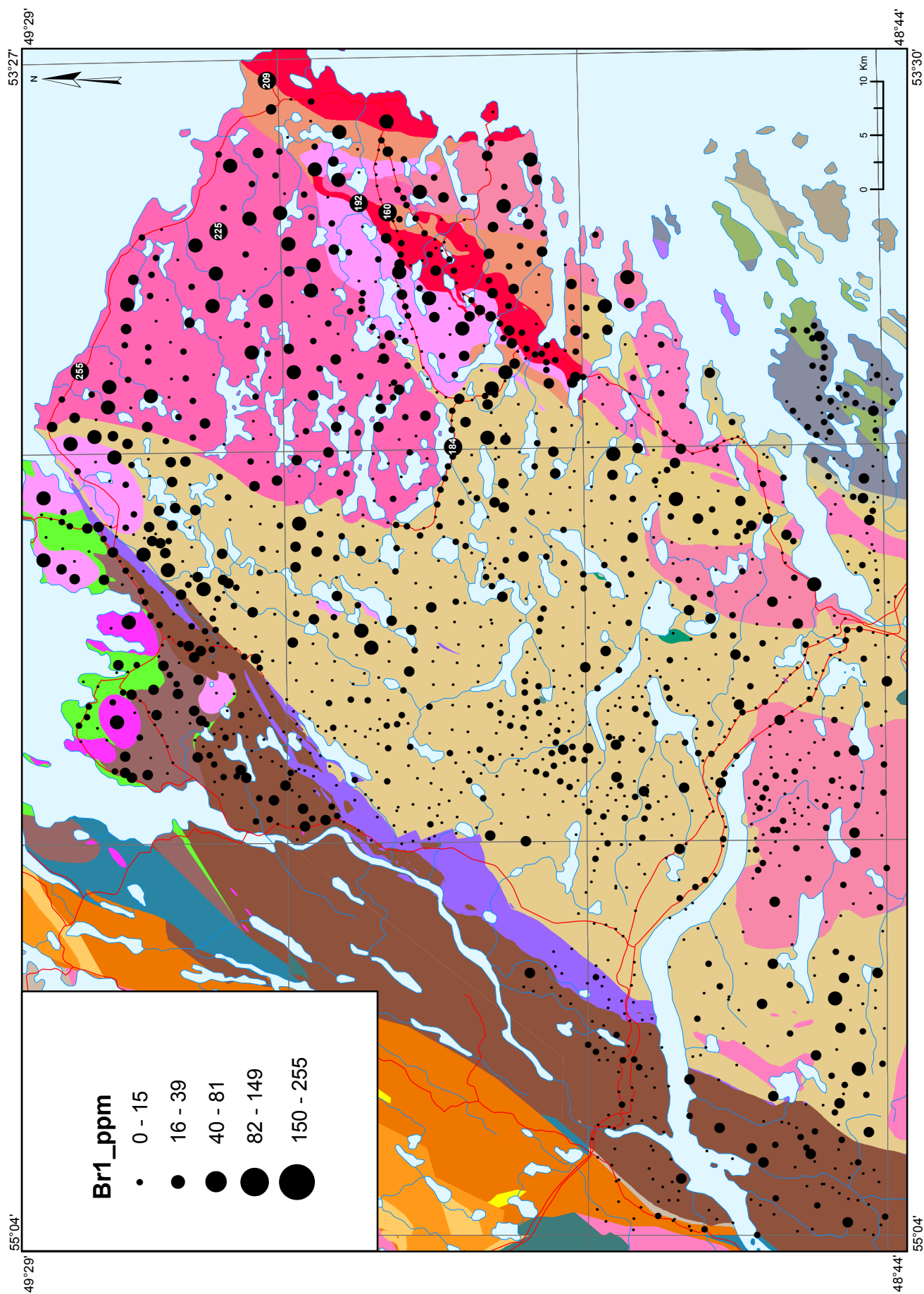
**Figure 18.** *Distribution of barium (Ba1) in till.*





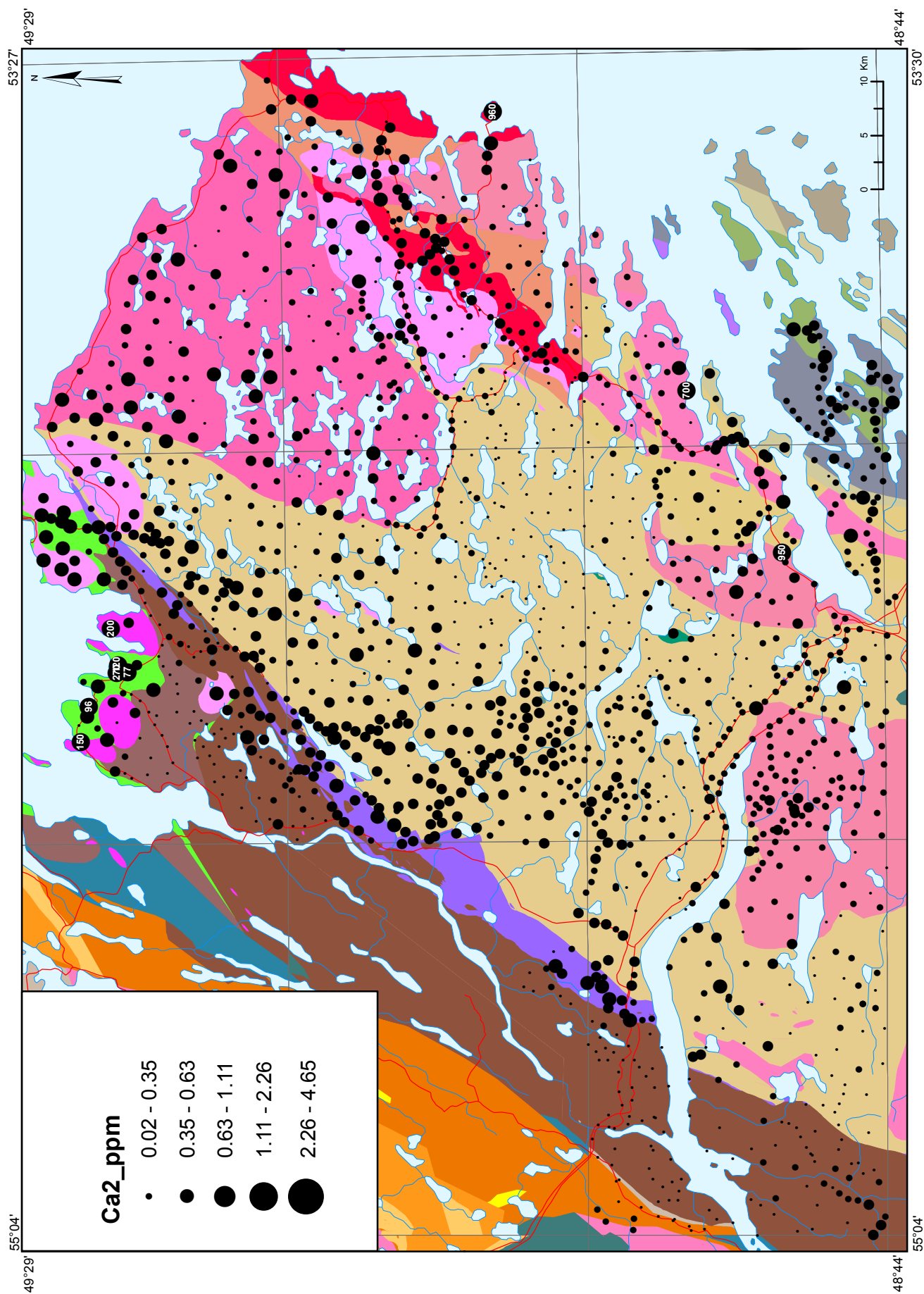
**Figure 19.** *Distribution of barium (Ba2) in till.*





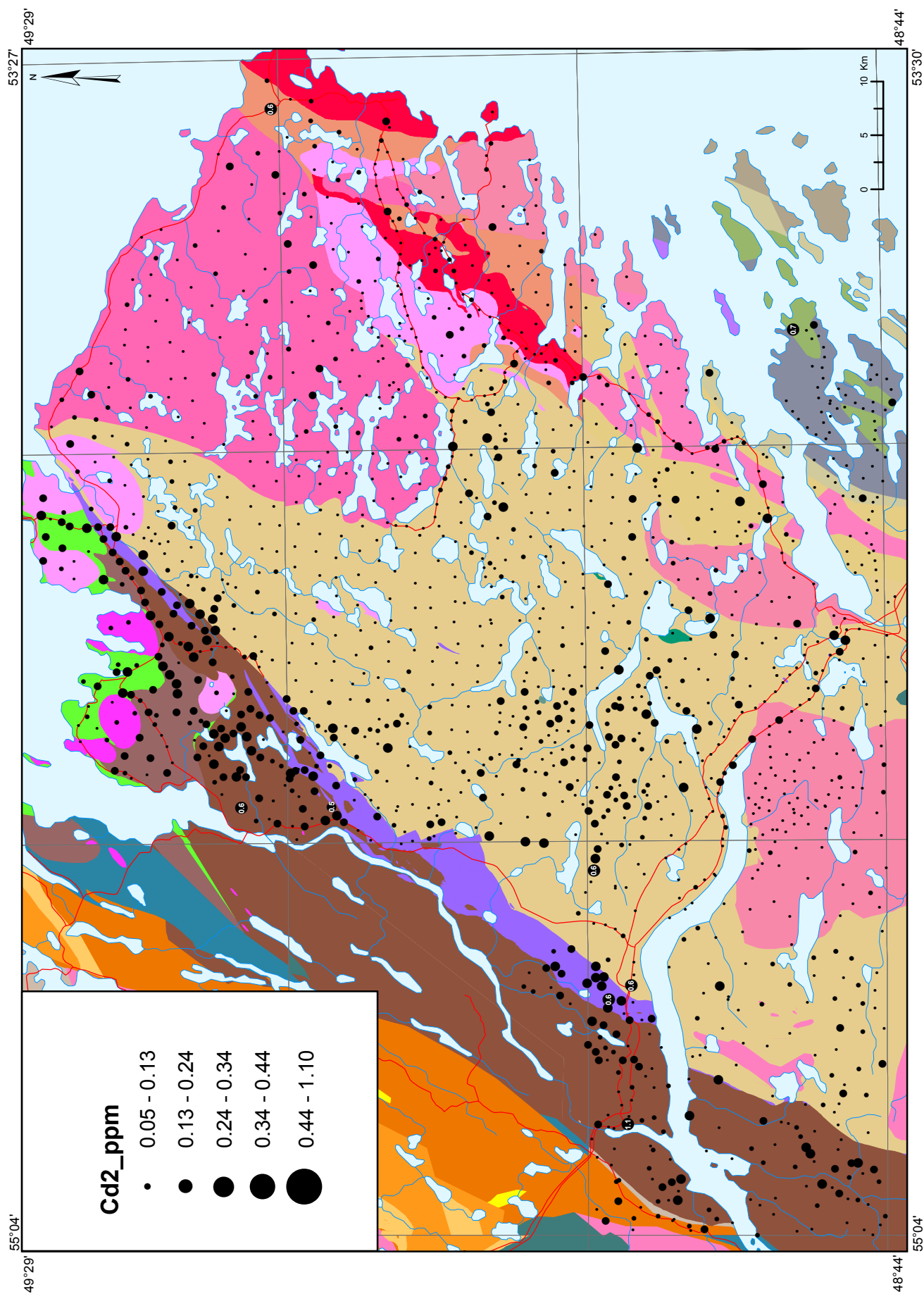
**Figure 20.** *Distribution of bromine (Br1) in till.*





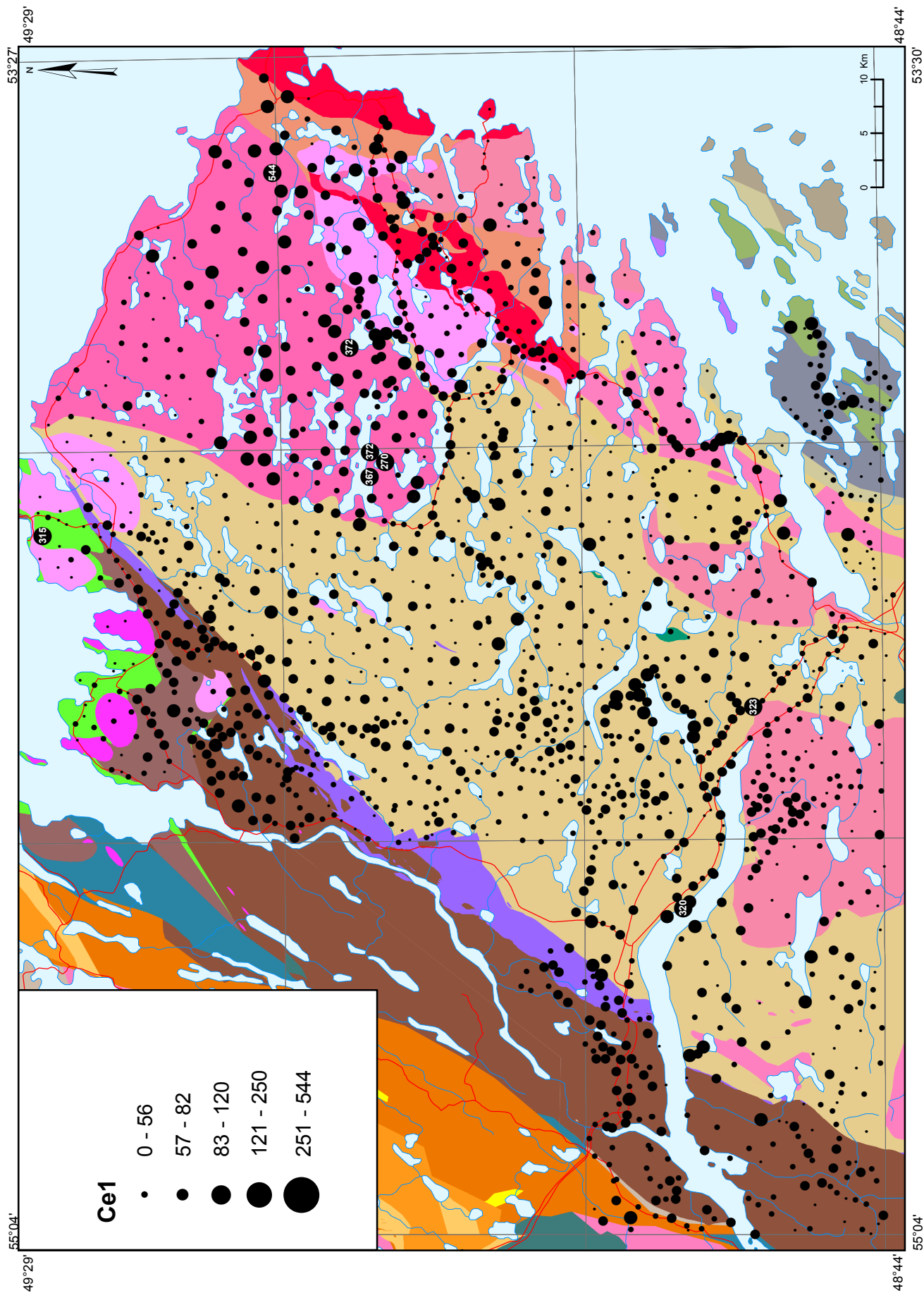
**Figure 21.** *Distribution of calcium (Ca<sup>2</sup>) in till.*





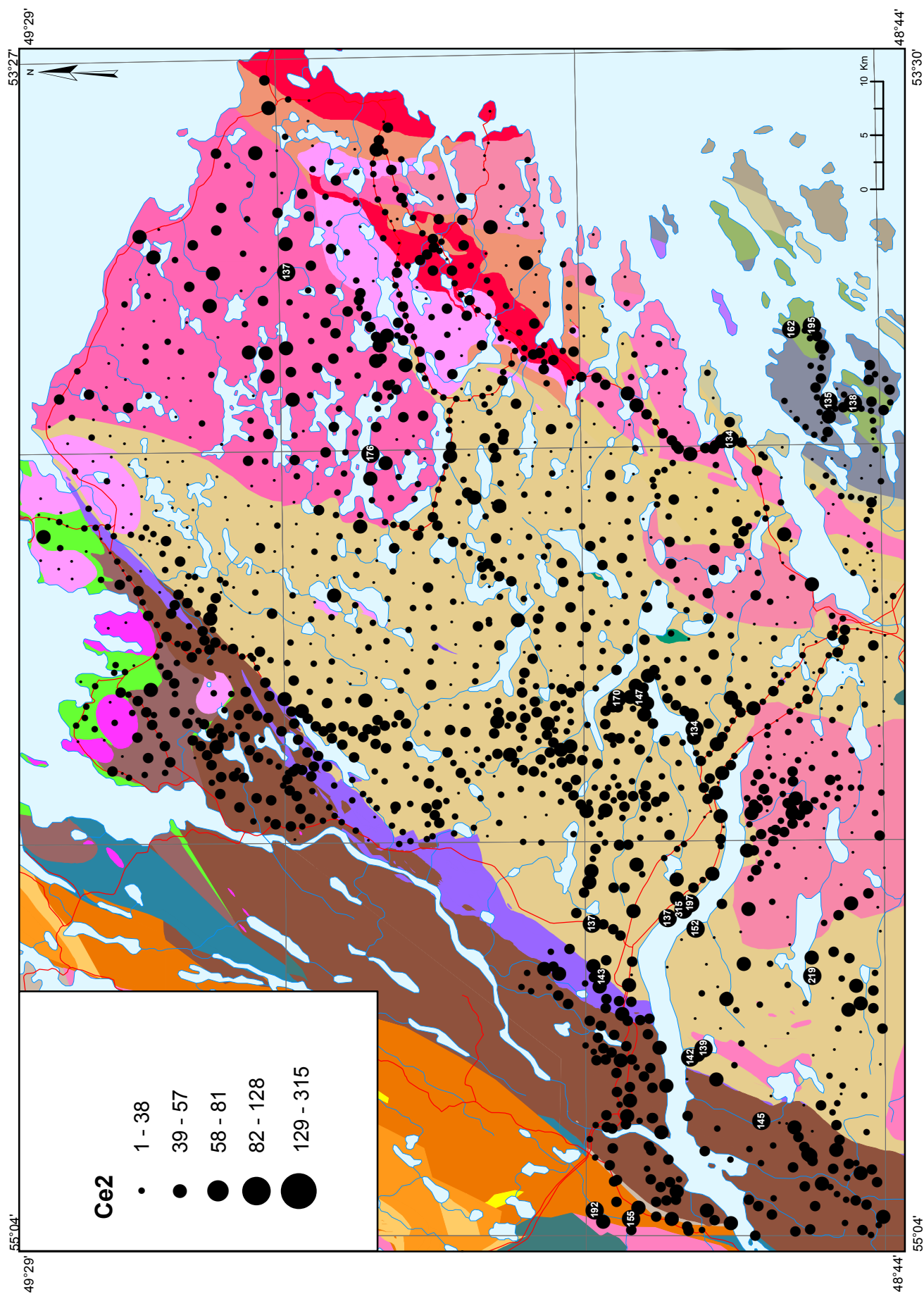
**Figure 22.** *Distribution of cadmium (Cd2) in till.*





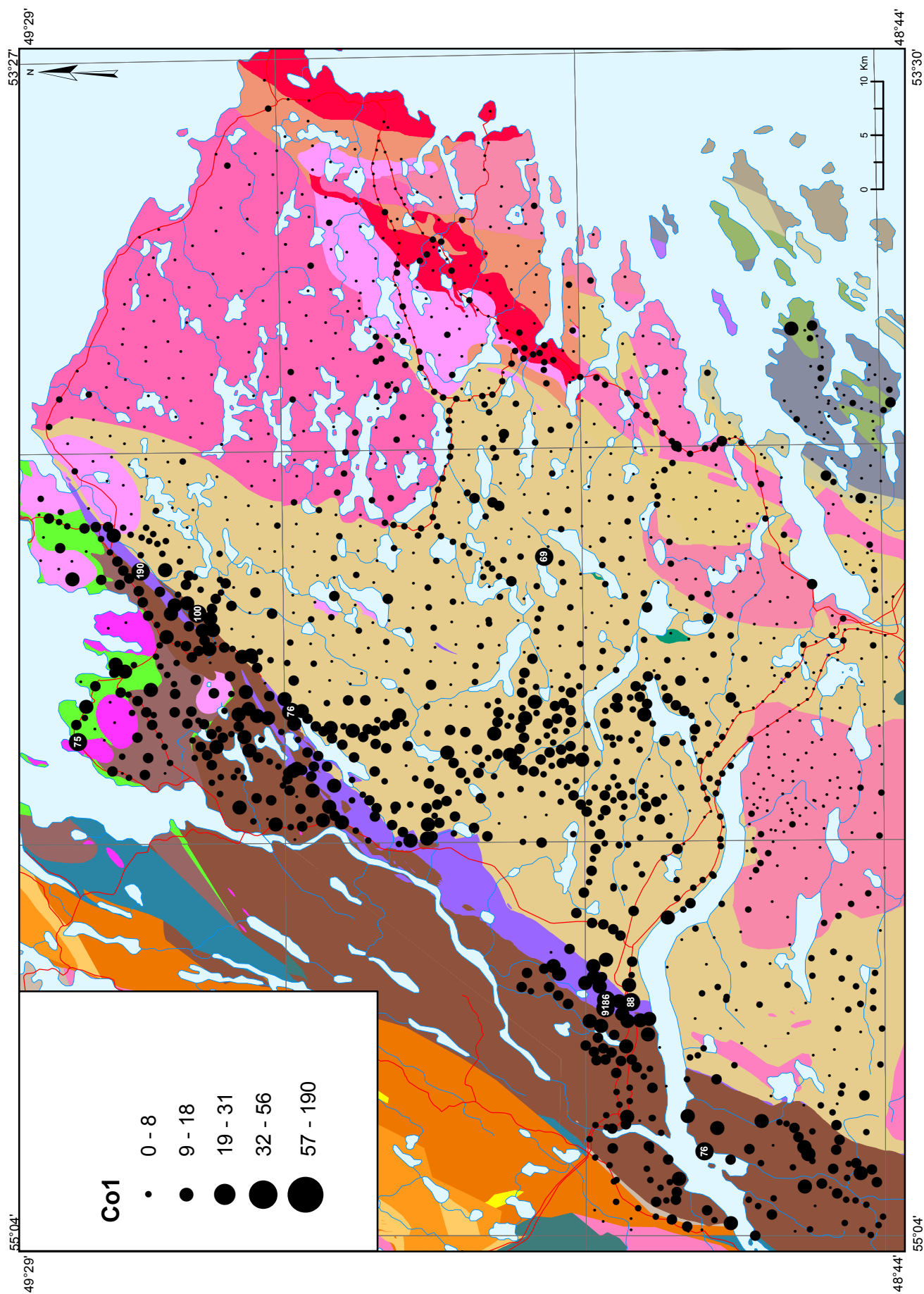
**Figure 23.** *Distribution of cerium (Ce1) in till.*





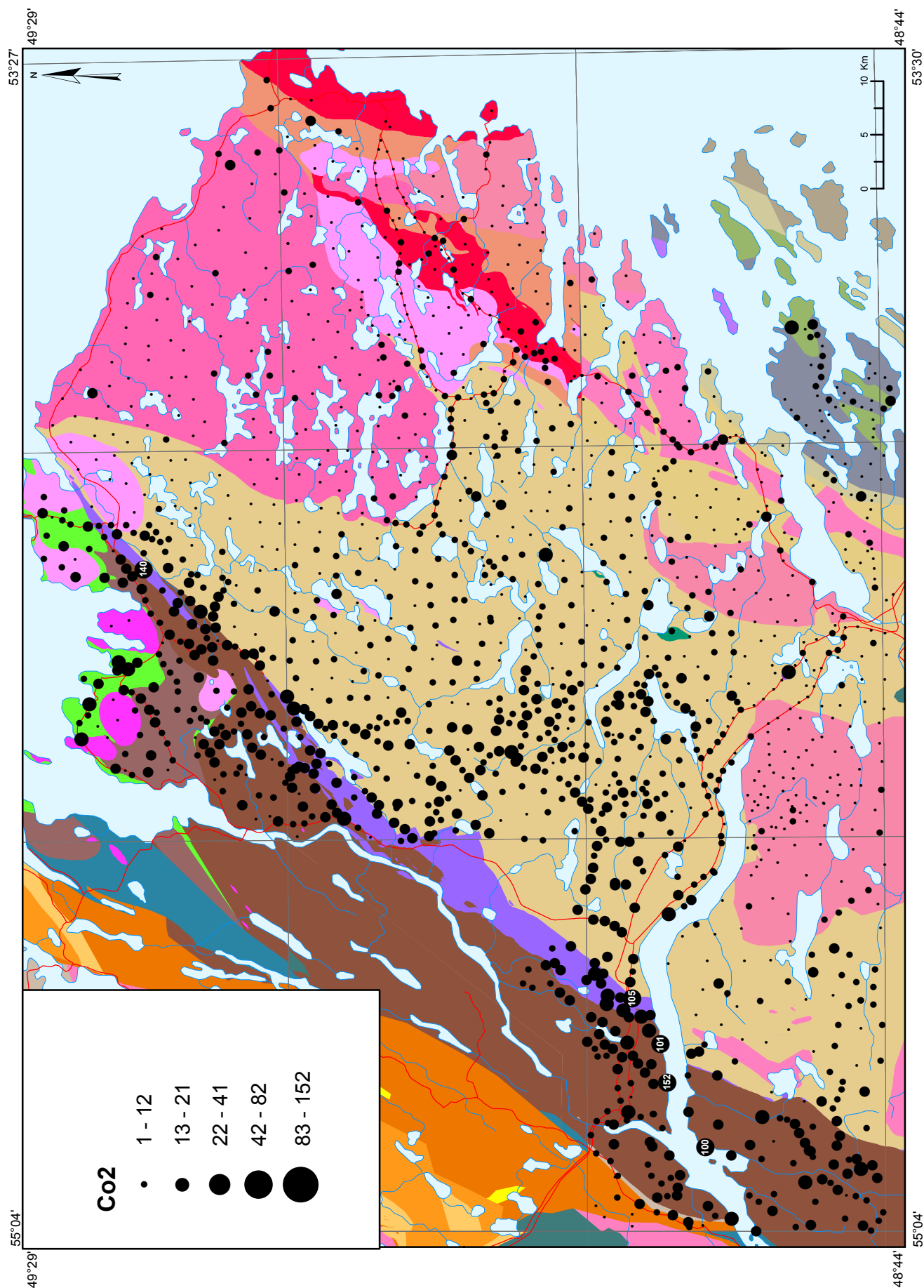
**Figure 24.** *Distribution of cerium (Ce2) in till.*





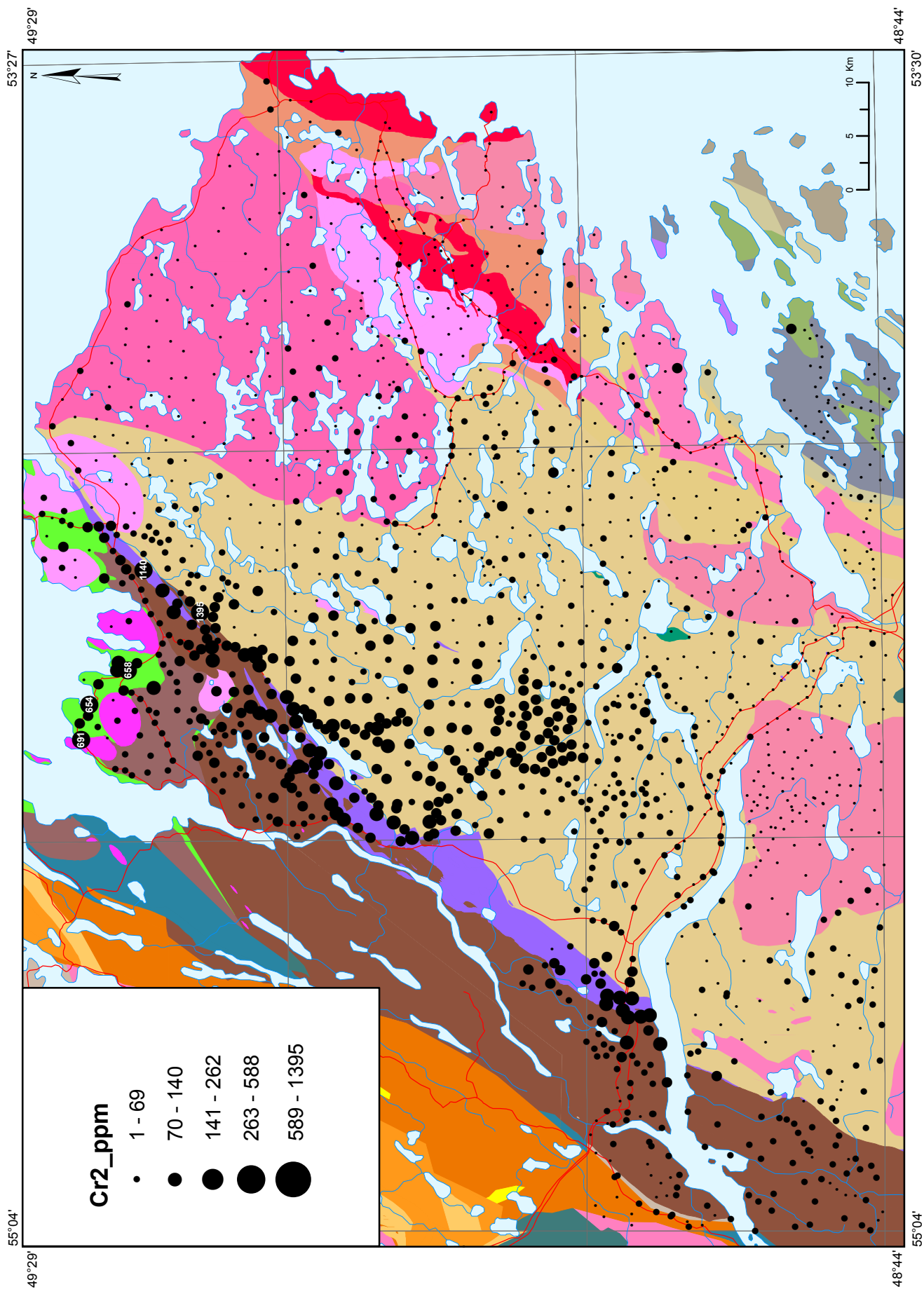
**Figure 25.** *Distribution of cobalt (Co1) in till.*





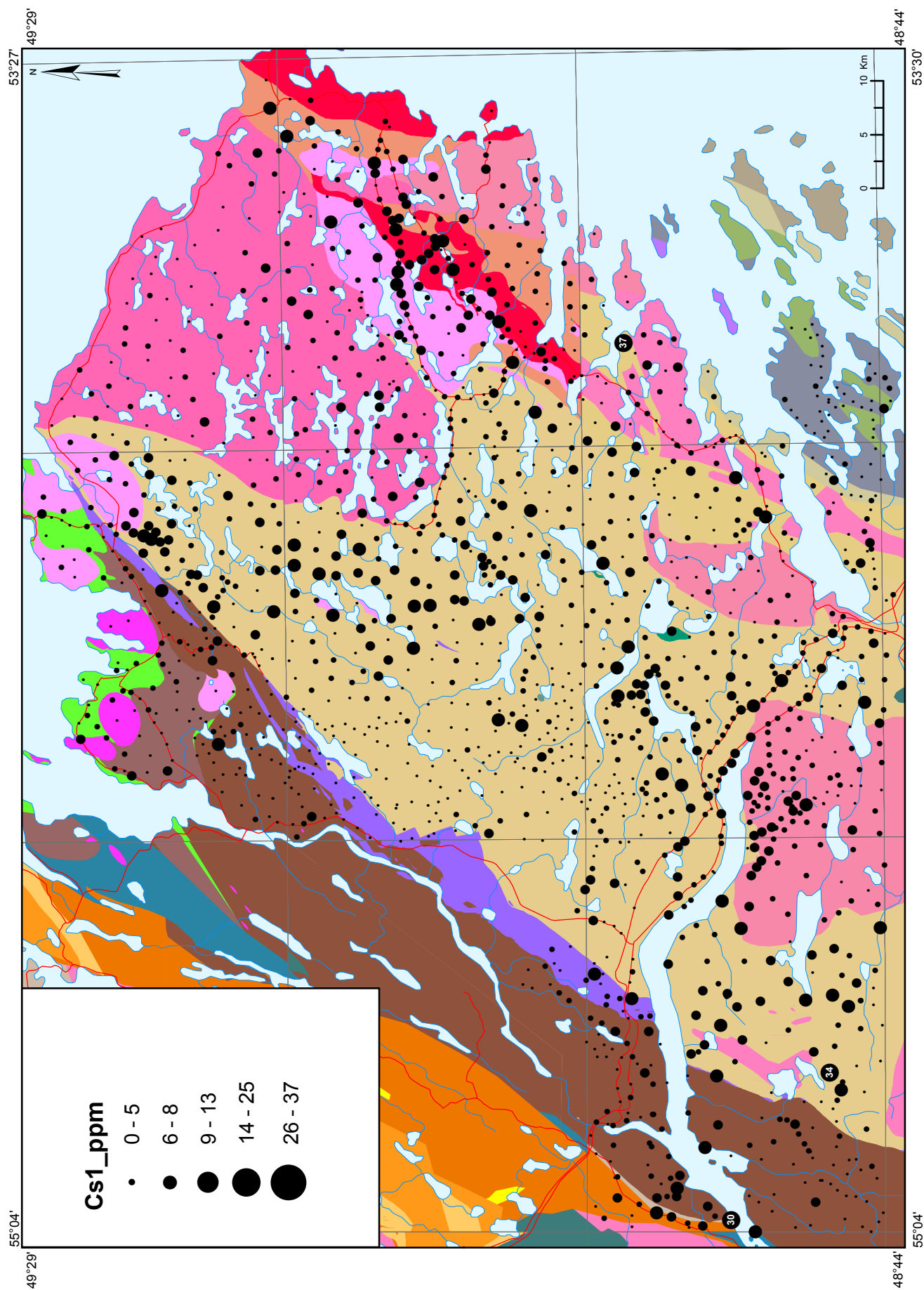
**Figure 26.** *Distribution of cobalt (Co2) in till.*





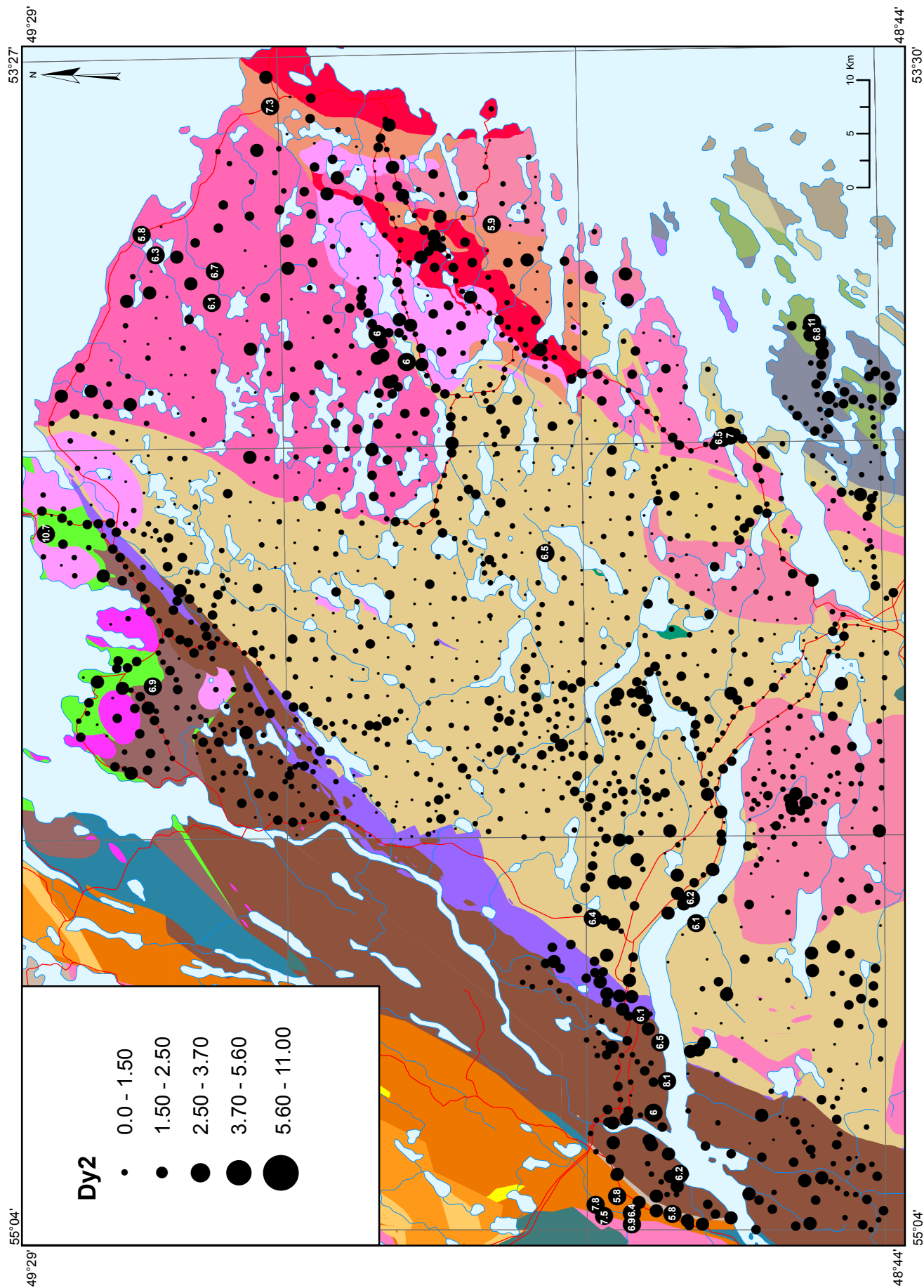
**Figure 27.** *Distribution of chromium (Cr2) in till.*





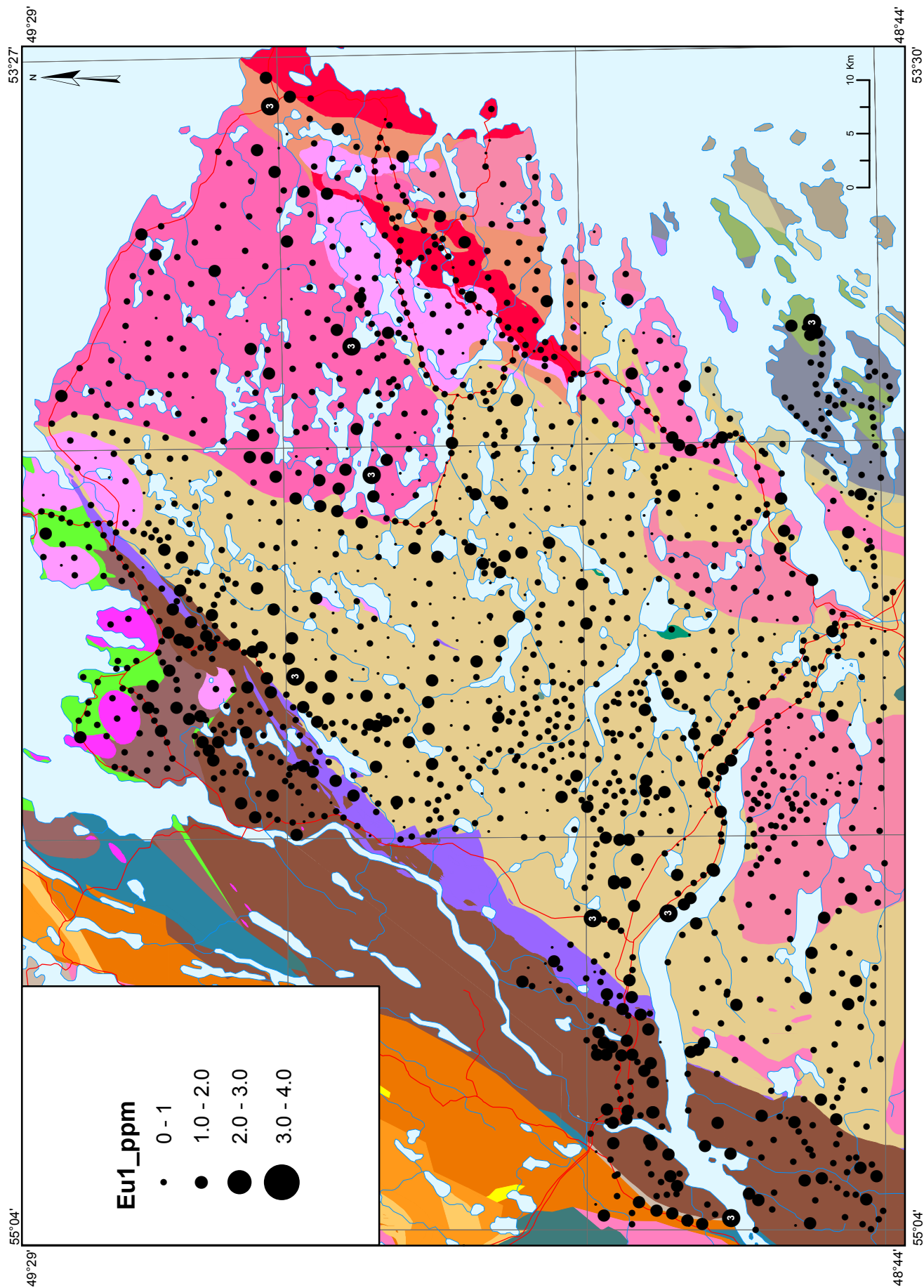
**Figure 28.** *Distribution of cesium (Cs1) in till.*





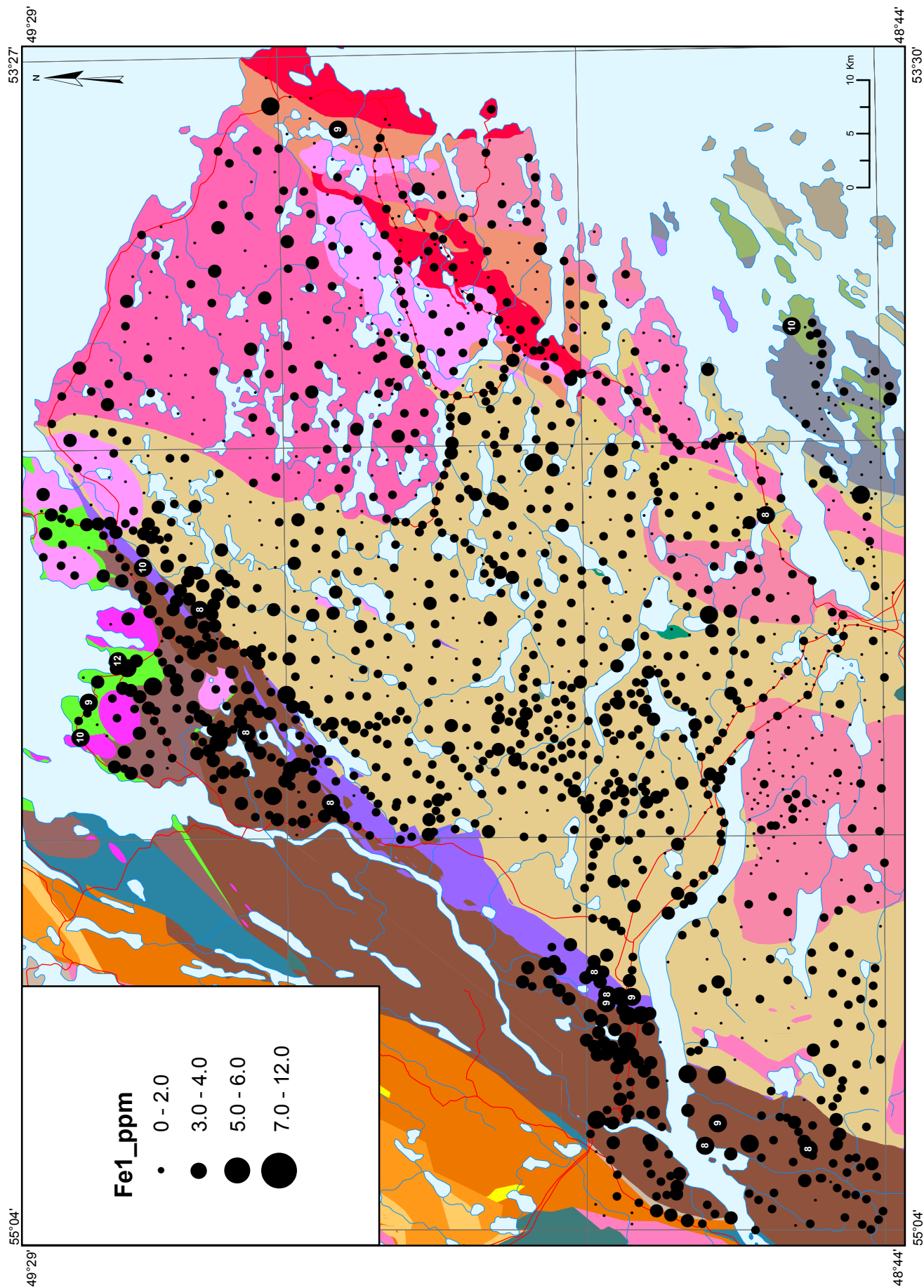
**Figure 29.** Distribution of dysprosium (Dy2) in till.





**Figure 30.** *Distribution of europium (Eu) in till.*





**Figure 31.** *Distribution of iron (Fe1) in till.*



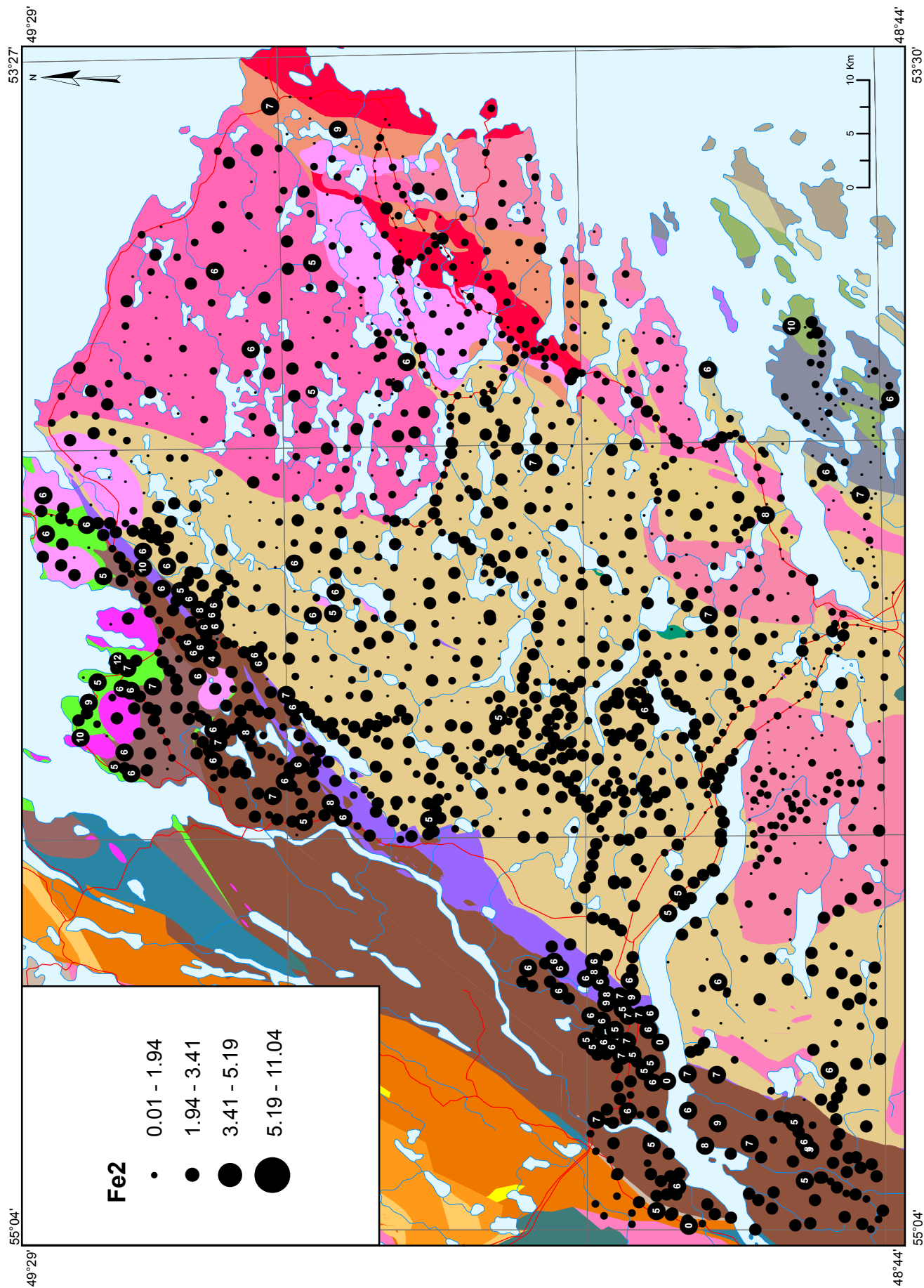
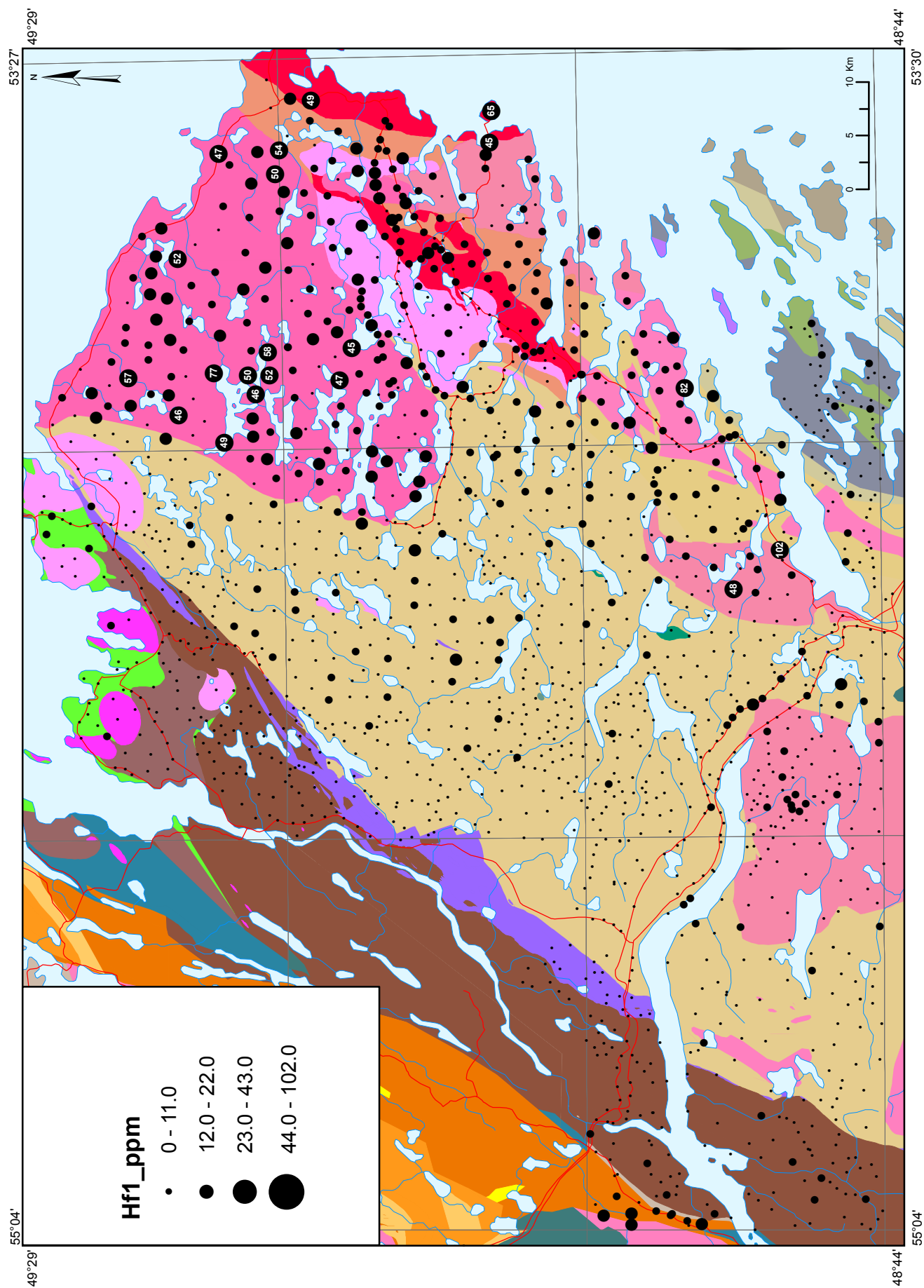


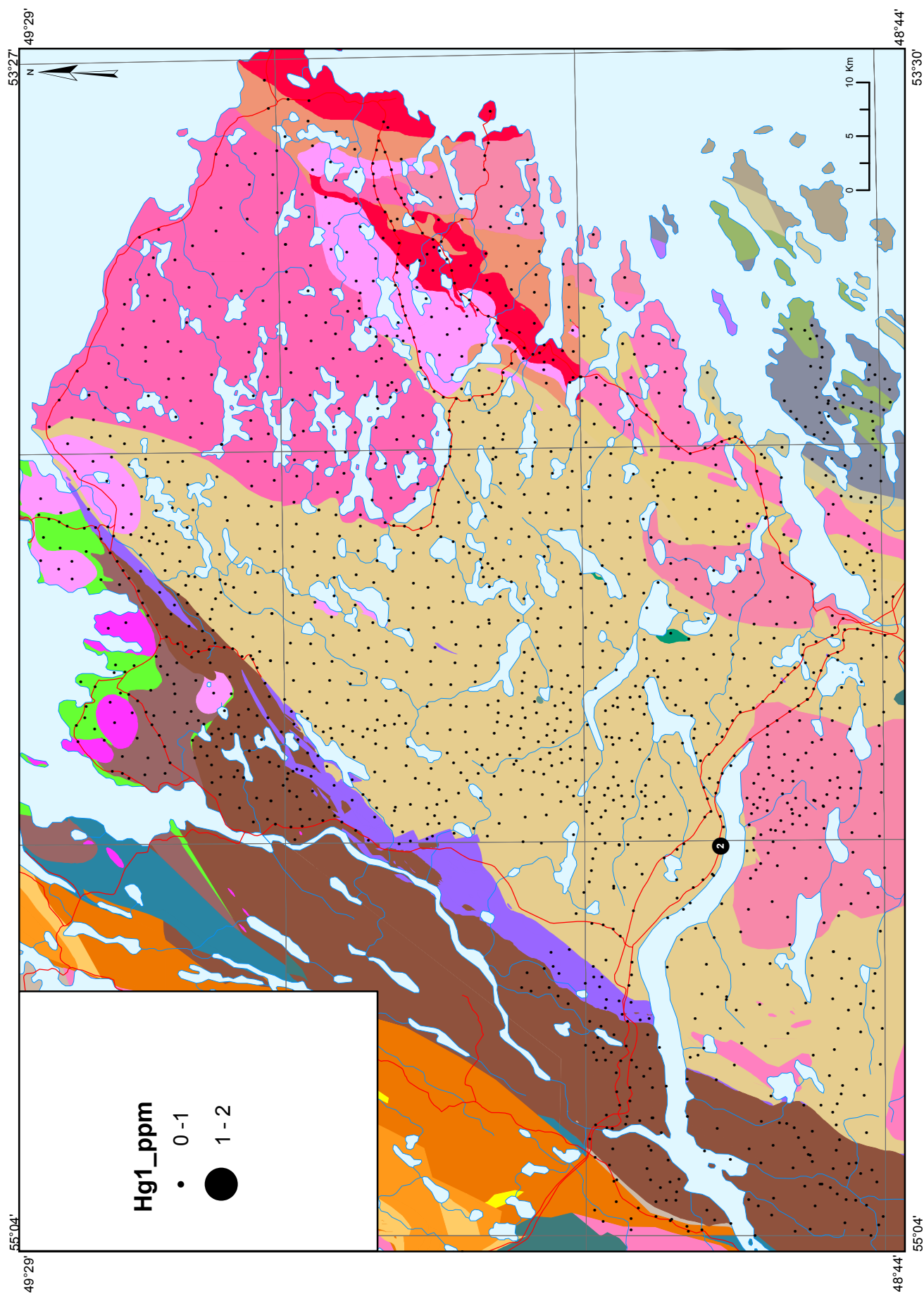
Figure 32. Distribution of iron (Fe2) in till.





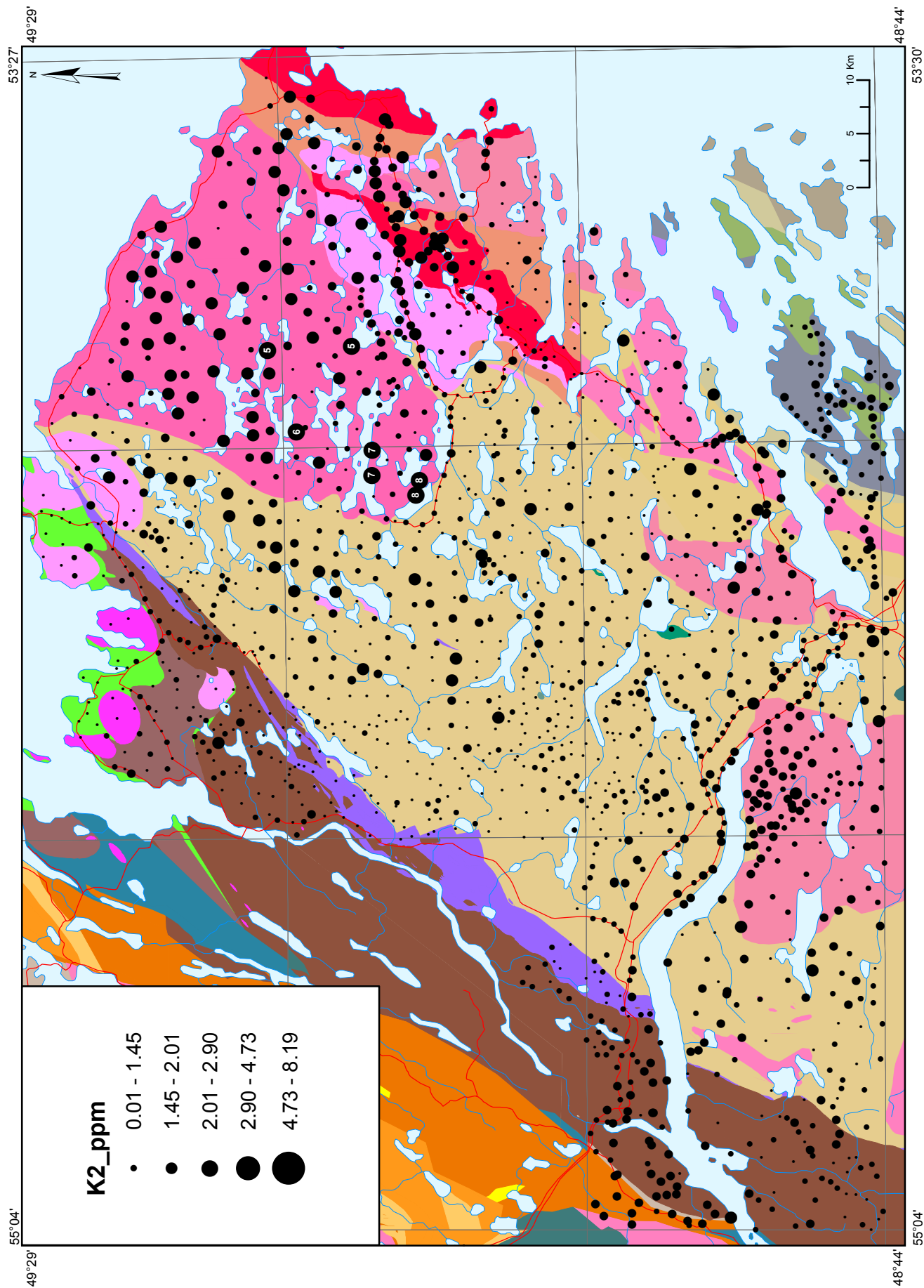
**Figure 33.** *Distribution of hafnium (Hf1) in till.*





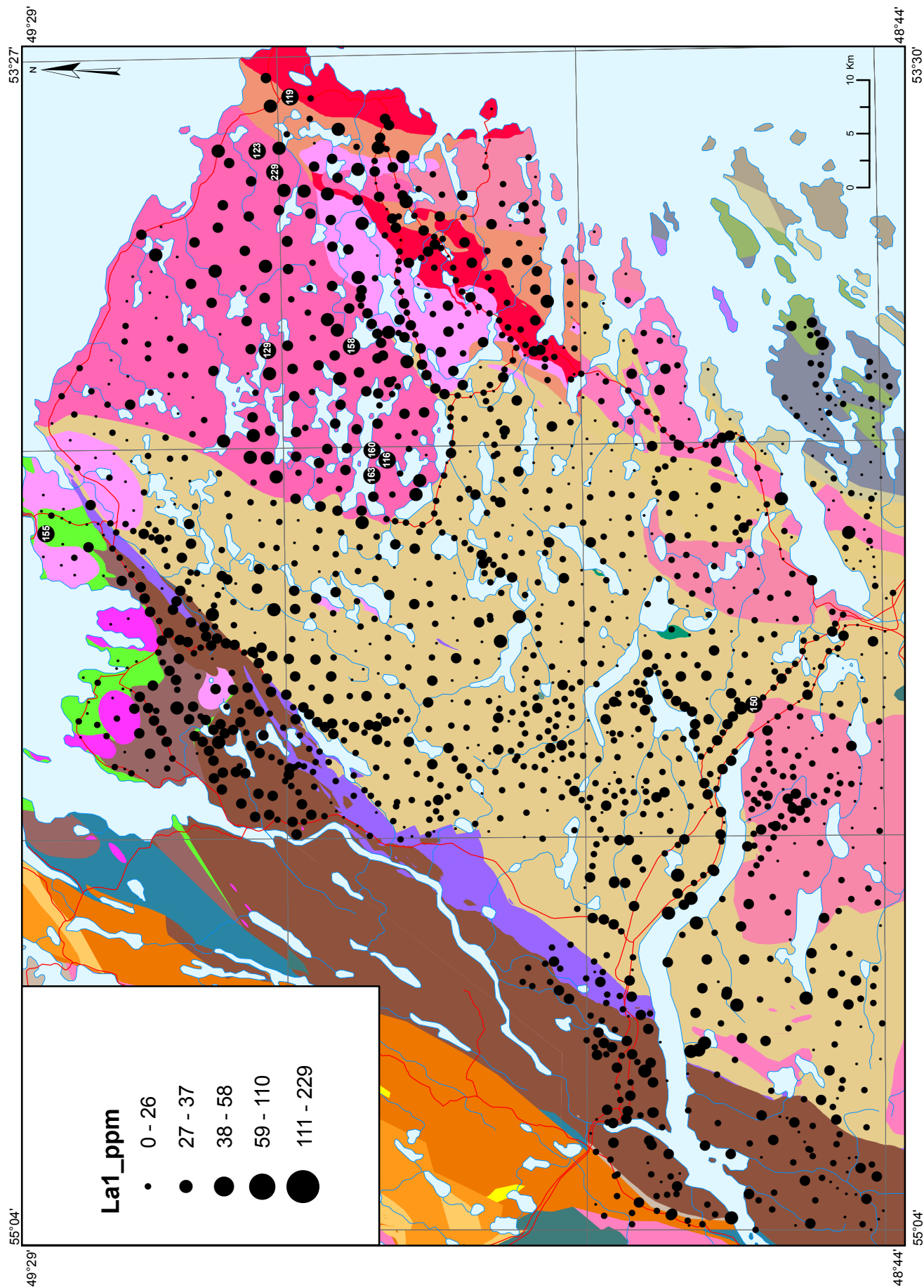
**Figure 34.** *Distribution of mercury (Hg1) in till.*





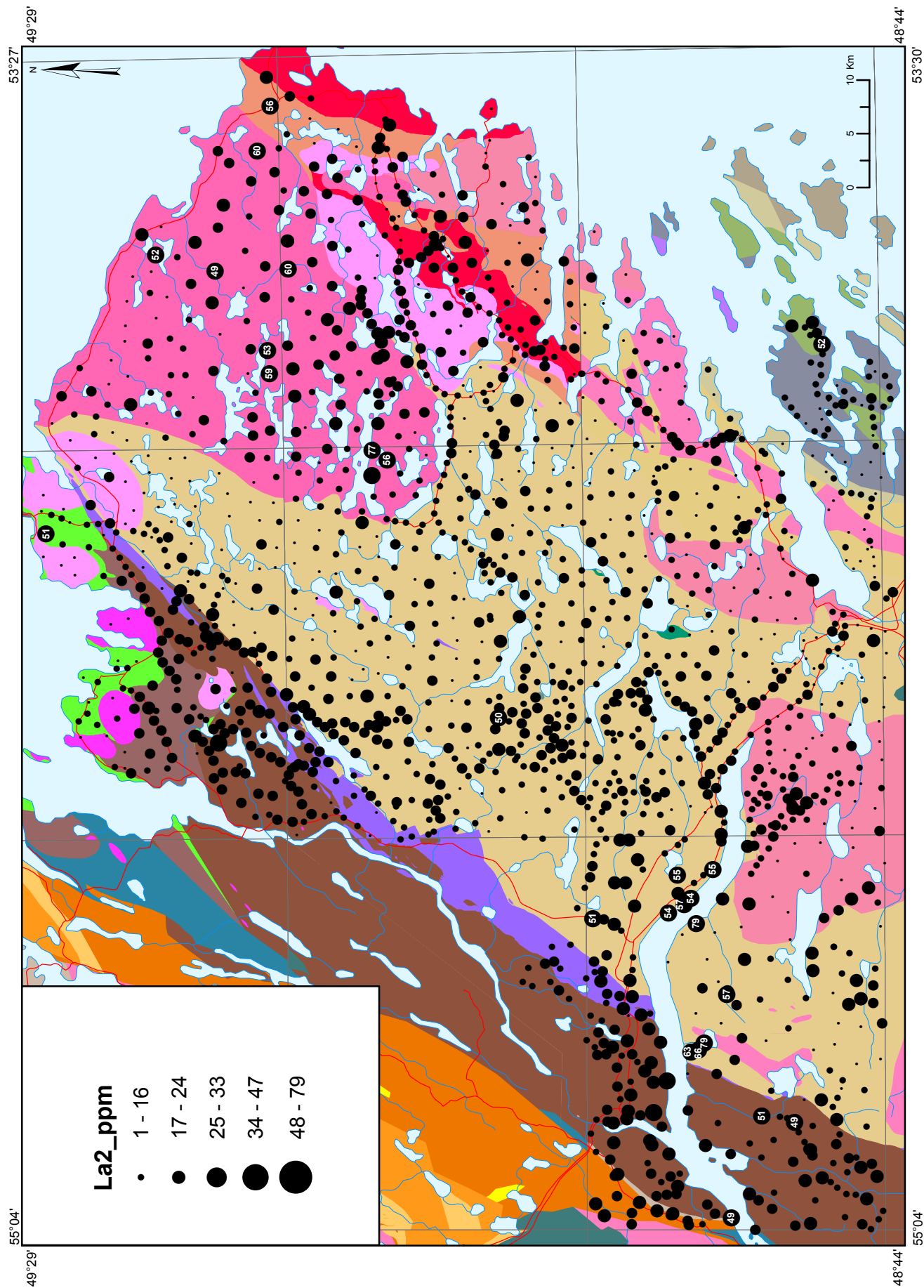
**Figure 35.** *Distribution of potassium (K2) in till.*





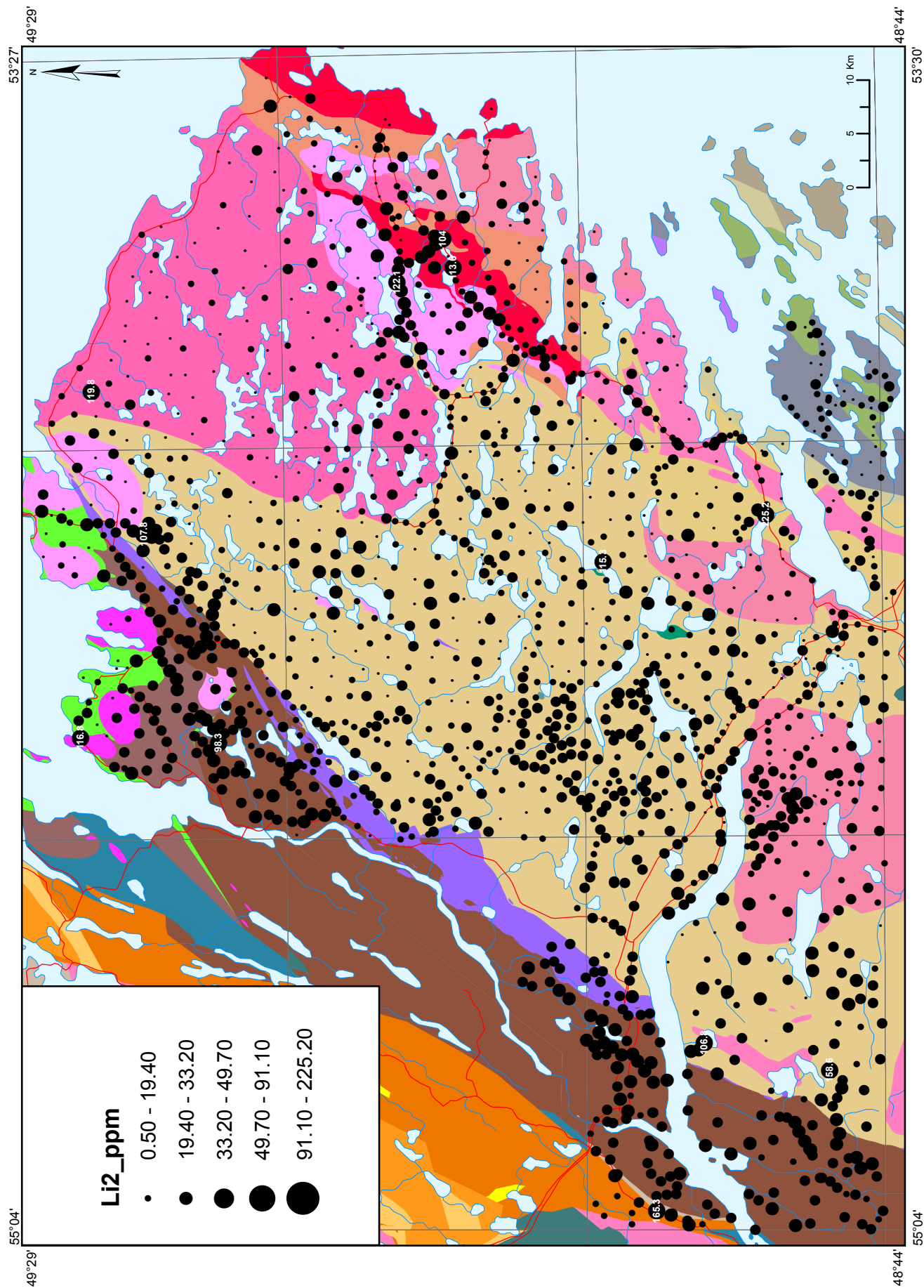
**Figure 36.** *Distribution of lanthanum (La1) in till.*





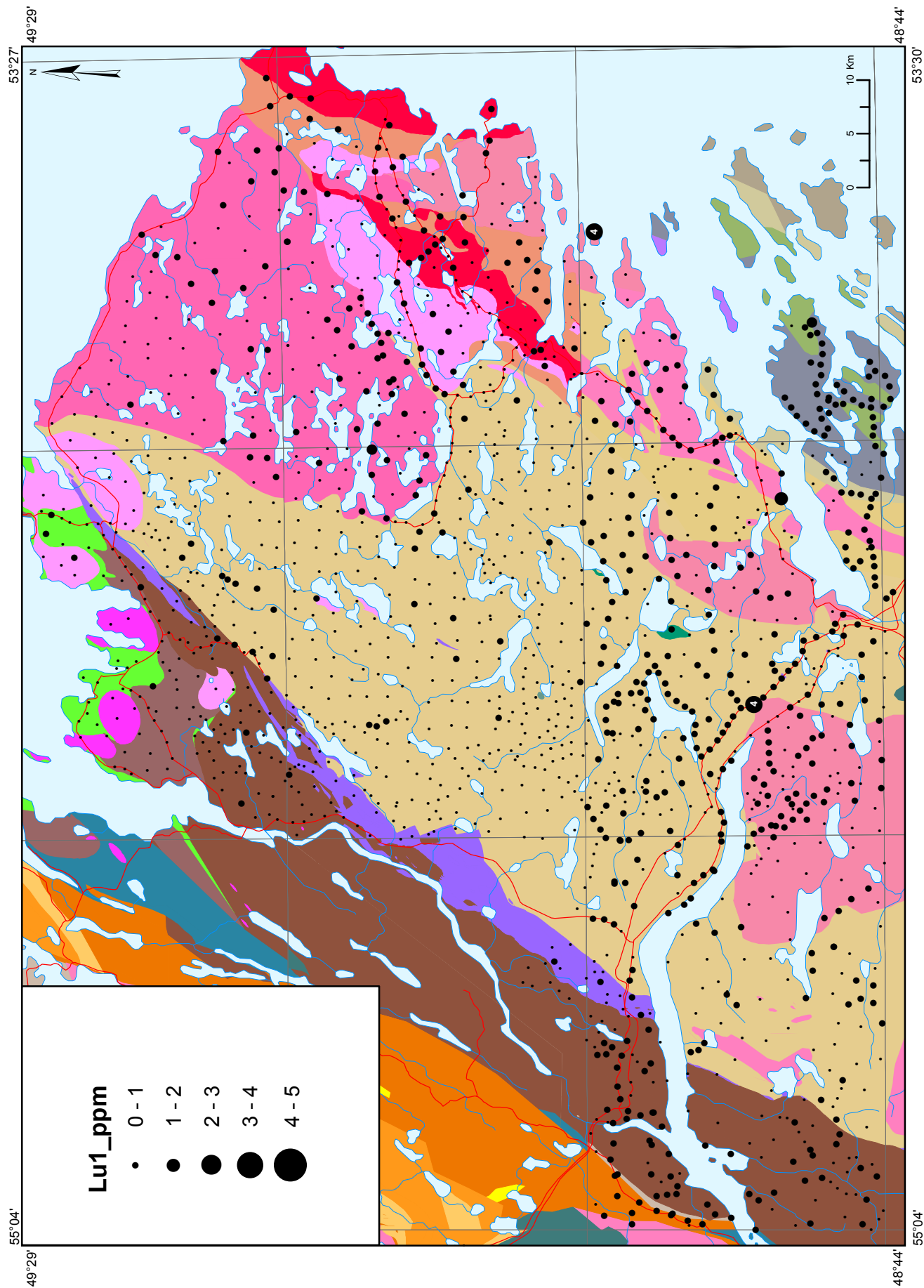
**Figure 37.** *Distribution of lanthanum (La2) in till.*





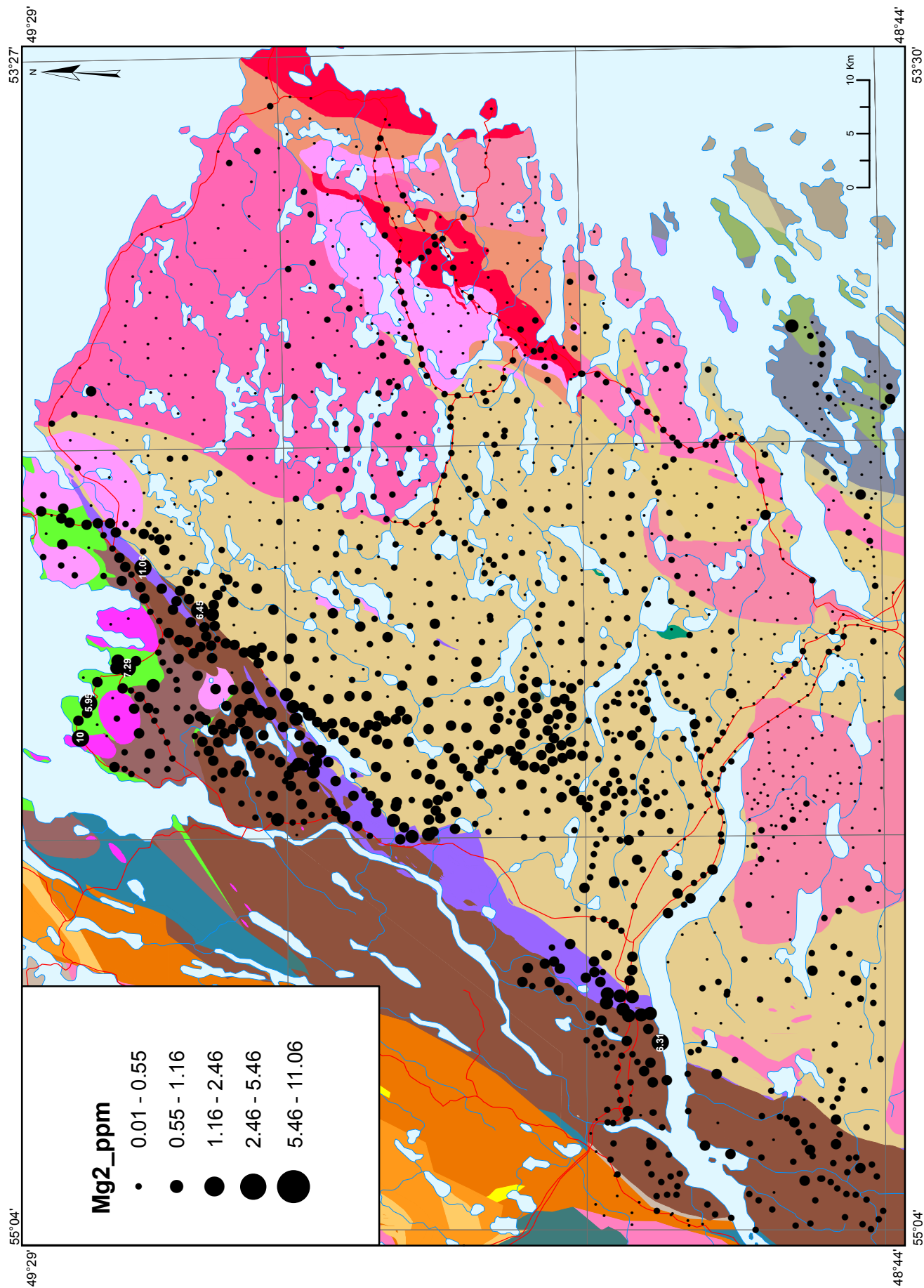
**Figure 38.** *Distribution of lithium (Li2) in till.*





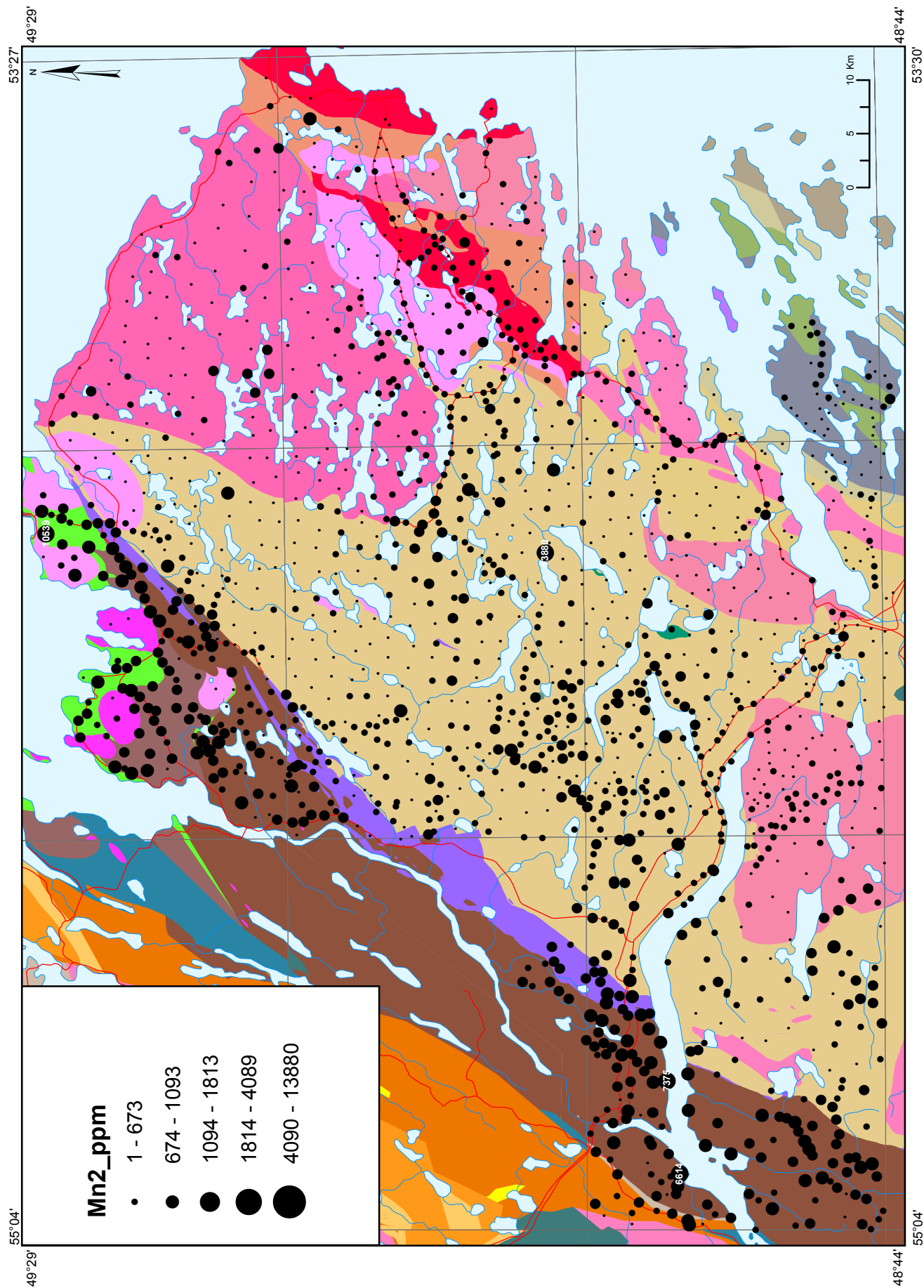
**Figure 39.** Distribution of lutetium (*Lu1*) in till.





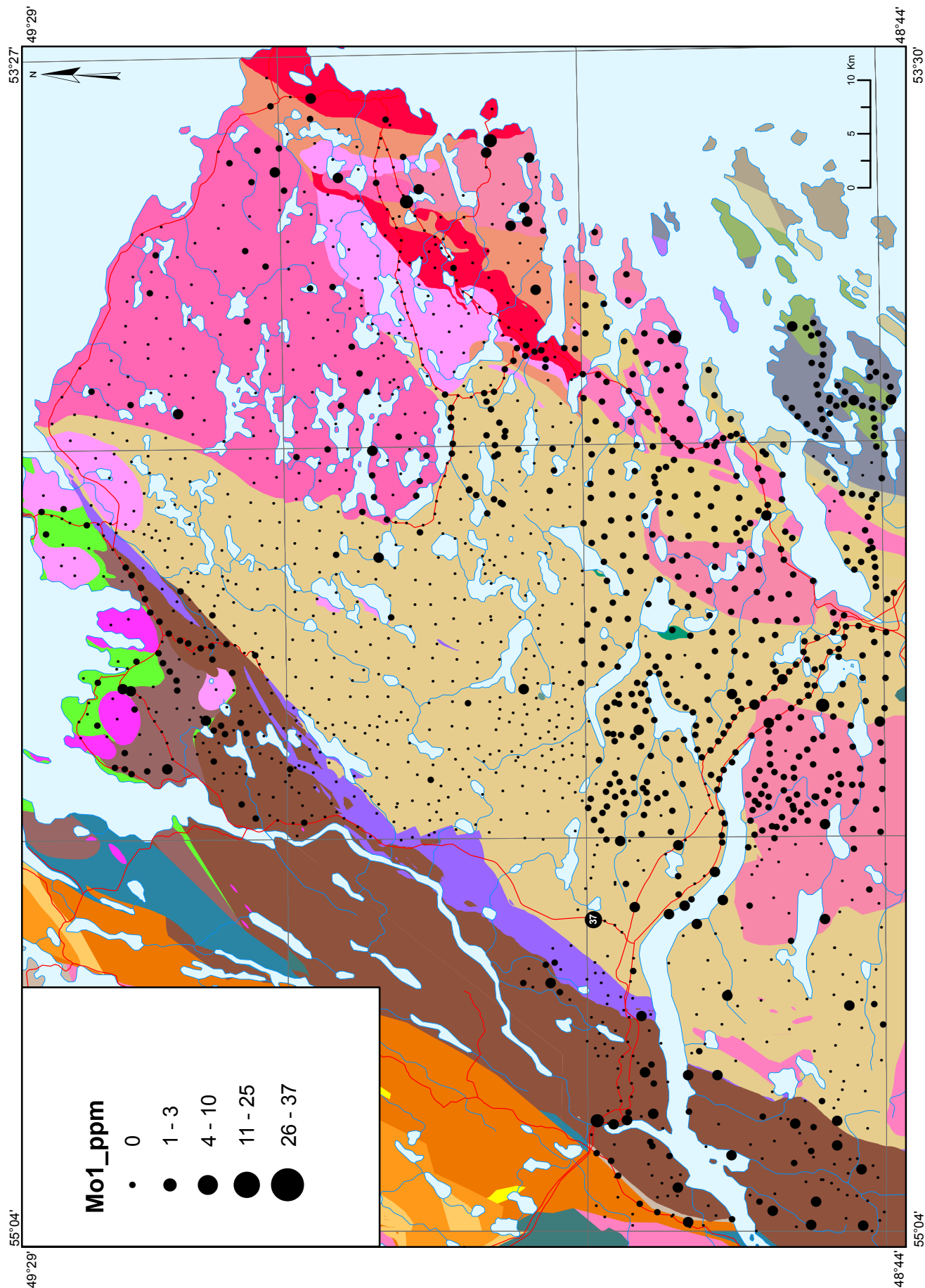
**Figure 40.** *Distribution of magnesium (Mg<sub>2</sub>) in till.*





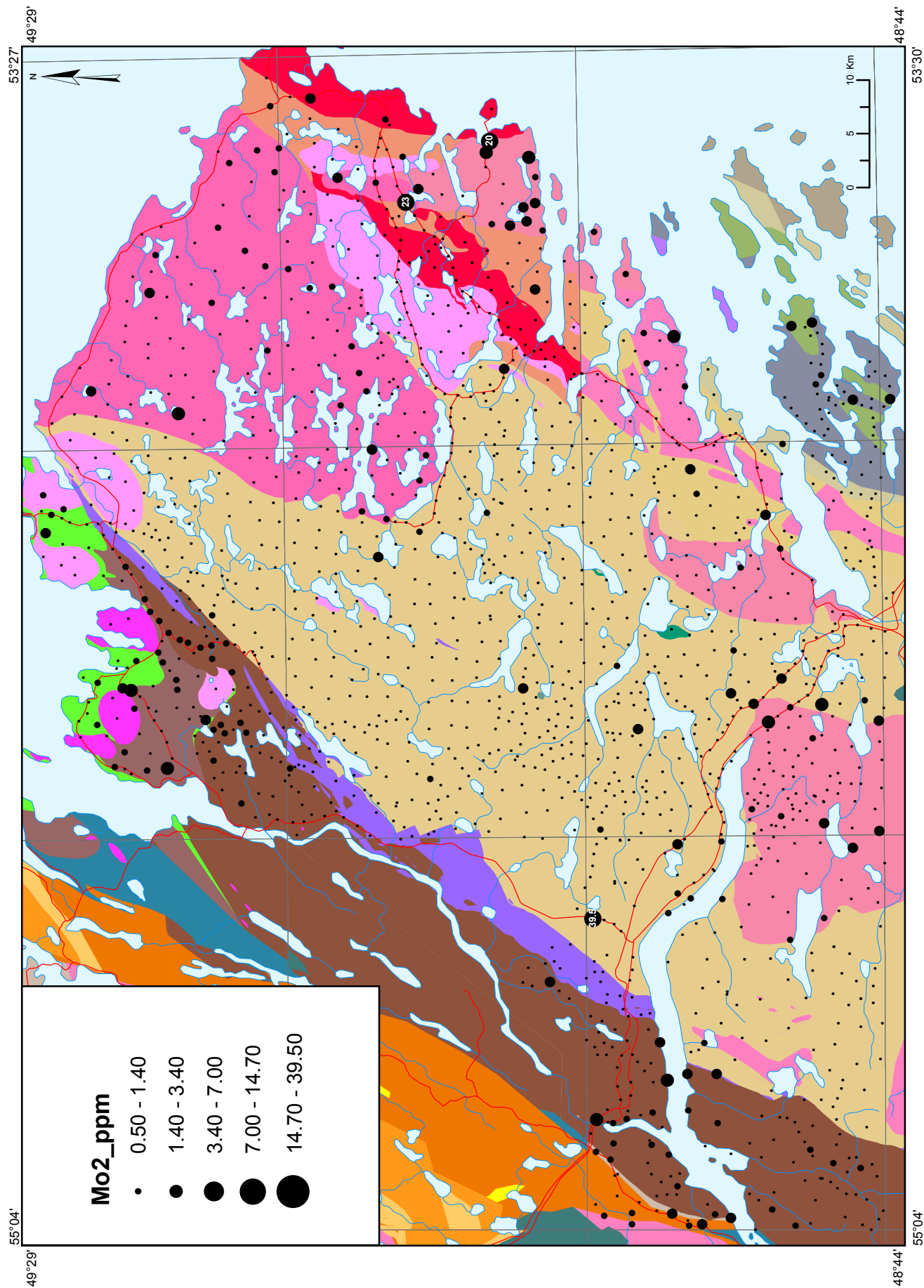
**Figure 41.** *Distribution of manganese (Mn<sub>2</sub>) in till.*





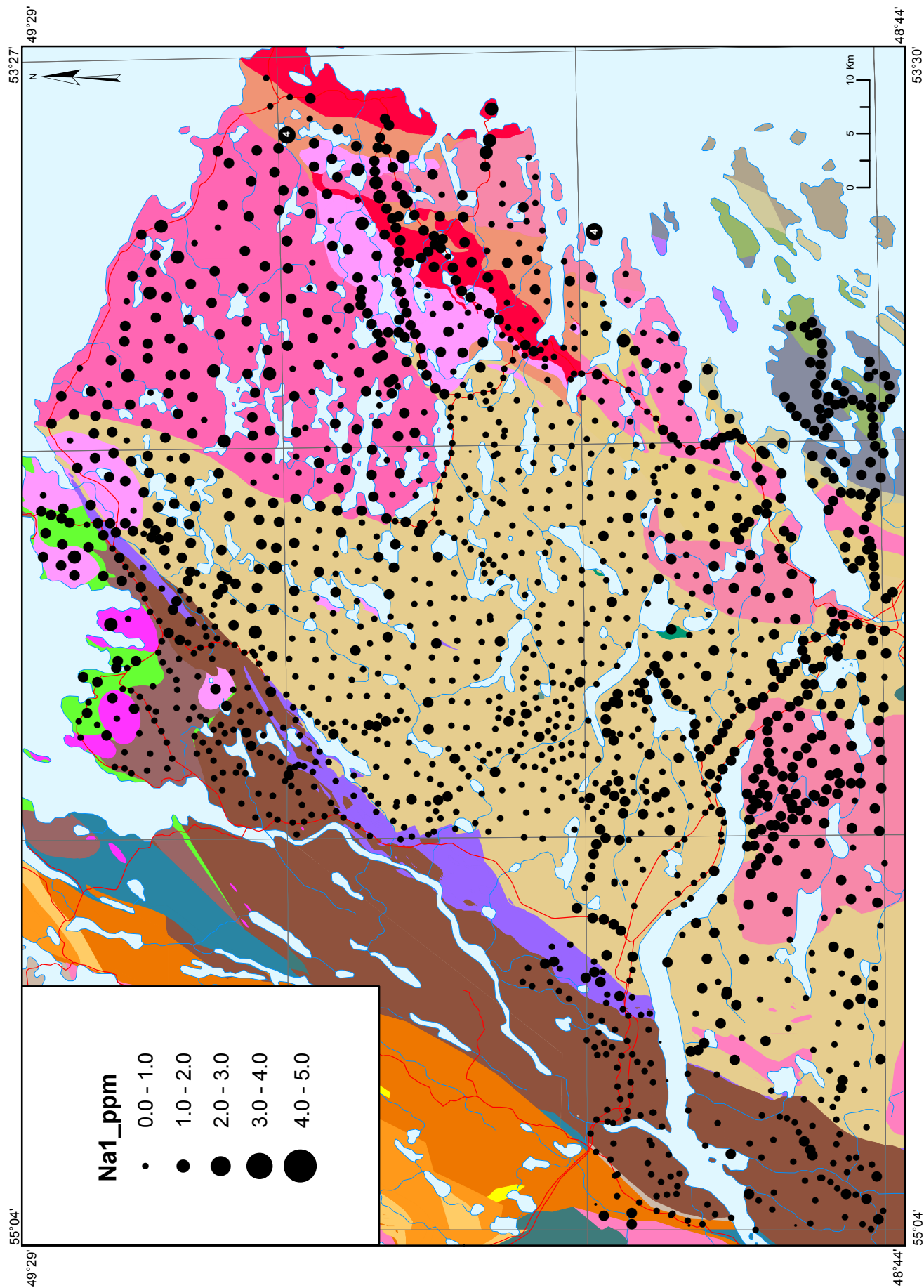
**Figure 42.** *Distribution of molybdenum (Mo1) in till.*





**Figure 43.** *Distribution of molybdenum (Mo2) in till.*



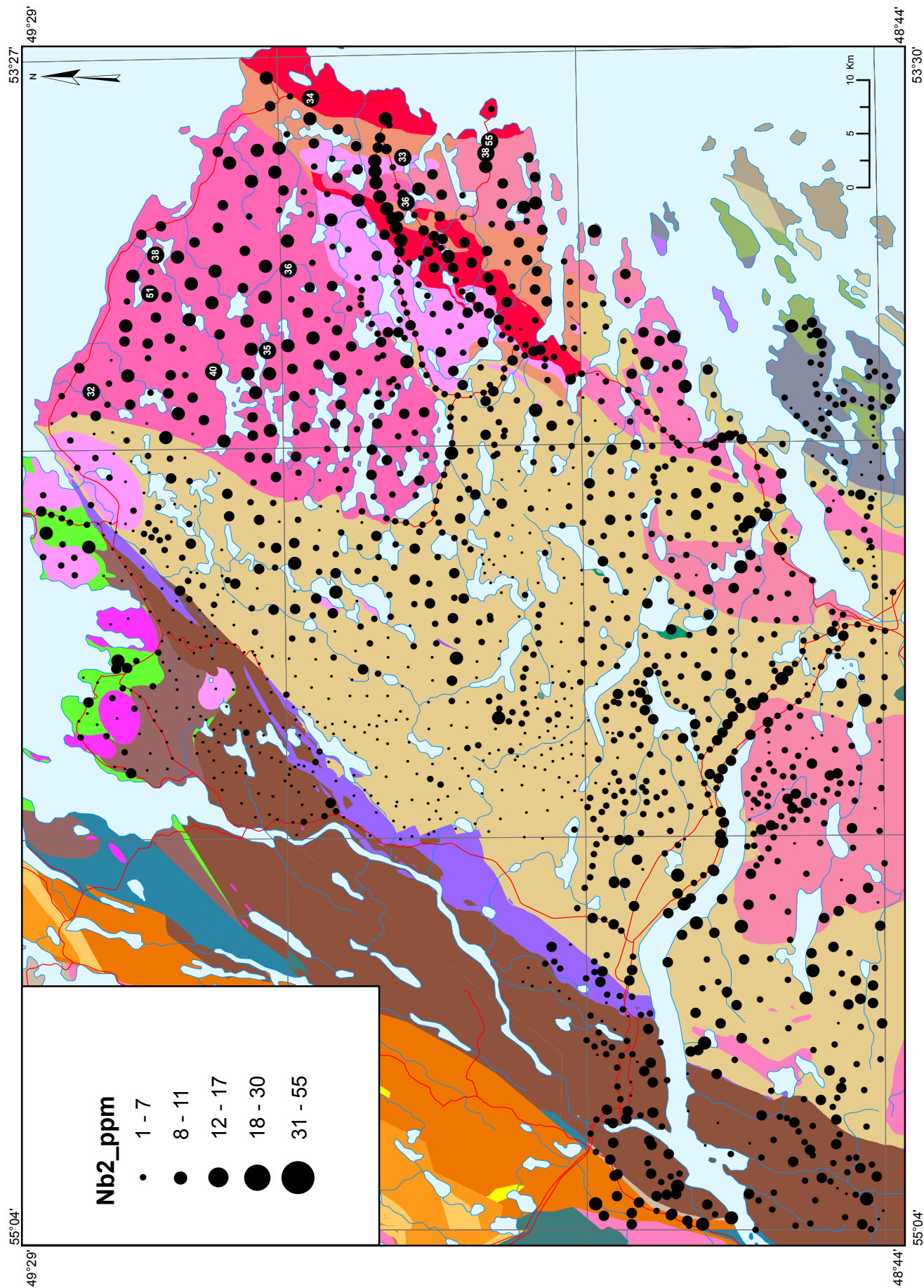


**Figure 44.** *Distribution of sodium (Na1) in till.*



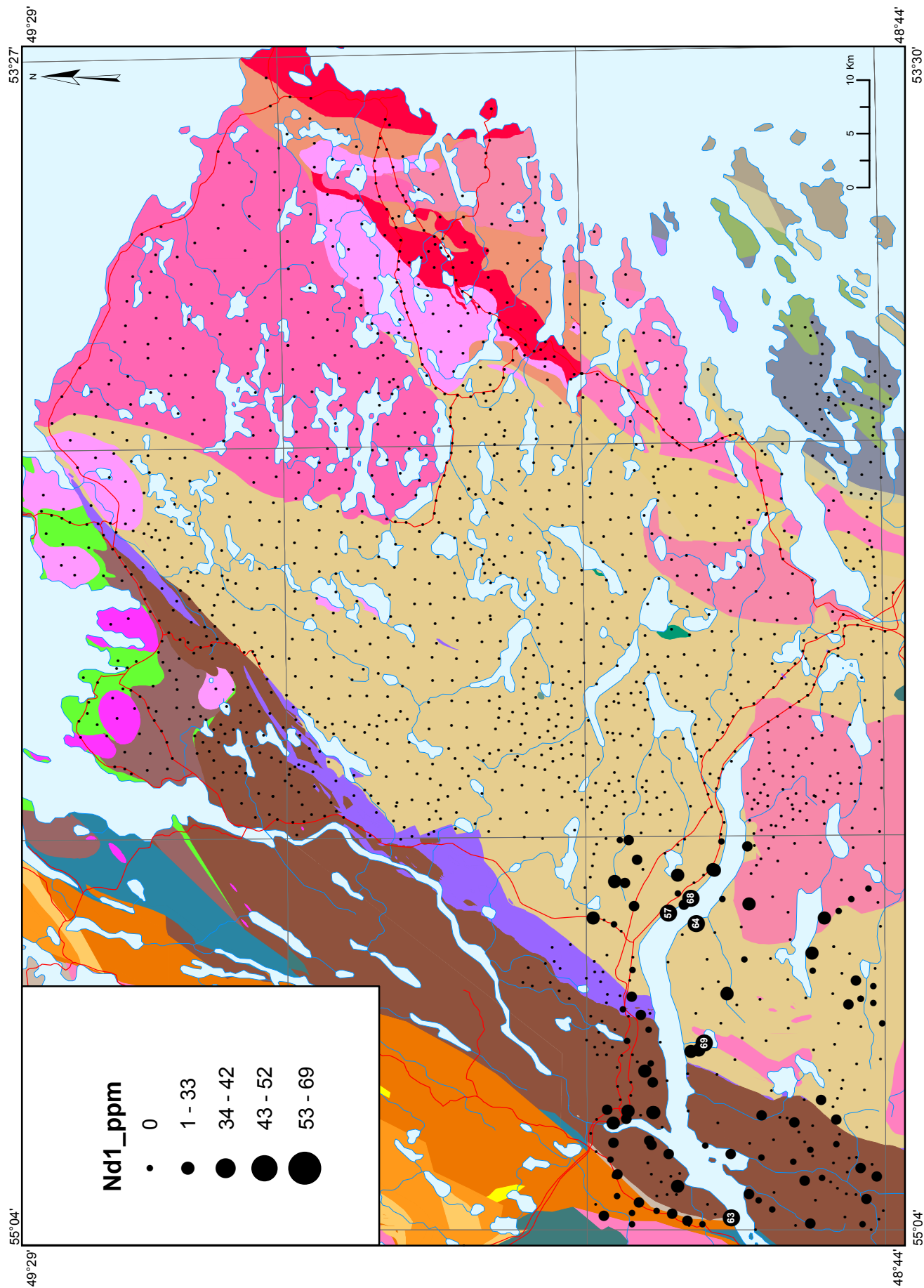






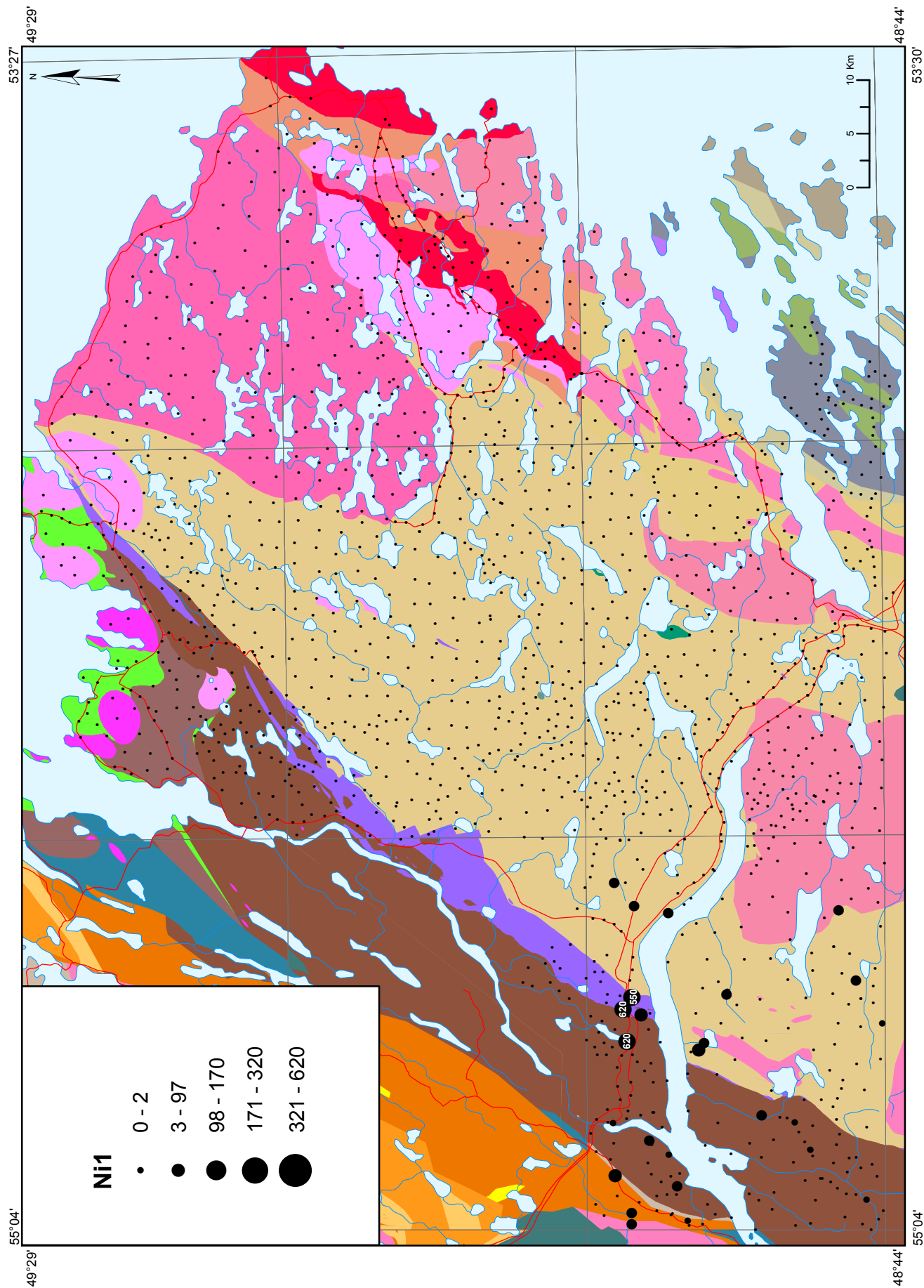
**Figure 46.** *Distribution of niobium (Nb2) in till.*





**Figure 47.** *Distribution of neodymium (Nd1) in till.*





**Figure 48.** *Distribution of nickel (Ni1) in till.*



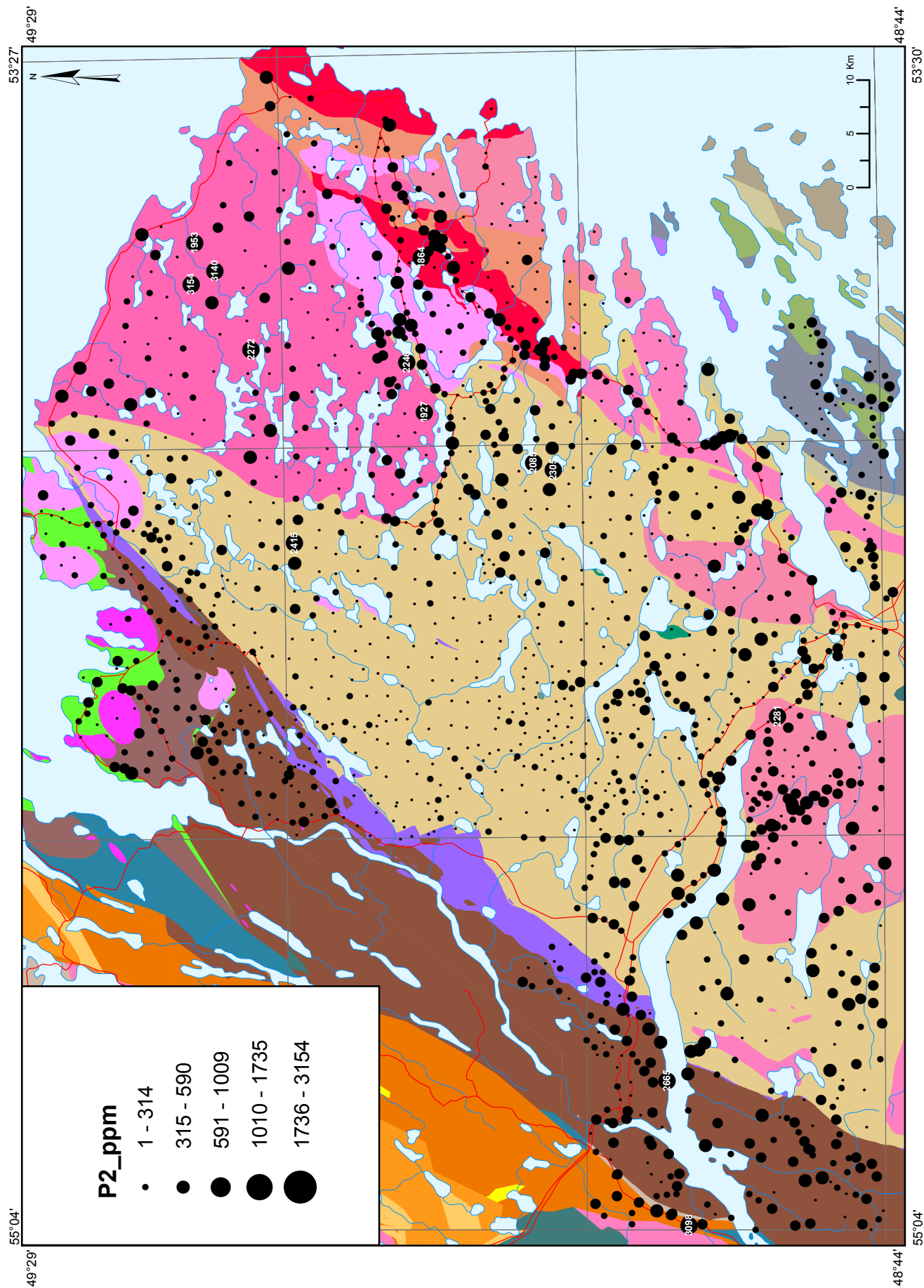


Figure 49. Distribution of phosphorus (P2) in till.



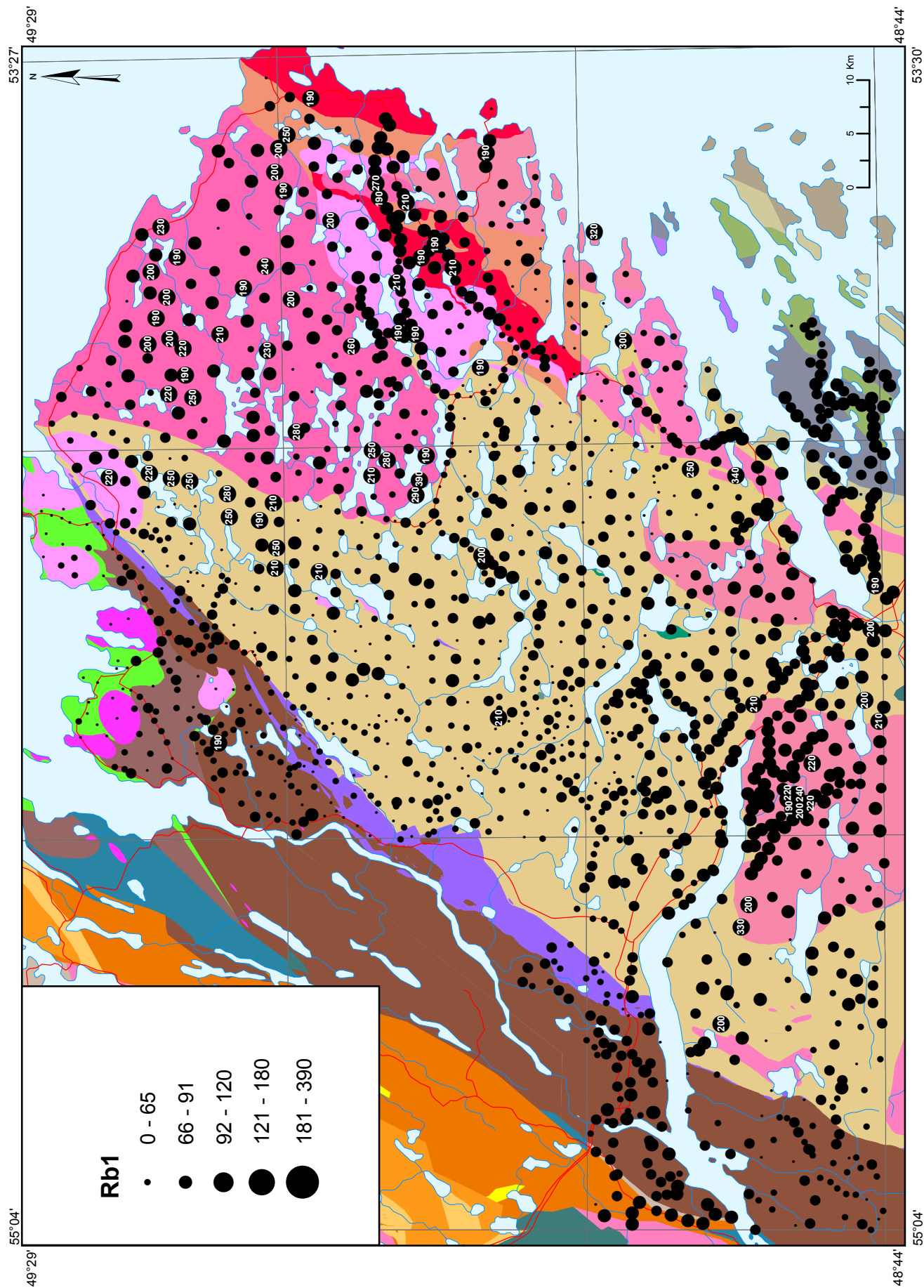
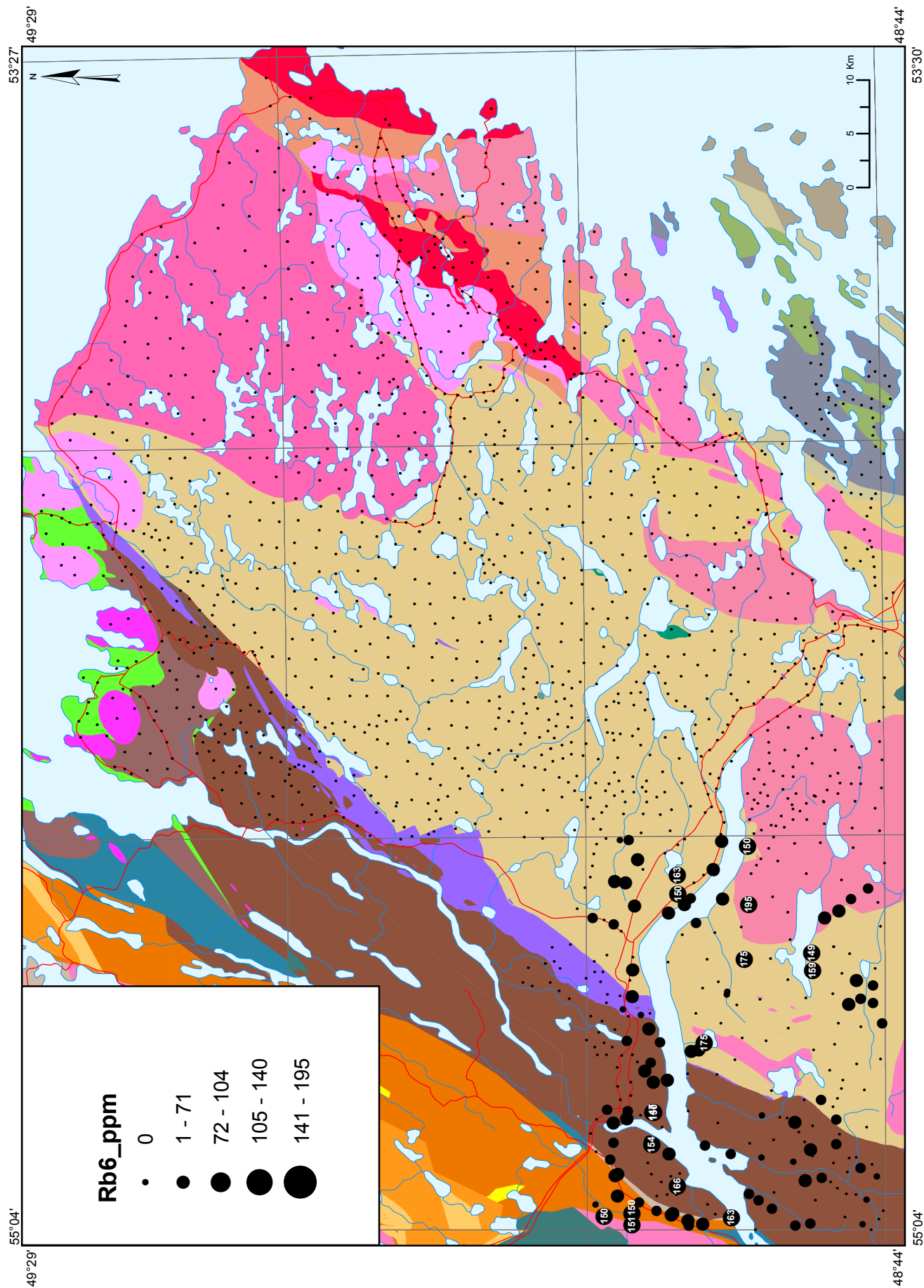


Figure 50. Distribution of rubidium (Rb1) in till.









**Figure 52.** *Distribution of rubidium (Rb6) in till.*



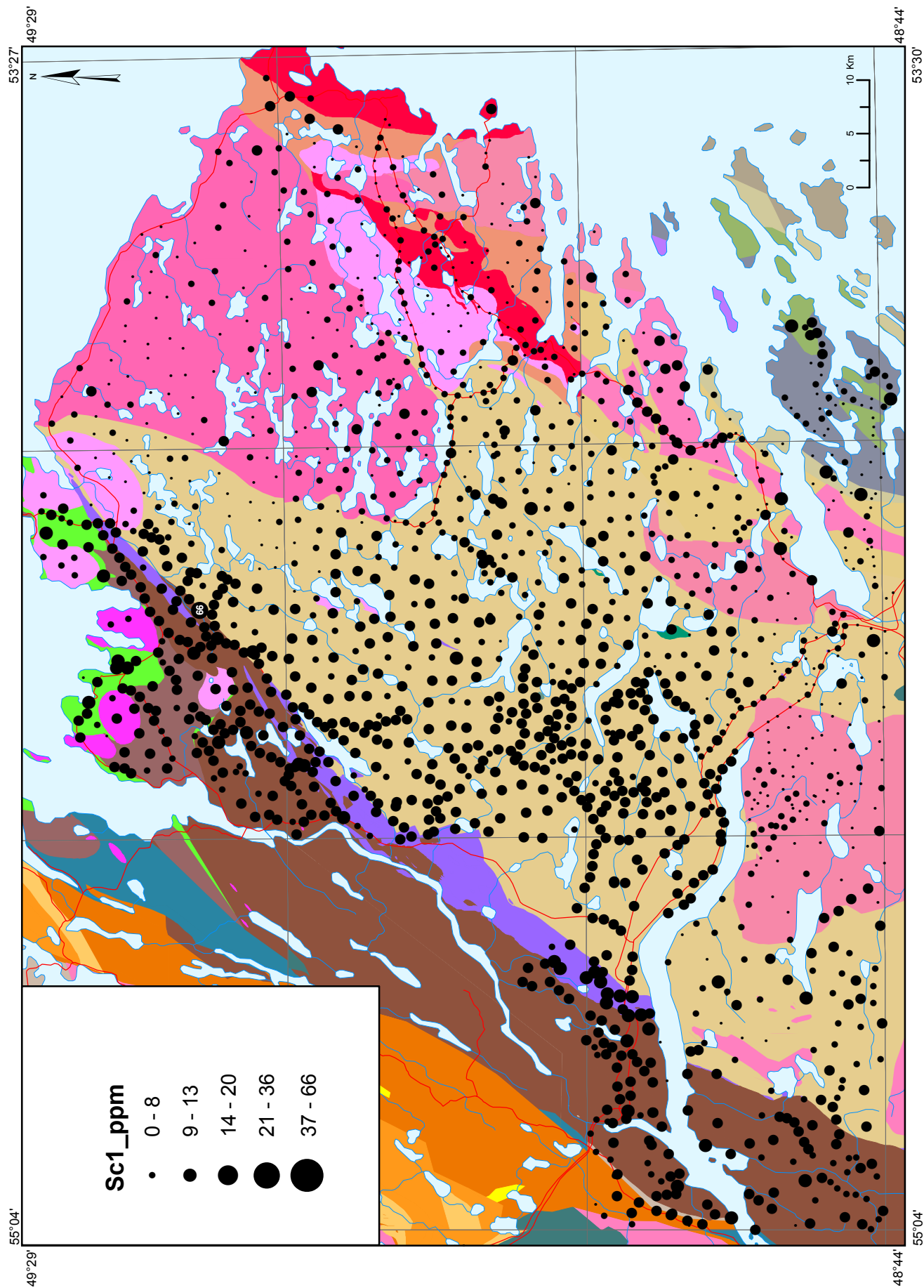
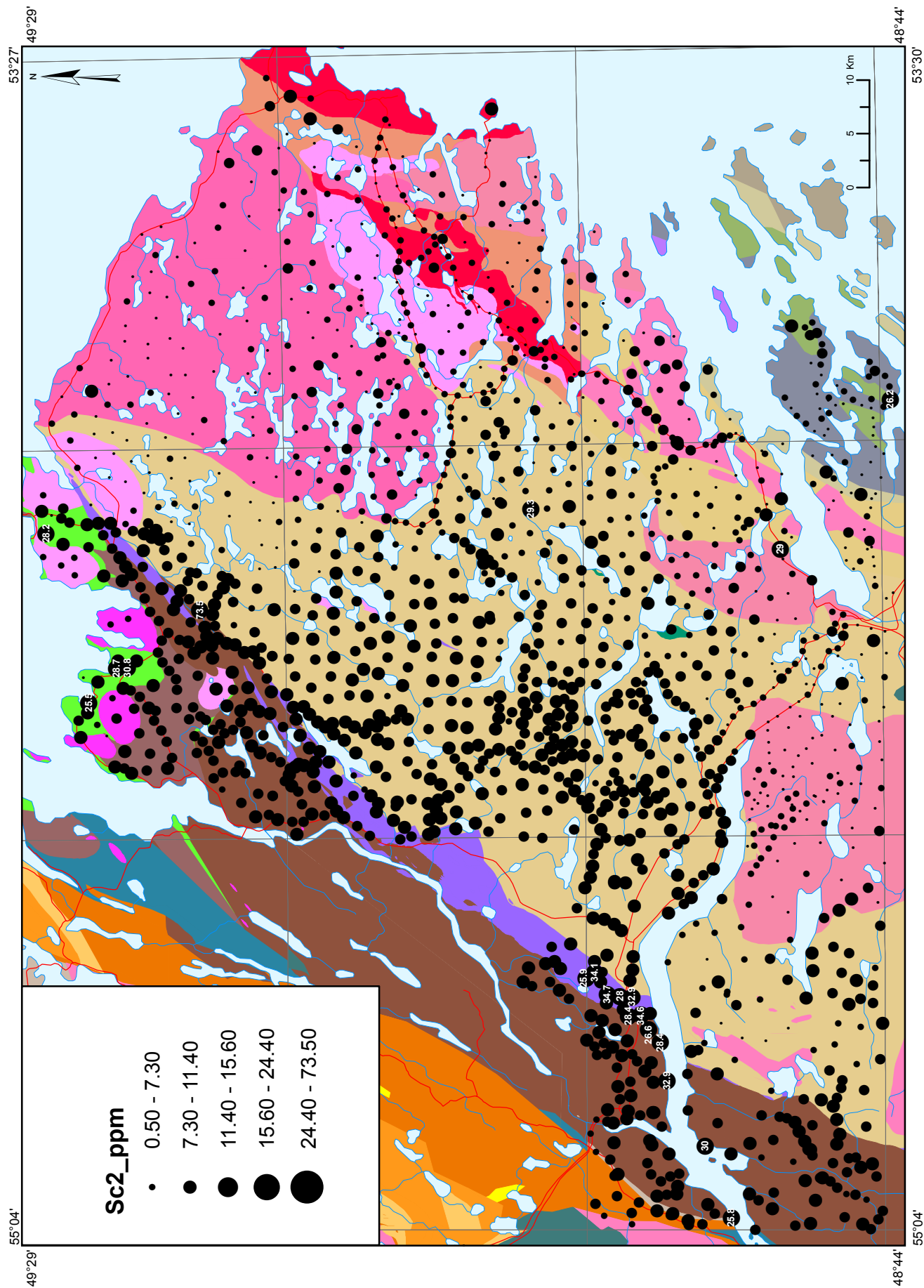


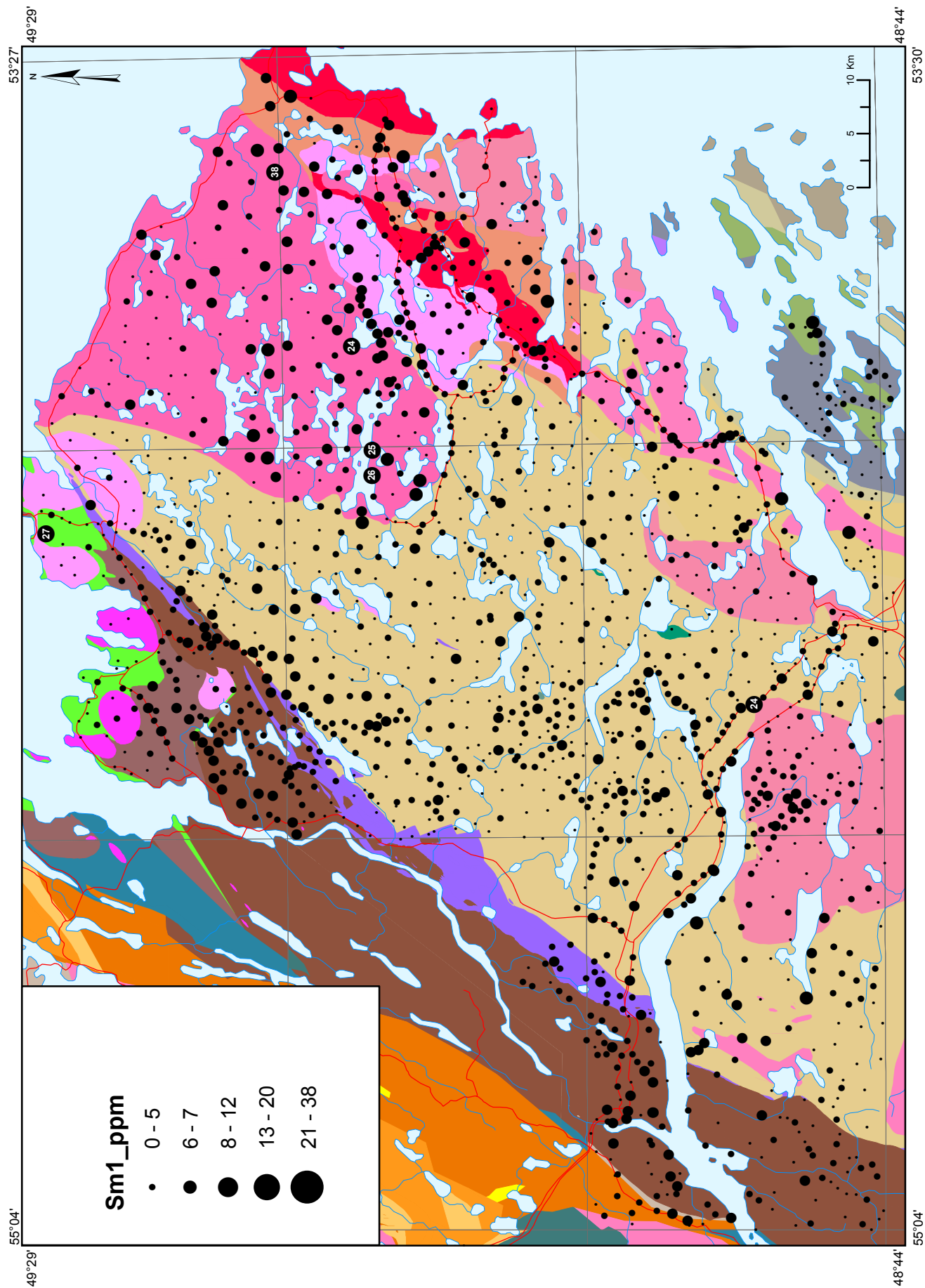
Figure 53. Distribution of scandium (ScI) in till.





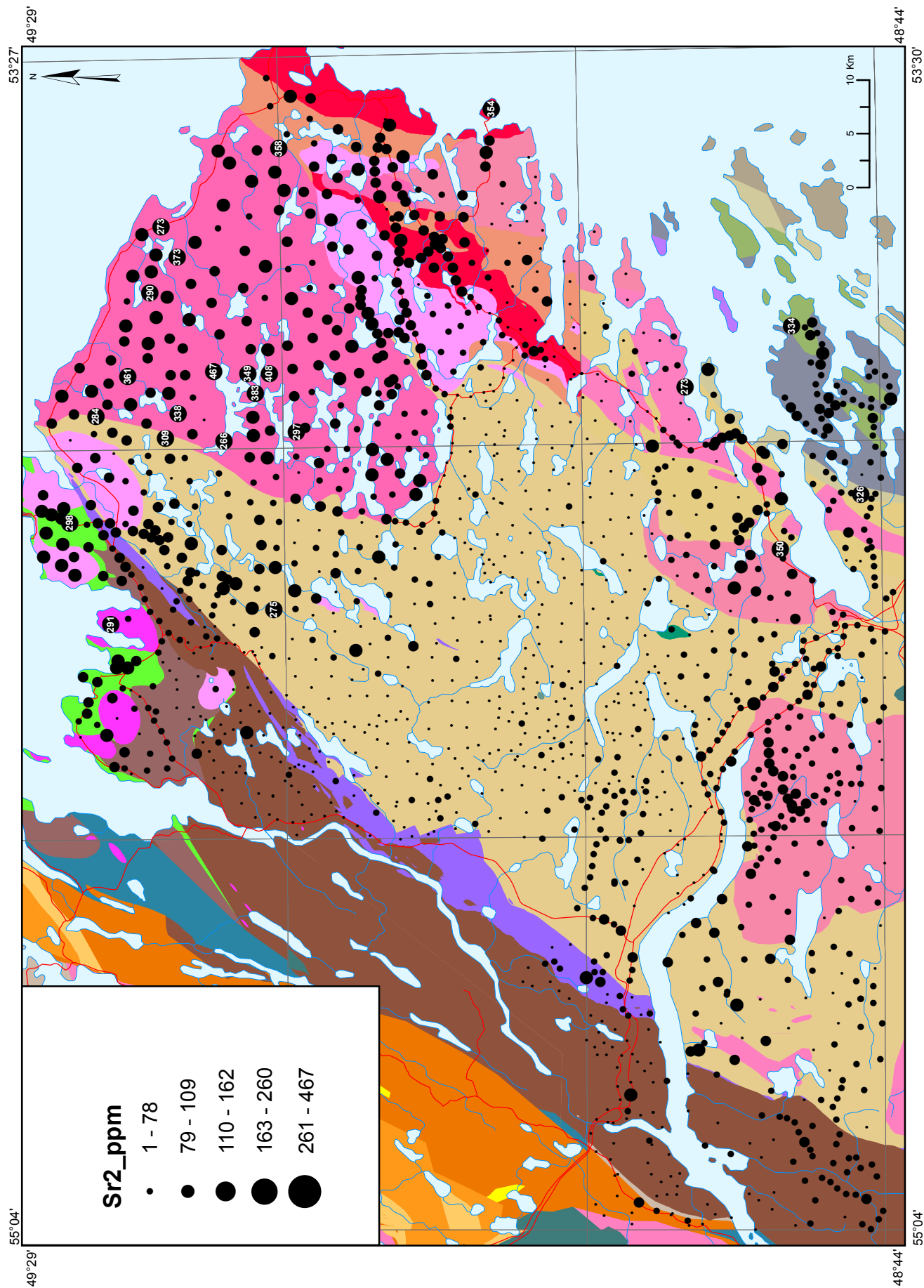
**Figure 54** *Distribution of scandium (Sc2) in till.*





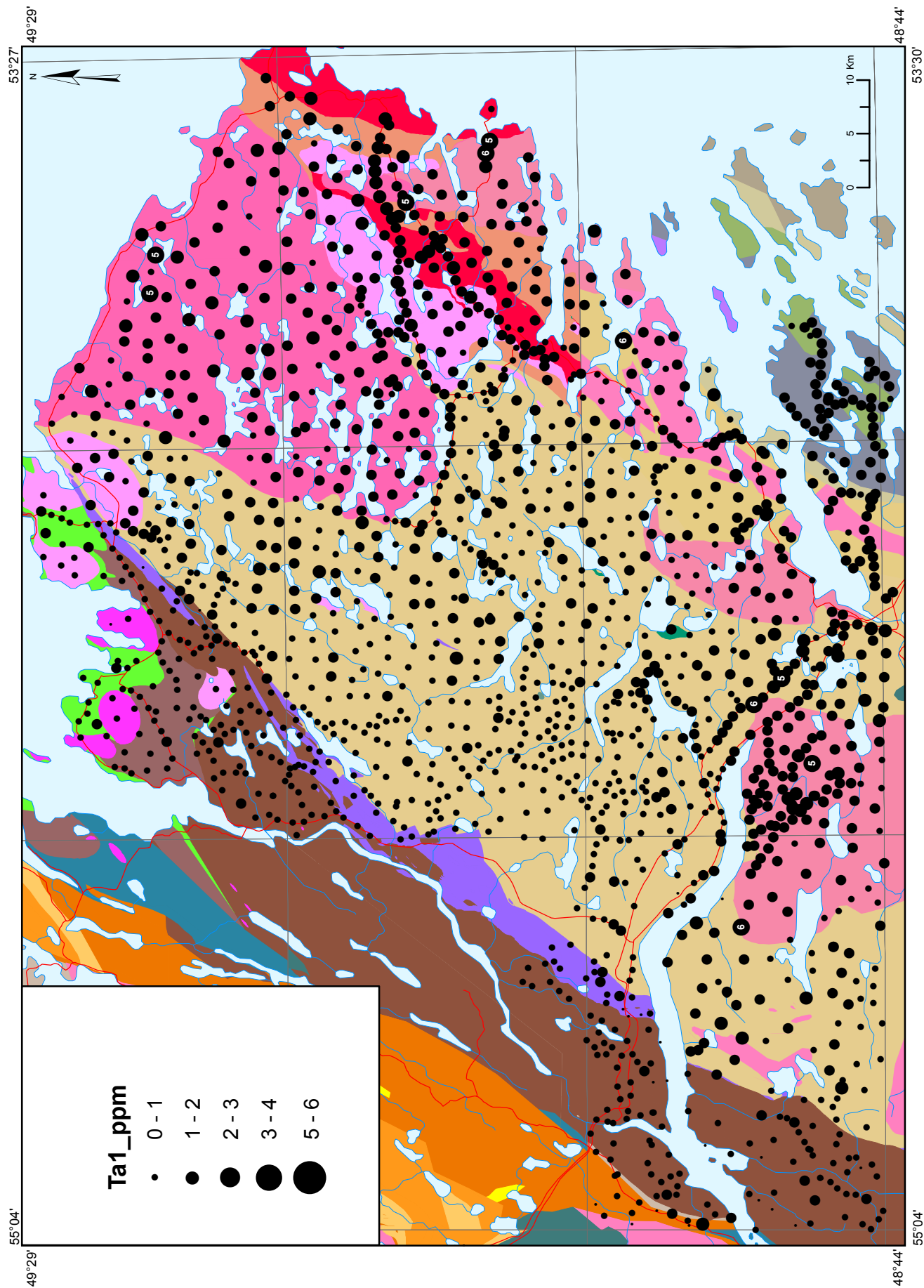
**Figure 55** *Distribution of samarium (SmI) in till.*





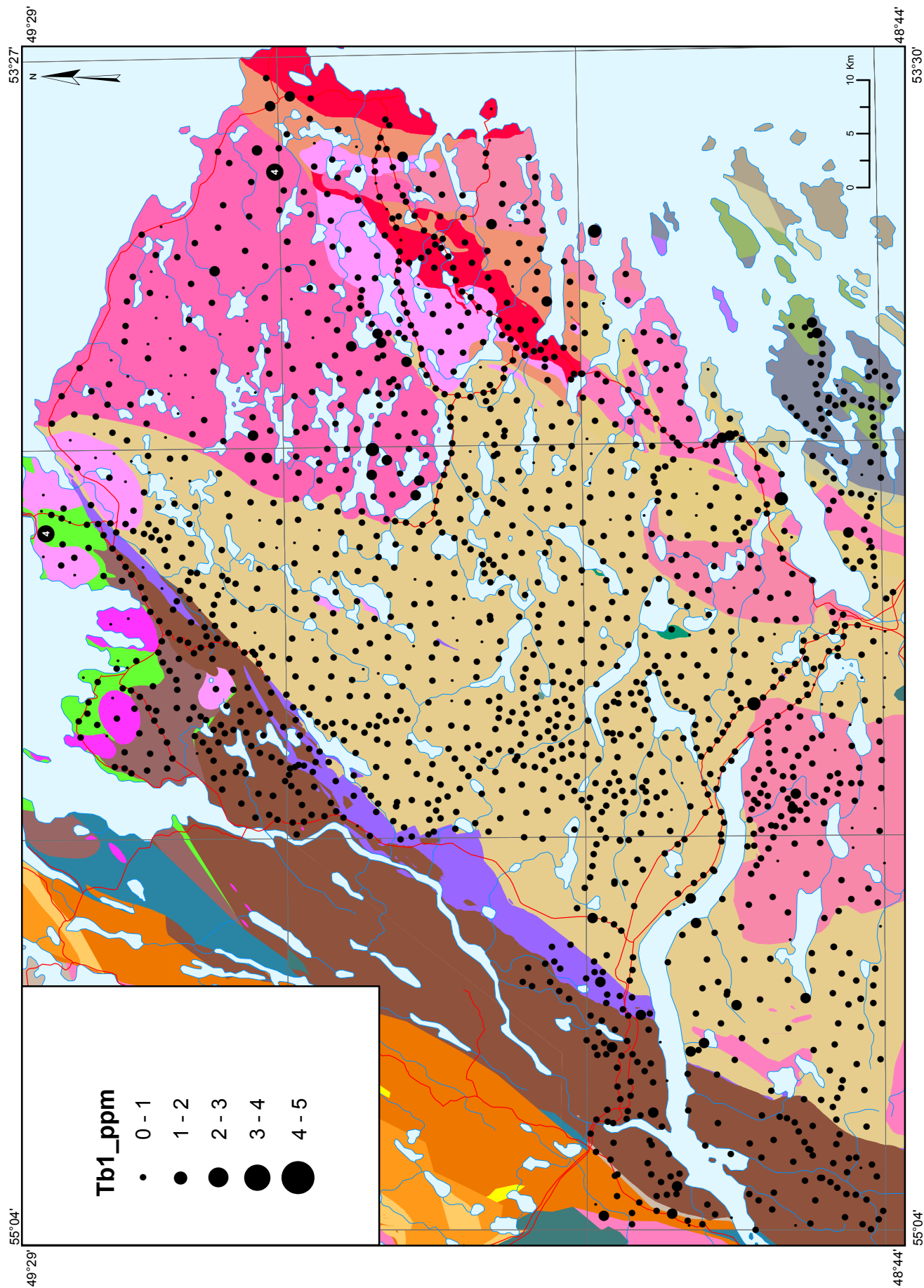
**Figure 56** *Distribution of strontium (Sr2) in till.*





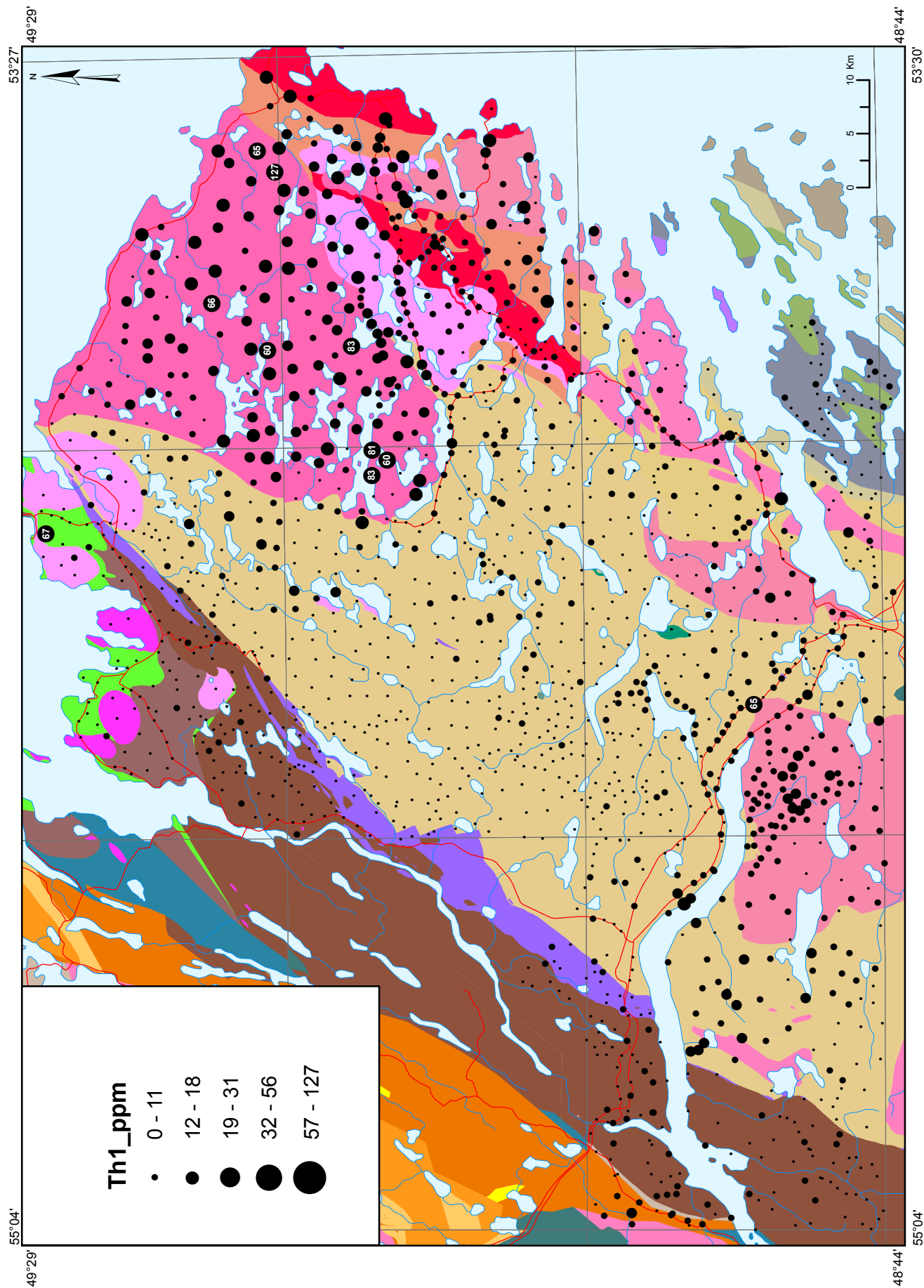
**Figure 57.** *Distribution of tantalum (Ta1) in till.*





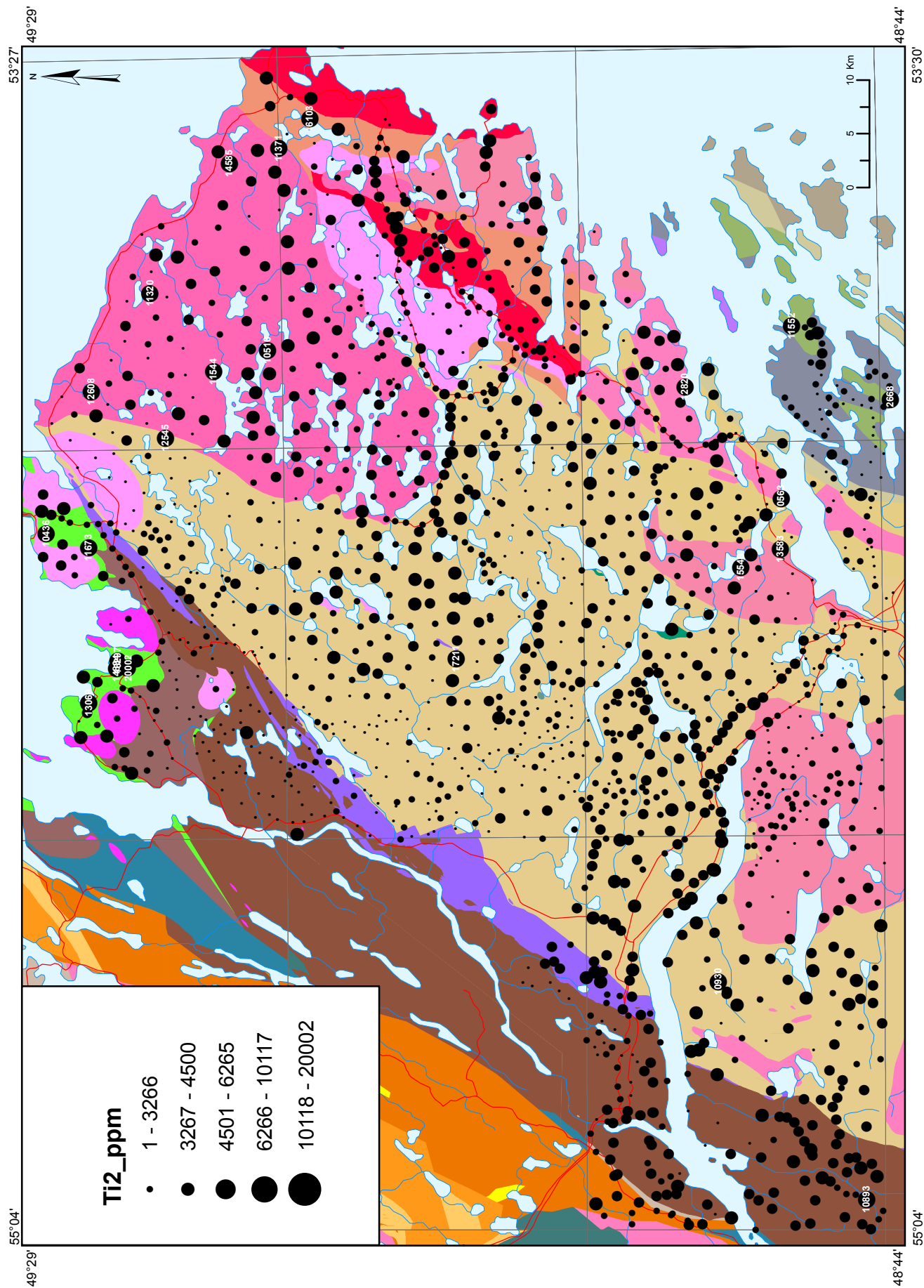
**Figure 58.** *Distribution of terbium (Tb1) in till.*





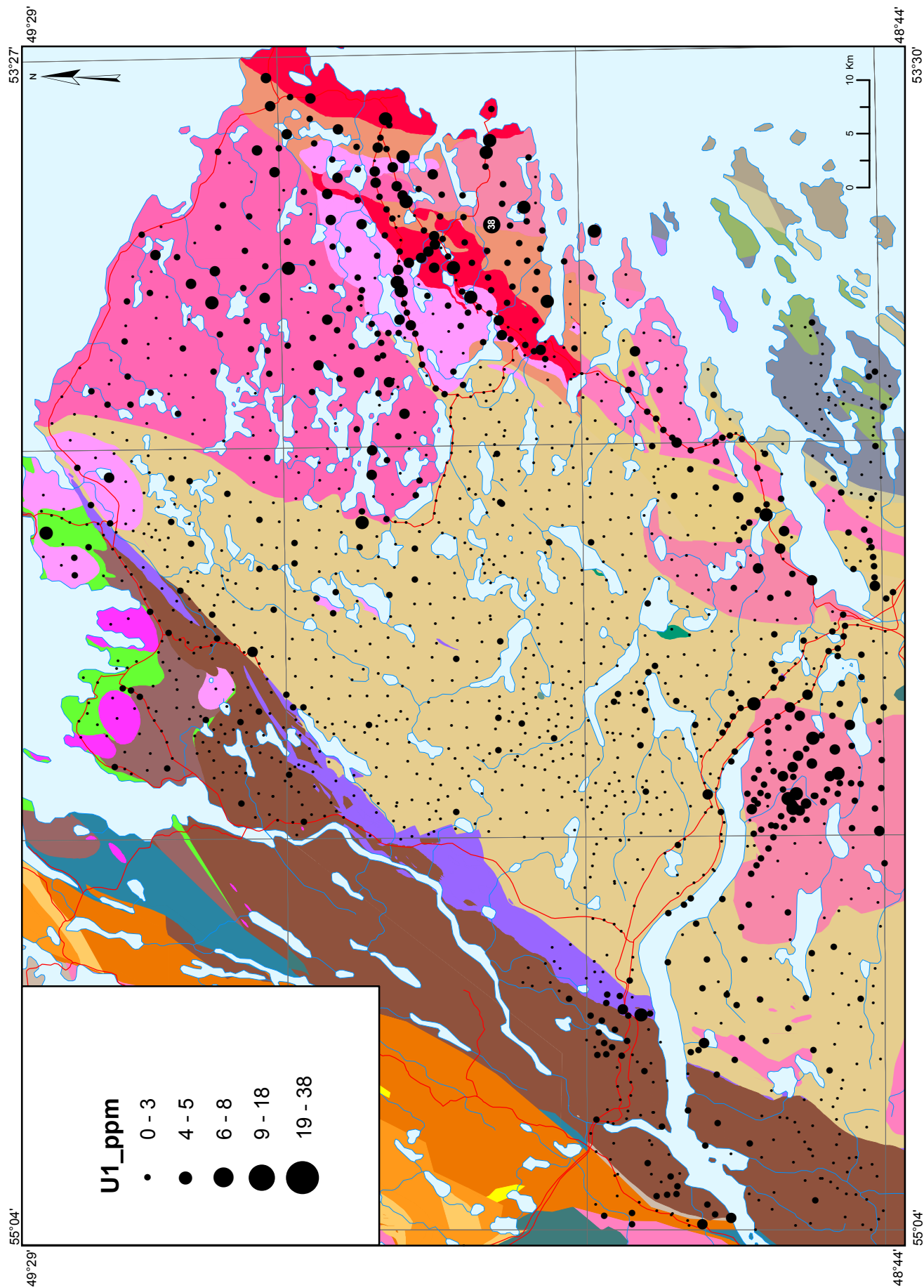
**Figure 59.** Distribution of thorium (Th1) in till.





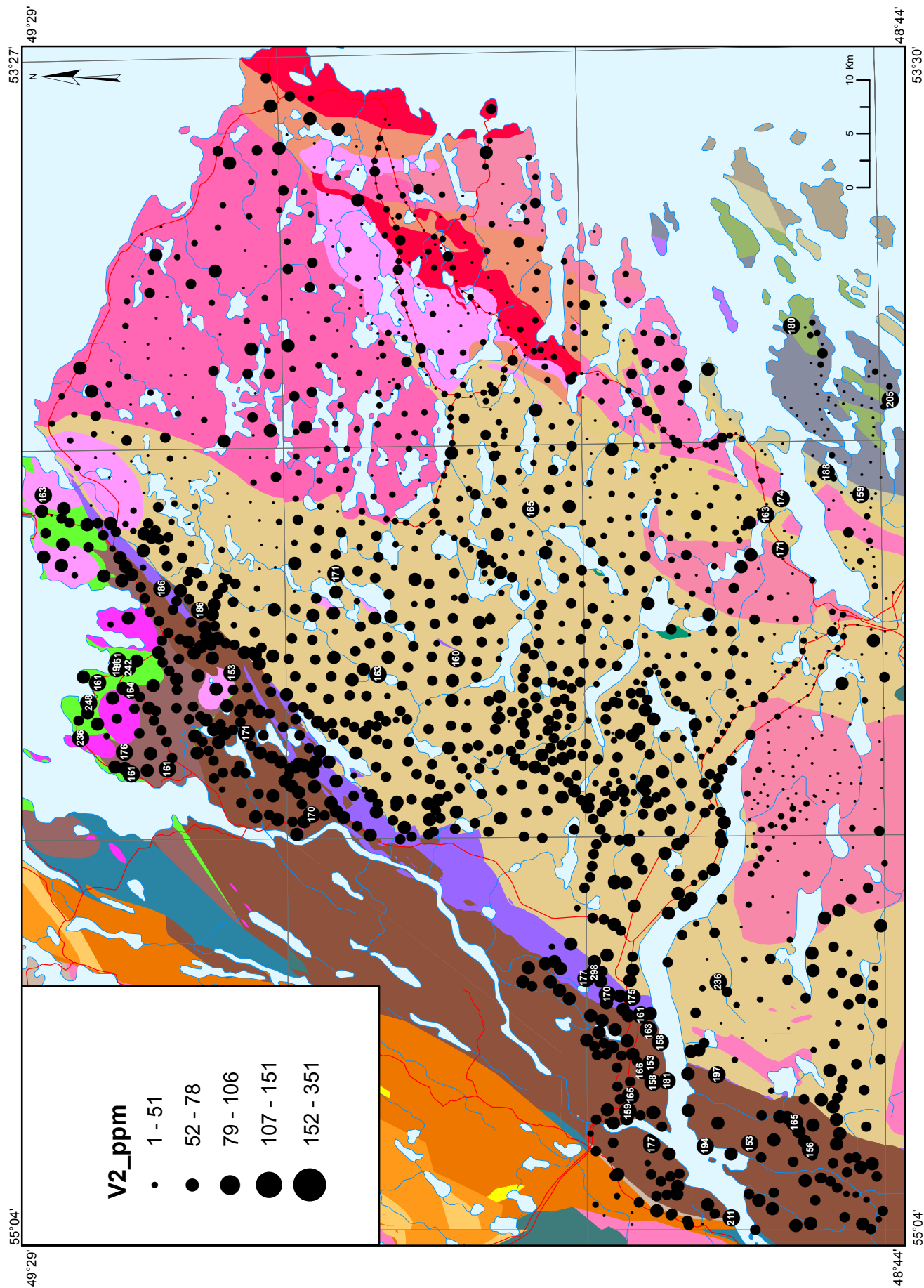
**Figure 60.** *Distribution of titanium (Ti2) in till.*





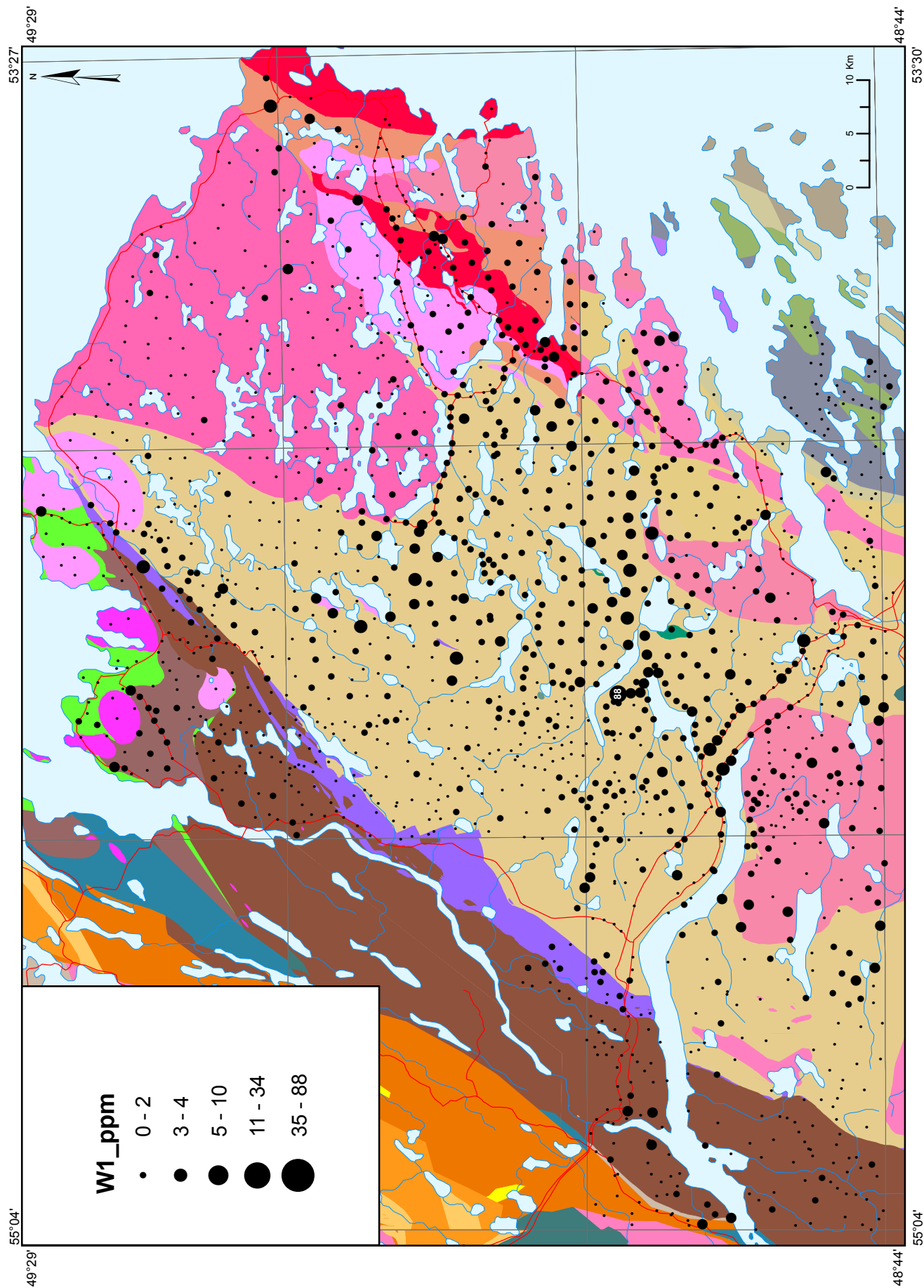
**Figure 61.** *Distribution of uranium (U1) in till.*





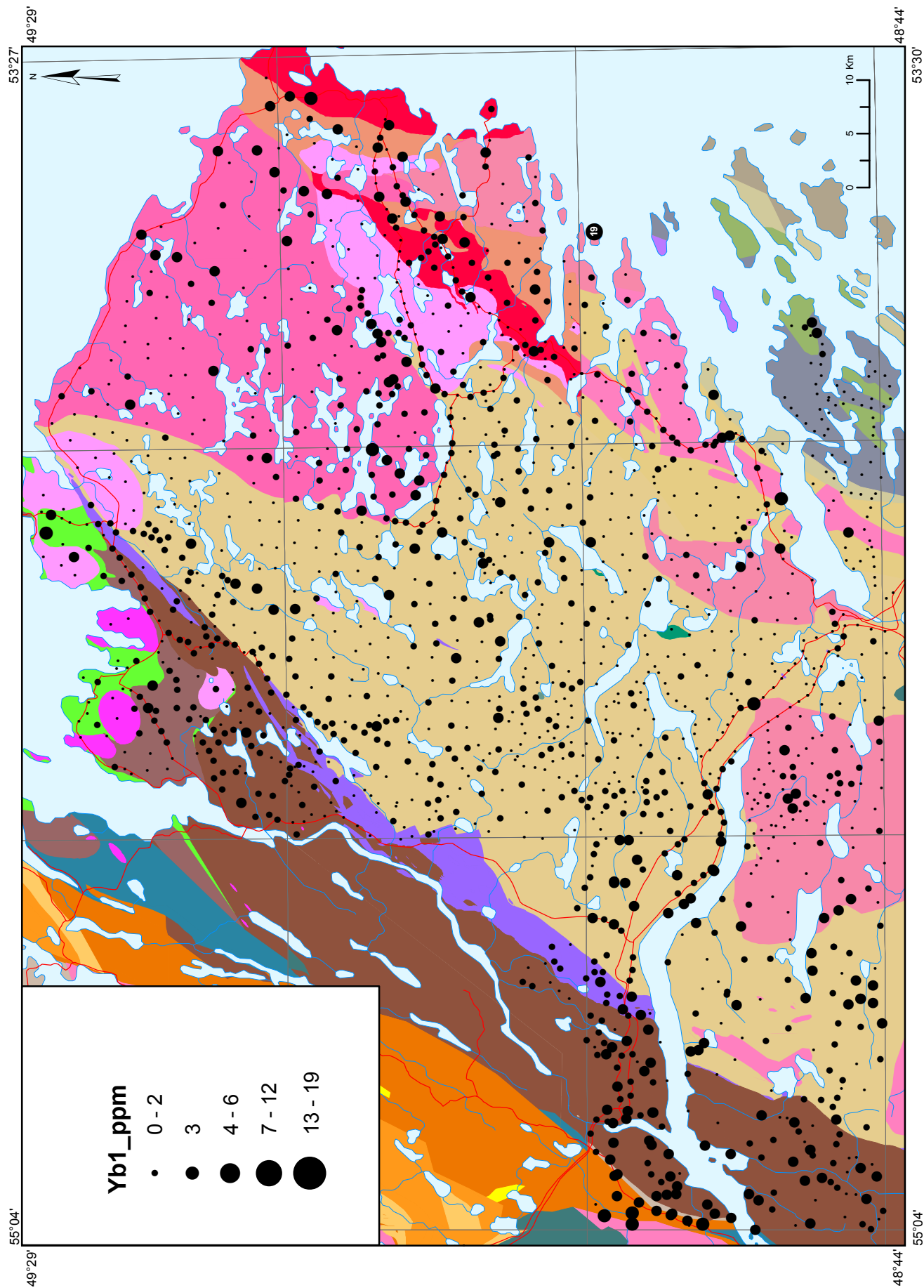
**Figure 62.** Distribution of vanadium (V2) in till.





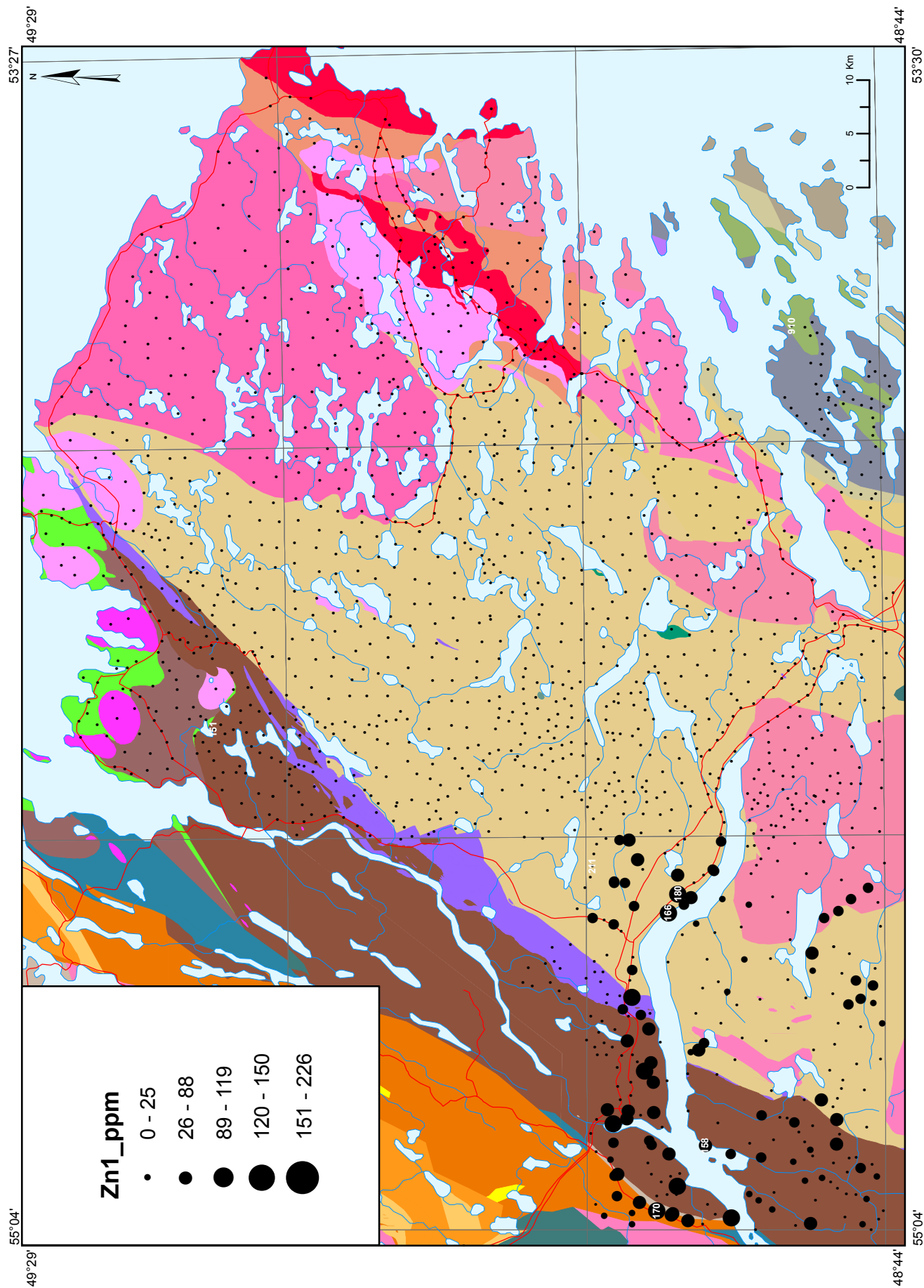
**Figure 63.** *Distribution of tungsten (W1) in till.*





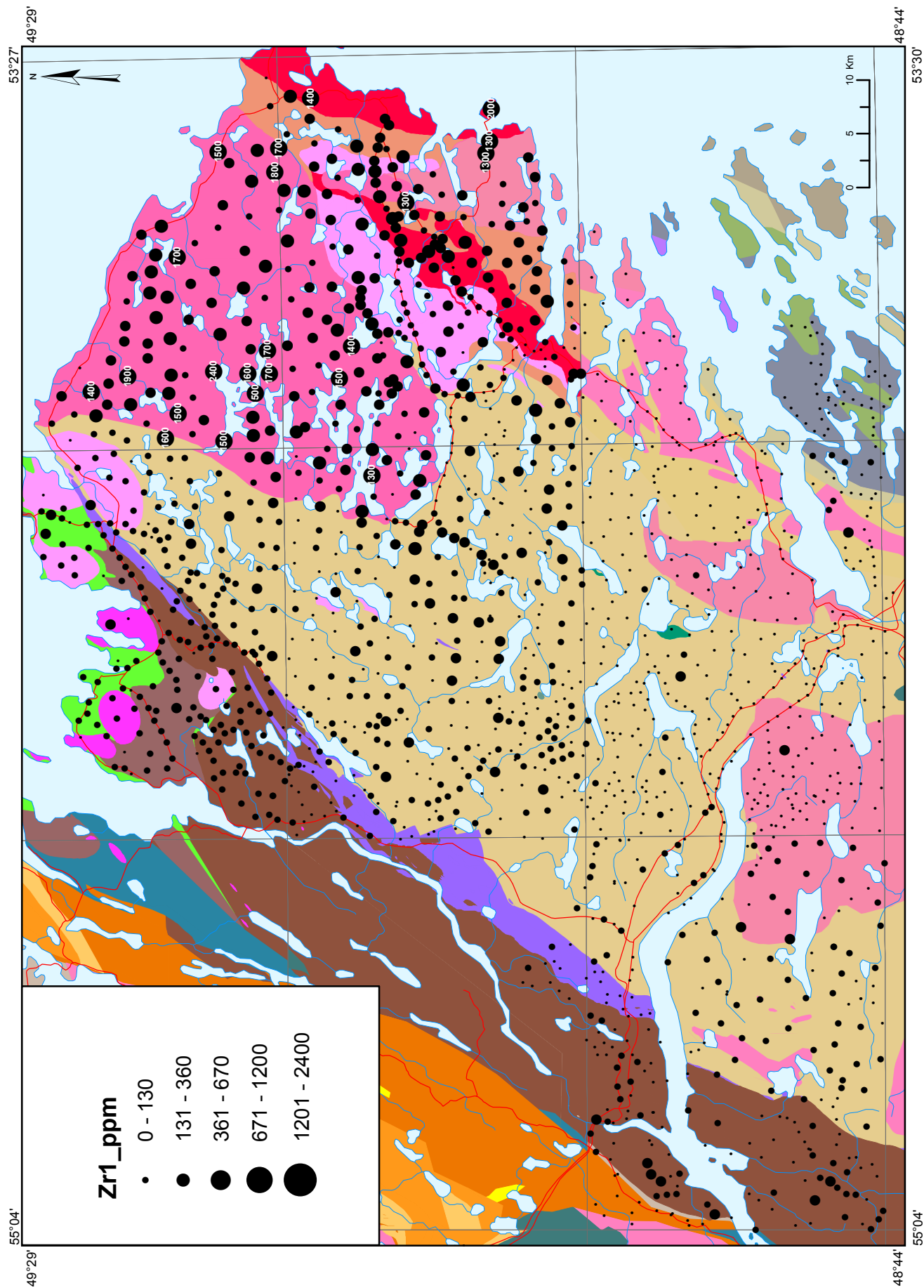
**Figure 64.** Distribution of ytterbium (Yb1) in till.





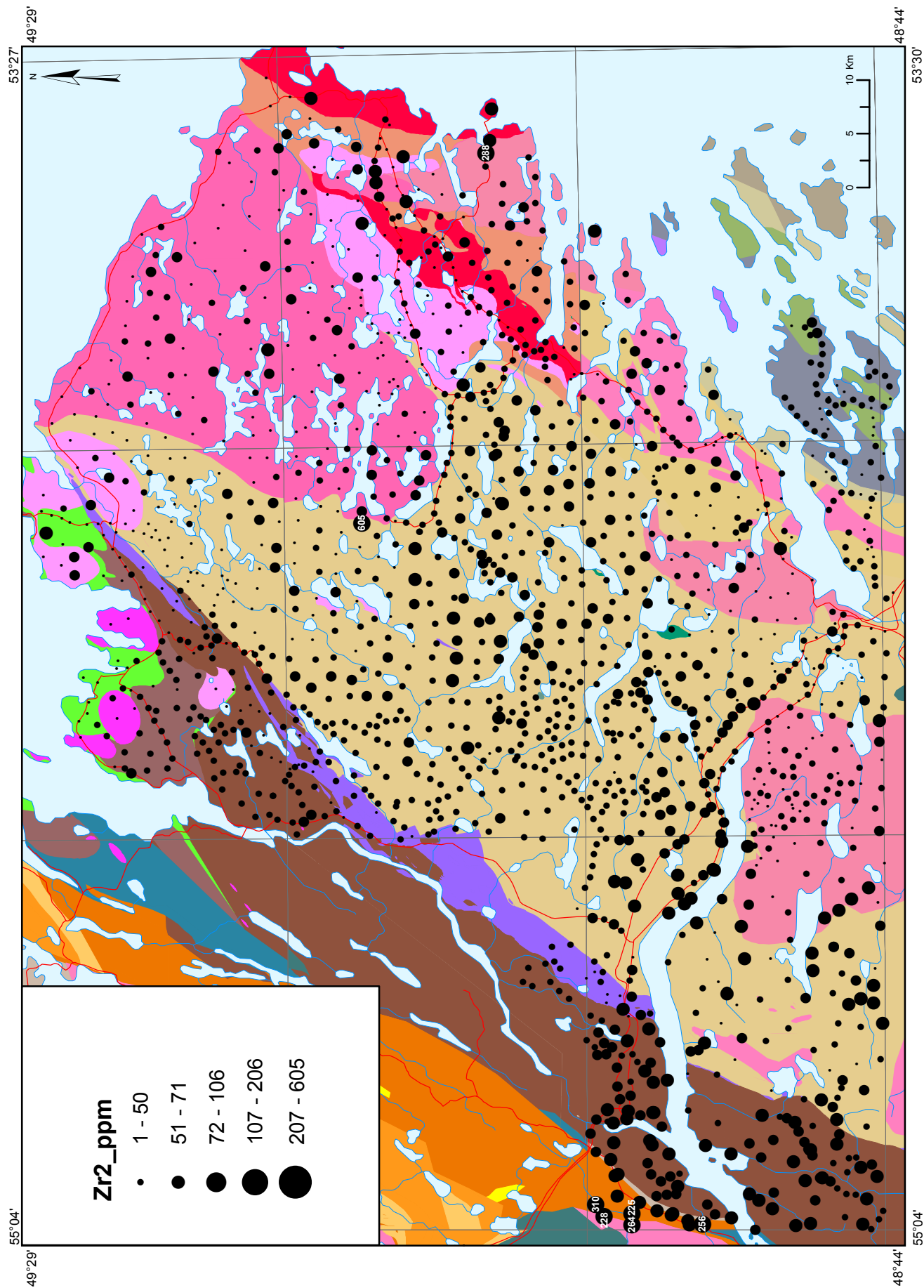
**Figure 65.** Distribution of zinc (Zn1) in till.





**Figure 66.** *Distribution of zirconium (Zr1) in till.*





**Figure 67.** *Distribution of zirconium (Zr2) in till.*