



Natural Resources

Mines

# TILL GEOCHEMISTRY OF THE GANDER LAKE AND GAMBO MAP AREAS (NTS 2D/16 AND 2C/13)



D. Brushett

Open File NFLD/3134

St. John's, Newfoundland  
October, 2011

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*Cover: View looking northeast from the Butts Pond area, west of Gambo.*



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## ABSTRACT

*This report provides the results from the first year of a multi-year (commenced in 2009) till geochemistry and surficial mapping program in northeast Newfoundland, which focused on areas north and east of Gander Lake (NTS map areas 2D/16 and 2C/13). 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 496 till samples were collected. Geochemical data of 53 elements, from BC- or C-horizon till samples, is 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.*

*The study area is dominated by till, of varying thicknesses, and organic deposits. Inland, the till cover is extensive and it conceals much of the bedrock, creating a gently undulating topography. Toward the coast, the topography is rugged and till cover is generally thin (or absent) and exposed bedrock prominent. Sediment in the Butts Pond area include glaciofluvial and hummocky deposits, esker-like ridges, and a raised marine delta that formed during deglaciation, as the ice was retreating toward Gander Lake.*

*The data from ice-flow mapping showed two regionally extensive events. The earliest ice flow was eastward throughout the field area, likely from a source north of Red Indian Lake. The most recent regional flow was north-northeastward and was only observed in the western part of the study area, the remainder being covered by stagnant ice.*

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

## INTRODUCTION

This open file report describes the till geochemistry of the Gander Lake–Gambo (NTS map areas 2D/16 and 2C/13) area, and supplements the Current Research report of Brushett (2010), a shortened version of this report. This open file report is the first from a multi-year till geochemistry and surficial geology mapping program in northeast Newfoundland that commenced in 2009. Previous mineral exploration in this area focused on gold and base metals in rocks of the Gander River complex, and more recent mineral potential identified in areas underlain by quartz-rich sandstone and quartz breccias of the Gander Group (Evans, 1993). Only limited surficial mapping has been completed in the field area – in the Gambo area (part of NTS map area 2D/16) by Vanderveer and Taylor (1987) and McCuaig (2006), and in the Weir’s Pond area (parts of NTS map areas 2D/16 and 2E/1) by Butler *et al.* (1984).

Given the presence of mineralization and limited surficial mapping, the objective of this field program was to further understand the region’s Quaternary geology, as it relates to mineral exploration, and provide a basis for the sound evaluation of the geochemical data; it will identify suitable sampling media for further geochemical exploration, especially in the more inaccessible and drift-covered areas that are common throughout this region.

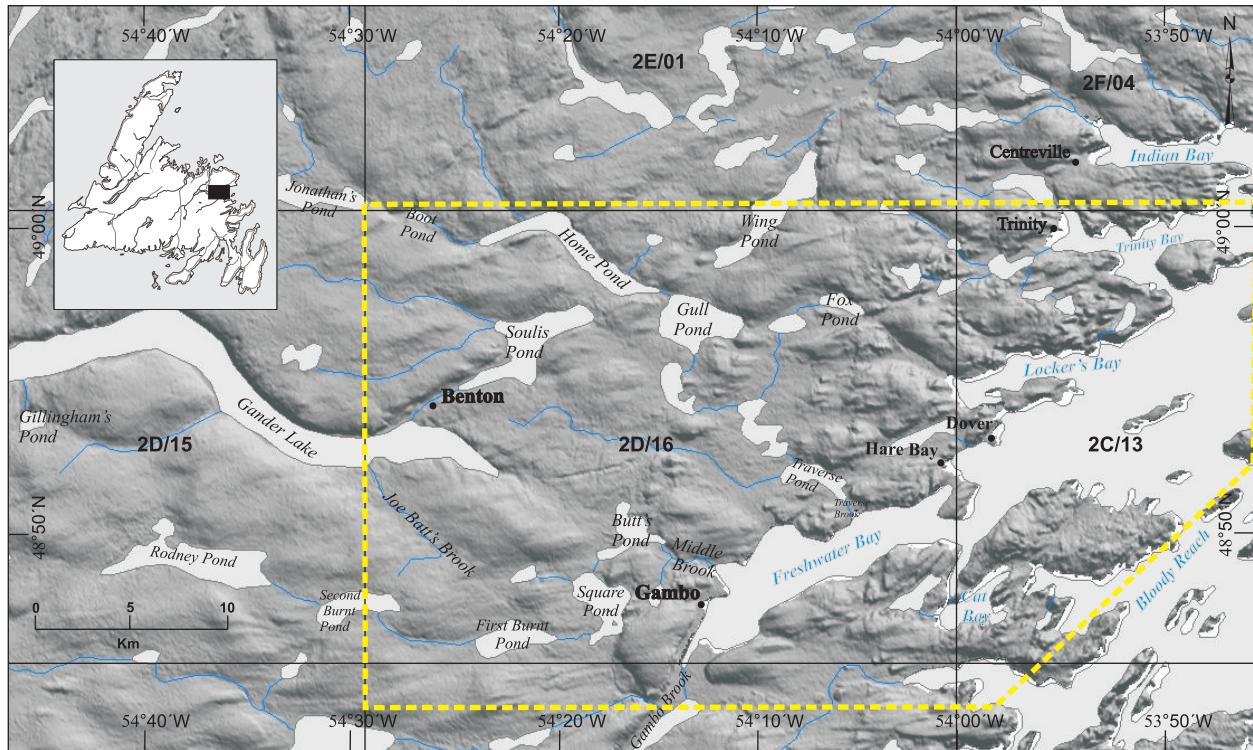
The results of this project will supplement those from similar projects in surrounding areas, including the Bonavista Peninsula (Batterson and Taylor, 2001), Grand Falls–Mount Peyton area (Batterson *et al.*, 1998), Hodges Hill area (Liverman *et al.*, 2000), and Gander area (Batterson and Vatcher, 1991).

## LOCATION, ACCESS AND PHYSIOGRAPHY

The study area is in northeastern Newfoundland and within NTS map areas 2D/16 and 2C/13, an area of approximately 1260 km<sup>2</sup> lying between 53°42' and 54°31'W and 48°47' and 49°07'N. It extends from the community of Benton in the southwest to Centreville in the northeast (Figure 1). Access to most of the field area is *via* paved roads (*e.g.*, Trans Canada Highway (TCH) and Route 320 (Gambo to Wesleyville)) or unpaved logging roads. ATVs were used along approved trails and the old railway bed; remote areas were accessed by helicopter.

The topography is gently undulating, and glacial cover varies in both thickness and areal distribution. Gander Lake, the dominant feature, is a long, narrow (40 km long 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).

North of the Gander Lake basin, the topography is typically flat and featureless. Surficial cover is thin, particularly along the TCH where bedrock is commonly exposed. The area south of the Gander Lake basin is dominated by a hilly topography and thick sediment cover, hummocky terrain, boulder fields and rare bedrock outcrops. The topography becomes more rugged toward the coast where sediment cover generally thins and bedrock is prominent.

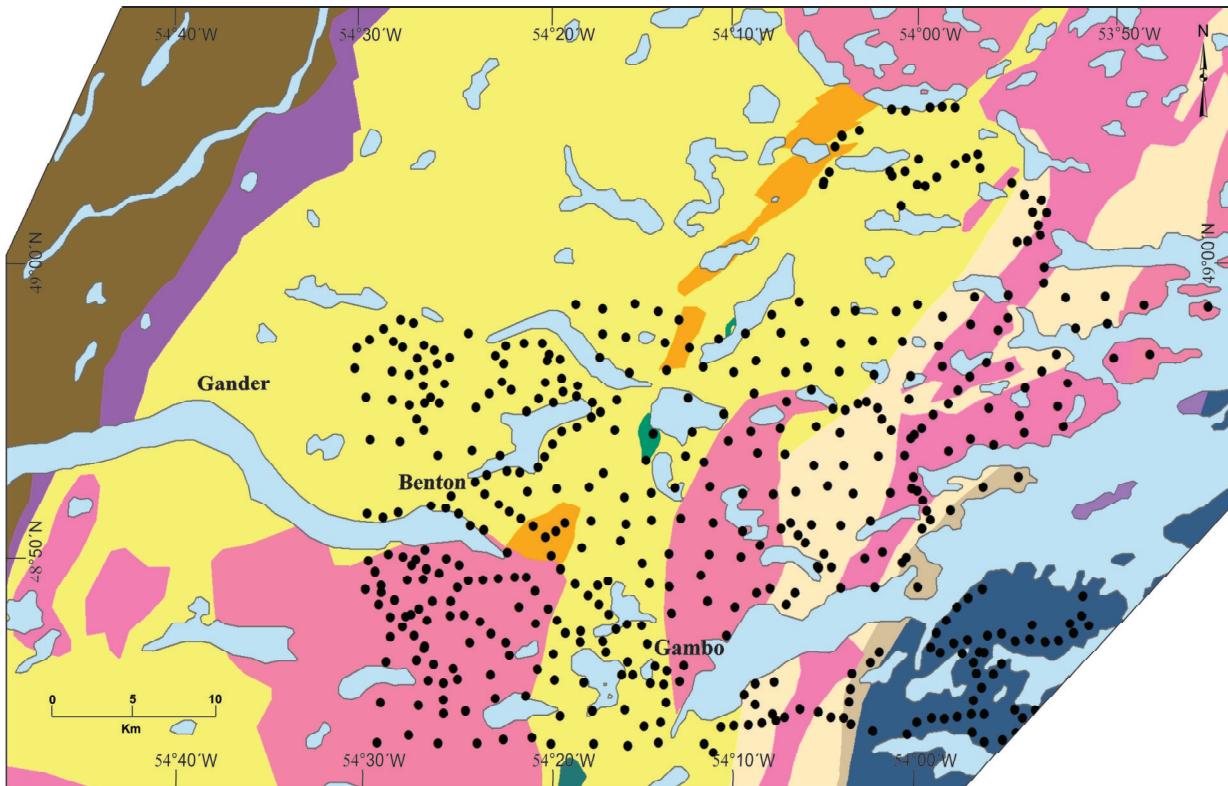


**Figure 1.** SRTM image of study area showing physiography and places mentioned in the text (study area boundary shown by dashed yellow line).

The study area has numerous ponds and is dissected by streams that generally drain eastward into Freshwater Bay. Home Pond drains eastward through a series of ponds to Traverse Pond and into the bay. Rodney Pond drains eastward through Second Burnt, First Burnt and Square ponds. Square Pond drains northeastward to Butts Pond, which drains into Freshwater Bay through Middle Brook.

## BEDROCK GEOLOGY

The study area is predominantly within the Gander (tectonostratigraphic) Zone of the Newfoundland Appalachians (O'Brien and Knight, 1988; Williams *et al.*, 1988), although rocks of the northwestern Avalon Zone outcrop in the easternmost part of the study area. Much of the area lies within the Gander Group of the Gander Zone, and comprises a north-northeast-trending belt of Ordovician metasedimentary rocks of the Indian Bay Big Pond and Jonathans Pond formations (Figure 2; 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 (O'Neill, 1991). The Gander Group grades eastward into amphibolite-facies rocks of the Hare Bay Pond Gneiss (O'Neill, 1987). 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).



## LEGEND

### DUNNAGE ZONE

#### Early to Late Ordovician

**Davidsville Group:** shale and thinly bedded siltstone and sandstone, probably distal turbidites; thickly bedded sandstone and minor shale and conglomerate, probably representing more proximal turbidites; minor limestone and felsic and mafic volcanic rocks

#### Late Cambrian to Middle Ordovician

**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

**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

**Jonathans Pond Formation:** quartzite, psammite, semipelite and pelite, including minor black slate, conglomerate, limestone, mafic and felsic volcanic rocks, and unseparated migmatitic rocks

**Hare Bay Gneiss:** migmatite, gneiss and schist

### GANDER ZONE (continued)

#### Devonian to Carboniferous

**Granitoid intrusions:**

#### Silurian to Devonian

**Gabbro and diorite intrusions, including minor ultramafic phases:**

#### Early Silurian

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

### AVALON ZONE

#### Neoproterozoic

**Musgravetown Group:** bimodal, mainly subaerial volcanic rocks including unseparated siliciclastic sedimentary rocks

**Love Cove Group:** bimodal, submarine to subaerial volcanic rocks including minor siliciclastic sedimentary rocks

**Figure 2.** Bedrock geology of the study area (mostly taken from Colman-Sadd and Crisby-Whittle, 2005). Black dots show the location of till samples collected during the 2009 field season.

The Gander Group is intruded by several Devonian-aged granitic plutons, the most extensive being the Gander Lake granite; a predominantly massive, K-feldspar megacrystic, biotite granite, which underlies much of the study area south of Gander Lake. Other plutons include a fine-grained, equigranular, pink- to red-weathering granite with 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 Gander Zone is separated from the Avalon Zone in the southeast by a 300–500 m wide mylonite zone that defines the Dover Fault (Blackwood and Gibbons, 1977). Bedrock in the area includes Neoproterozoic rocks of the Love Cove and Musgravetown groups. The Love Cove Group, the oldest rocks in the area, 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).

Rocks of the Gander River complex and Dunnage Zone, occurring to the west and south of the study area, could potentially be used as indicators of glacial transport directions and distances. The Davidsville Group of the Dunnage Zone comprises 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 marks the boundary between the Gander and Dunnage zones and is restricted to a thin north-northeast to south-southwest belt composed mainly of locally serpentized pyroxenite, but also includes local exposures of carbonate, talc, and gabbro (O'Neill, 1990); these clasts are also considered to provide details on ice-flow history in the area.

Historically, rocks of the Gander River complex have been the main focus of mineral exploration in the area, with gold as the primary target. More recent mineral exploration activity has been centred in 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) indicate a correlation of arsenic, antimony and gold along a gravity–magnetic boundary which, combined with gold occurrences in the Little Wing Pond showing (O'Neill and Knight, 1988) and the Stallion/Star Track project area east of Benton, suggest further mineral potential.

## QUATERNARY HISTORY

### QUATERNARY HISTORY OVERVIEW

Previous work on the glaciation of Newfoundland suggests that during the last glacial maximum (LGM; ~21 ka), the island was covered by multiple coalescent local ice caps extending out to the continental shelf edge (Grant, 1989; Shaw *et al.*, 2006). The sequence of deglacial events following LGM are based mostly on striation and landform data, that depict a first-order ice divide extending south and southeast across the island, along the axis of the Long Range Mountains, east

through central Newfoundland and across the Avalon Peninsula (Figure 3). Early ice retreat was facilitated by calving along deep 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, where depths greater than 600 m have been reported (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, but predominantly through melting (Shaw *et al.*, 2006). At least fifteen of these remnant ice caps were present at the time (Grant, 1974), 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). The Gander area was likely ice-free by ~11.5 ka, based on radiocarbon dates from marine macrofauna found in the lower Gander and Exploits river valleys (Batterson and Taylor, 1998; McCuaig, 2006).

## ICE-FLOW PATTERNS

Paleo ice-flow directions determined from glacial erosional evidence, mostly striations, indicate at least two separate ice-flow events in northeastern Newfoundland during the last, late Wisconsinan glaciation. Relative age relationships were determined from crosscutting relationships and leeside preservation (Taylor and St. Croix, 1989; St. Croix and Taylor, 1990, 1991; Batterson *et al.*, 2001).

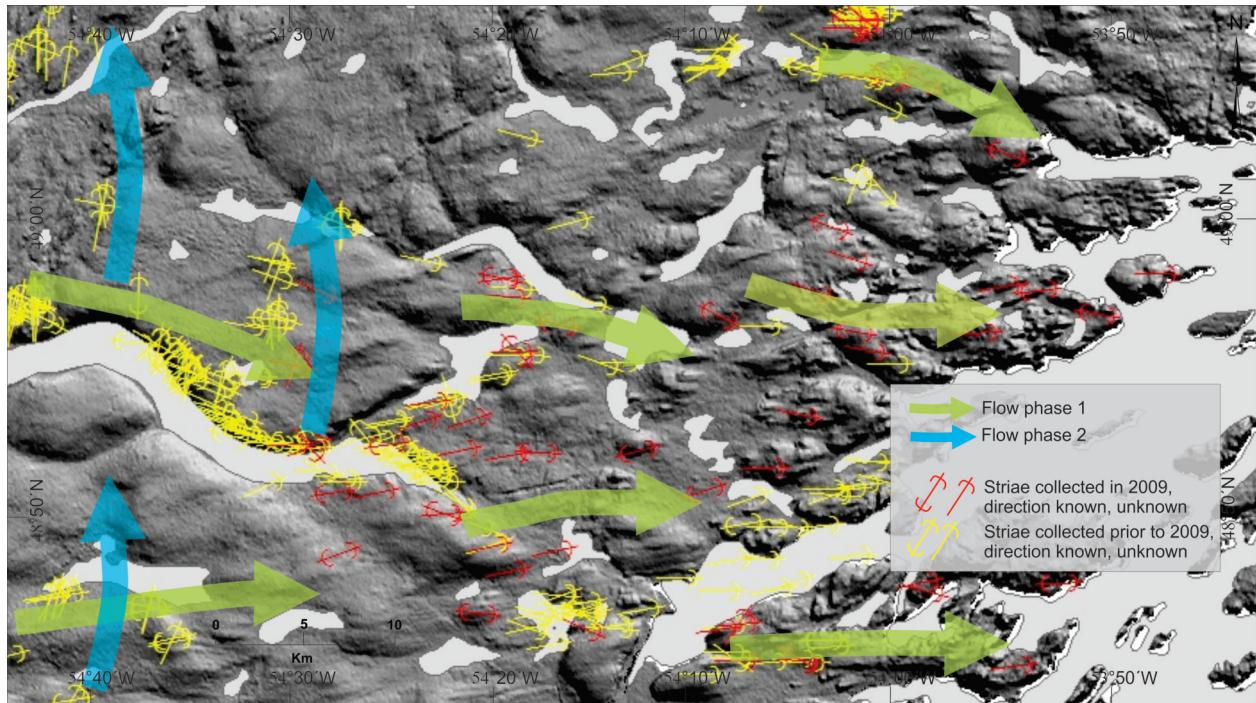


**Figure 3.** Glacial extent at ~13 ka. Last glacial maximum (dotted line), major ice divides (thick blue lines) and generalized ice-flow lines (thin grey lines) modified from Shaw *et al.* (2006).

A total of 64 striations were recorded from 51 sites during the 2009 field survey. Multidirectional patterns were observed at 10 sites; however, relative age relationships were determined only at 7 sites. These striations are generally consistent with previously described regional ice-flow patterns (St. Croix and Taylor, 1990, 1991) and indicate that the study area was affected by 2 separate ice-flow phases (Figure 4).

### Flow Phase 1

The earliest flow was eastward ( $\sim 095^\circ \pm 25^\circ$ ) and is found across the entire study area. These striations are consistent with previously described ice-flow patterns identified in the Gander Lake area, where ice flow roughly parallels the lake in its central and southeast-oriented portions (Vanderveer, 1985; Vanderveer and Taylor, 1987; Batterson and Vatcher, 1991; St. Croix and Taylor, 1991), and eastward toward the coast into Freshwater Bay and the Cat Bay area (Jenness, 1960; Butler *et al.*, 1984; St. Croix and Taylor, 1991). These eastward striations range between 70 to 120°; this variability likely reflects topographic influence as thinning ice was drawn-down toward the coast. 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 (Vanderveer and Sparkes, 1982).



**Figure 4.** Ice-flow patterns overlain on SRTM image. Two ice-flow phases affected the study area. The first (Flow phase 1) was a regionally extensive eastward flow from a source likely north of Red Indian Lake. Stagnant ice was likely present in the eastern area for some time and the later northward ice-flow phase (Flow phase 2), sourced from the Middle Ridge area, is only recorded in the west part of the study area.

## Flow Phase 2

The eastward ice-flow event was followed by a north-northeast ice-flow, evidence for which is widespread throughout most of northeastern Newfoundland (Butler *et al.*, 1984; Vanderveer and Taylor, 1987; St. Croix and Taylor, 1990, 1991; Batterson and Vatcher, 1991; Scott, 1994; Batterson and Taylor, 1998). However, it was only observed in a few sites in the western portion of the study area ( $\sim 006^\circ \pm 014^\circ$ ), where it roughly parallels the southwest Gander River valley and the Outflow (to the west of the study area), but obliquely crosses Gander Lake. Where striations related to both the northward and eastward flow are observed, the northward flow is interpreted to be the younger of the two, consistent with regional ice-flow relationships recorded to the west of the study area. The source of this ice flow is likely from the Middle Ridge area (Proudfoot *et al.*, 1988; St. Croix and Taylor, 1990, 1991).

## SURFICIAL GEOLOGY

The area is dominated by varying thicknesses of sediment and lies predominantly within the ‘outer drift zone’ described by Jenness (1960). This zone is characterized by thin till cover, and valleys containing glaciofluvial sediments derived from melting ice inland. It is separated from an ‘inner drift zone’ by a discontinuous ‘boulder-till moraine’, which generally contains thicker till cover and has a hummocky or ribbed topography that suggests inland ice stagnated. The boundary of this zone crosses part of the field area to the south of Gander Lake. Jenness (1960) suggested that this zonation evolved as a result of rapid ice retreat from its terminal position on the northeast coast to a major stillstand position marked by the moraine.

## TILL

Diamicton is the dominant surficial deposit within the study area. There is a marked contrast between diamictons in the coastal areas and those inland. North of Gander Lake, diamicton cover is generally thin with numerous bedrock exposures, particularly adjacent to the TCH. In the Soulis, Home and Gull pond areas, and south of Gander Lake, blankets of diamicton ( $>2$  m) are common and bedrock exposures are rare (Plate 1). Hummocky terrain is also present south of Gander Lake. Hummocks commonly have a surface cover of boulders, likely derived from a supraglacial source. Drumlinoid features and crag-and-tail hills were identified from aerial photographs and Shuttle Radar Topography Mission (SRTM) data. Orientations of these features, along with those of isolated crag-and-tail hills, are consistent with the regional eastward striations observed in the area (Figure 4). In coastal areas, exposed bedrock is dominant, the topography is more rugged and diamicton occurs as either a discontinuous veneer or is absent (Plate 2).

Few natural sections were observed and only a single stratigraphic unit of diamicton was noted. Sedimentary structures were not generally noted, but this may be due to poor exposure. Diamicton texture and colour varies throughout the field area and reflects the underlying bedrock geology. Diamicton underlain by the Gander Group are commonly light brownish-grey to grey, whereas diamicton underlain by Gander Lake granite are typically pinkish grey. The matrix is predominantly silty sand, poorly sorted and slightly- to moderately-compacted. Diamicton, in areas underlain by Gander Lake granite, has a coarser, sandier matrix than diamicton underlain by the



**Plate 1.** Thick till blanket to the south of Gander Lake. Hummocky and boulder strewn terrain are common in this area.

Gander Group. Clasts are granule- to boulder-sized (up to 3 m diameter) and are mostly subrounded to angular. Clasts are commonly striated and have thin silt coatings on their upper surfaces. Clast lithology and shape are controlled by the underlying bedrock. Angular, fragile shale clasts are common in areas underlain by bedrock of the Gander Group, whereas granite clasts are generally subrounded. Clast content varies between 30 and 70 percent, averaging about 55 percent. South of Gander Lake, boulders 1 to 3 m diameter are common on and near the diamicton surface.

The characteristics described above (subrounded clasts, striated and fragile clasts, and silt coatings) are interpreted to represent deposition as subglacial melt-out till (Dreimanis, 1988). These sediments are commonly associated with stagnating glaciers. Detailed clast fabric analysis and examination of the stratigraphy, to be conducted in future work, will provide further details on the depositional environment.

## GLACIOFLUVIAL–GLACIOMARINE–MARINE SEDIMENTS

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



**Plate 2.** Thin till veneer and exposed bedrock in the Hare Bay area. Toward the coast, the topography is typically more rugged with till either absent or occurring as a discontinuous veneer.

Freshwater Bay (Butler *et al.*, 1984; McCuaig, 2006). These deposits include 4 geomorphic units representing 4 depositional environments:

- a zone of hummocky glaciofluvial sediments containing an abandoned meltwater channel at the eastern end of Gander Lake;
- braided river sediments to the southeast of the hummocky zone consisting of poorly- to moderately-sorted gravel/boulder beds with some crossbedding;
- an esker complex at Butts Pond, consisting of a series of sinuous features made up of mainly poorly sorted, large (up to ~3 m in diameter), subrounded in a fine sand to cobble gravel matrix; and
- deltaic sediments extending from Butts Pond to Gambo, consisting of planar to undulating deposits containing predominantly sandy beds (Figure 5; McCuaig, 2006).

McCuaig (2006) suggested that these four depositional environments were part of a glacial spillway where meltwater flowed eastward into Freshwater Bay from westward-retreating ice. The elevation of the delta topset beds was at 43 m, providing a marine limit for the area. Ground-penetrating radar (GPR) profiles taken seaward of the delta show reflections that are consistent with Gilbert-type deltas (McCuaig, 2006). The elevation of topset beds in the GPR profiles is 30 m,

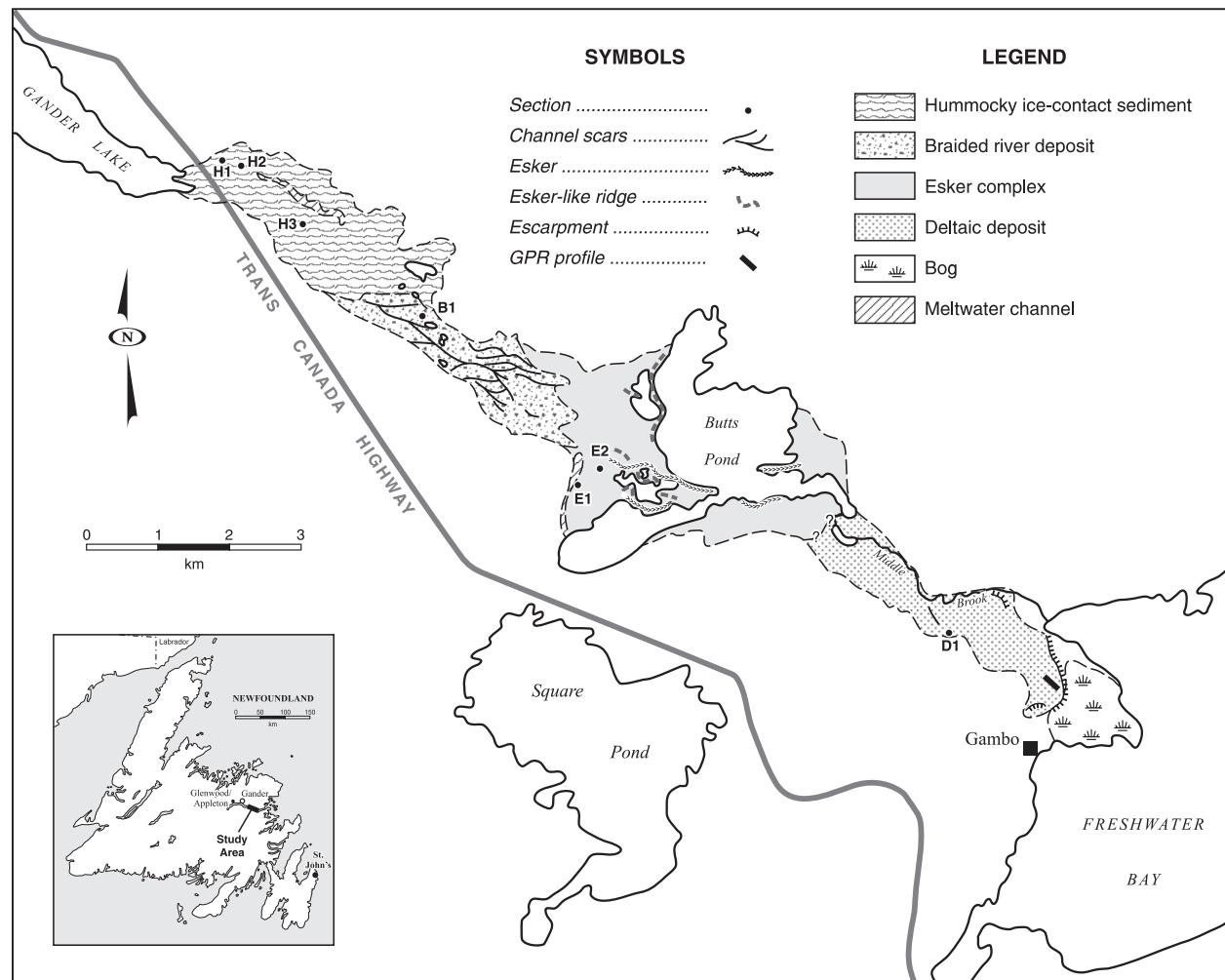
suggesting that the delta began to develop at 43 m asl and the 30 m topset beds formed as the delta adjusted to sea level fall.

The coastal region of the study area likely had a type-B sea-level curve, characterized by rapid sea-level fall to below modern sea level followed by slower sea-level rise to present. Sea level fell below present between 10 and 9.5 ka (Liverman, 1994).

Age constraints on the deglaciation within the study area come from radiocarbon dates on marine macrofauna (*Hiatella arctica*) found in silty clay near the shore of Gander River, approximately 15 km northeast of the northern outlet. These dates indicate that ice had retreated from this area and was open to the sea by approximately 12.2 ka (McCuaig, 2006).

## ORGANIC DEPOSITS

Organic deposits, common within the study area, are generally associated with poorly drained areas. Numerous bogs are found in valleys along the coast, low-lying areas in the interior of the region and in depressions associated with hummocky moraine.



**Figure 5.** Glacial spillway deposits in the Butts Pond–Gambo area (taken from McCuaig, 2006).

## SUMMARY OF GLACIAL HISTORY

The study area was covered by glacial ice from two sources during the last, late Wisconsinan glacial period. The first ice-flow event was a regional eastward flow that extended into Bonavista Bay. This ice 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; Scott, 1994).

The eastward ice-flow event was followed by a north to northeastward ice-flow, likely sourced from the Middle Ridge area (Rogerson, 1982). The eastern portion of the study area showed no evidence of a northward ice flow and was likely covered by stagnant ice; this is supported by hummocky moraines at the eastern end of Gander Lake, hummocky topography south of Gander Lake, and esker-like ridges near Joe Batt's Brook and Fox Pond. This is in agreement with a remnant ice centre postulated by Grant (1974). The area became ice-free sometime before 12.2 ka based on shells from the Gander River valley (McCuaig, 2006).

## REGIONAL SURFICIAL SEDIMENT SAMPLING

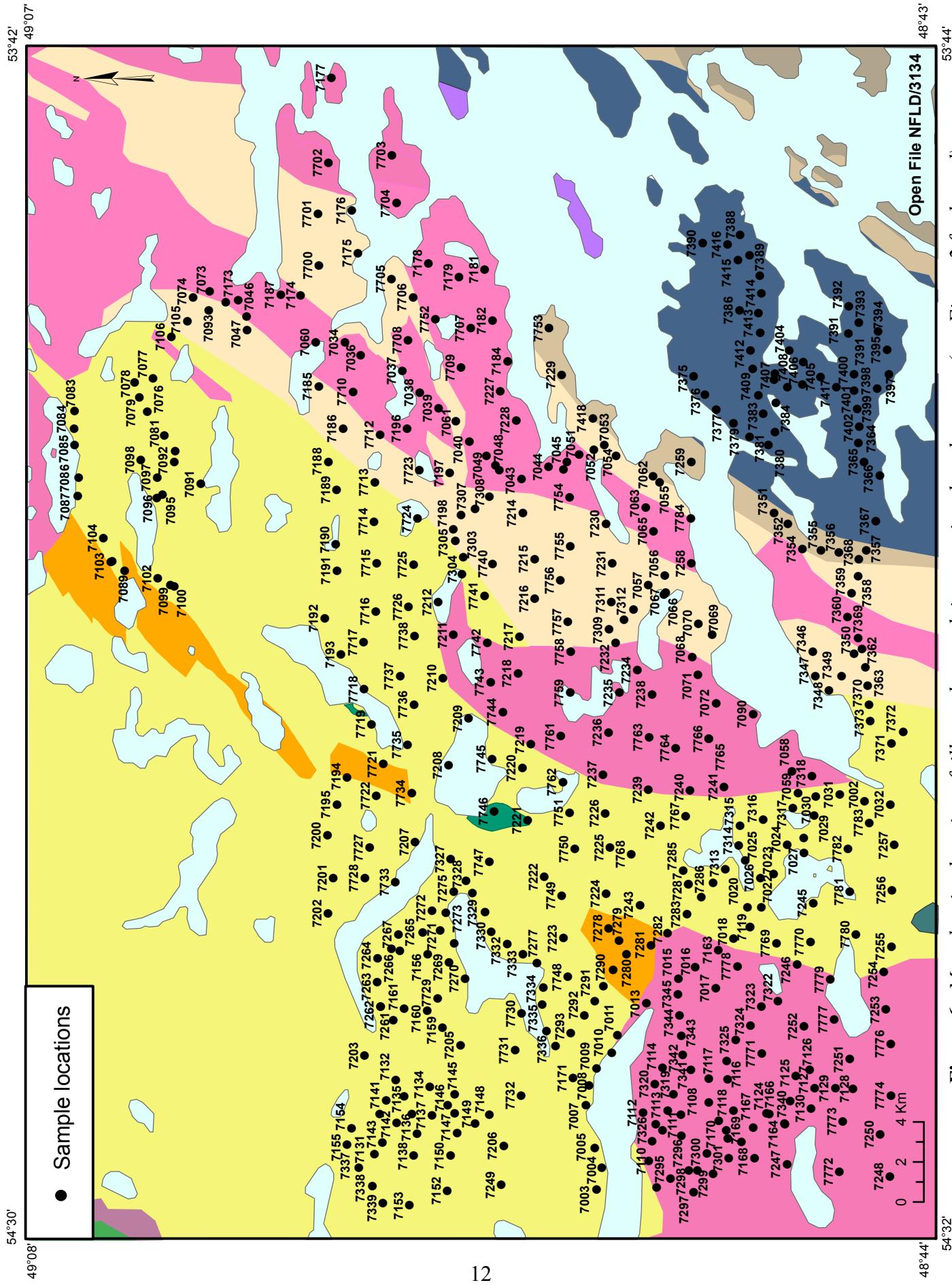
### SAMPLING AND SAMPLE PREPARATION METHODS

Till sampling, conducted using the surficial geology as a guide, resulted in 496 samples (including duplicates) being collected from the C- and BC-horizons; most were from test pits (40 to 60 cm depth) and roadcuts (50 to 100 cm depth). Mudboils were sampled at shallower depths (average 25 cm). In rare cases, 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 every 4 km<sup>2</sup> in more remote areas where helicopter support was required. Duplicate samples were taken from 30 sites and were used to test for field reproducibility.

Data from 466 samples are presented (Figure 6), excluding the field duplicates. 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 40°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. 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.



**Figure 6.** Map showing location of till samples overlain on regional geology map (see Figure 2 for legend).

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

Variabe	Description	Variabe	Description
Sample	Unique sample ID. First number represents geologist id, e.g., 7 = Brushett.	La2 ppm	Lanthanum, ppm, by ICP
NTS	NTS sheet (1:50 000)	Li2 ppm	Lithium, ppm, by ICP
Easting	UTM map coordinate NAD 27	LOI	Loss on ignition
Northing	UTM map coordinate NAD 27	Lu1 ppm	Lutetium, ppm, by INAA
Elev	Elevation of sample site (m)	Mg2 pct	Magnesium, %, by ICP
Zone	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
Al2 pct	Aluminum, %, by ICP	Na2 pct	Sodium, %, by ICP
As1 ppm	Arsenic, ppm, by INAA	Nb2 ppm	Niobium, ppm, by ICP
As2 ppm	Arsenic, ppm, by ICP	Nd1 ppm	Neodymium, ppm, by INAA
Au1 ppb	Gold, ppb, by INAA	Ni1 ppm	Nickel, ppm, by INAA
Ba1 ppm	Barium, ppm, by INAA	Ni2 ppm	Nickel, ppm, by ICP
Ba2 ppm	Barium, ppm, by ICP	P2 ppm	Phosphorus, ppm, by ICP
Be2 ppm	Beryllium, ppm, by ICP	Pb2 ppm	Lead, ppm, by ICP
Br1 ppm	Bromine, ppm, by INAA	Rb1 ppm	Rubidium, ppm, by INAA
Ca1 pct	Calcium, %, by INAA	Rb2 ppm	Rubidium, ppm, by ICP
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, ppm, 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 = %

## **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 5 ml of concentrated HCl and 5 ml of perchloric acid is added to each sample. The samples are placed on a hotplate at 200°C and evaporated to dryness, after which the beakers are half-filled with 10 percent hydrochloric acid 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 Cr from chromite, Ba from barite and Zr from zircon. Accuracy can be judged from the results for reference materials (Table 2). 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, scandium, strontium, titanium, vanadium, yttrium, zinc and zirconium (Al2, Ba2, Be2, Ca2, Ce2, Co2, Cr2, Cu2, Dy2, Fe2, Ga2, K2, La2, Li2, Mg2, Mn2, Mo2, Na2, Nb2, Ni2, P2, Pb2, Rb2, Sc2, Sr2, Ti2, V2, Y2, Zn2 and Zr2, 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 3).

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,

**Table 2.** 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 Obs	N=7 Rec	Till-2 Obs	N=6 Rec	Till-3 Obs	N=7 Rec	Till-4 Obs	N=7 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 3.** Accuracy of till geochemical data by INAA and gravimetry. 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 Obs	N=7 Rec	Till-2 Obs	N=6 Rec	Till-3 Obs	N=7 Rec	Till-4 Obs	N=7 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

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 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, Cd2, Eu1 and Se1, 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 46 elements determined, 12 were determined by both ICP-ES and INAA (As, Ba, Ce, Co, Cr, Fe, La, Mo, Na, Rb, Sc, Zr). To reduce the size of the data for presentation and statistical analysis, for these 12, the data from the method with the best quality determined from comparison with laboratory and field duplicates have been used (*i.e.*, As1, Ba1, Ce2, Co2, Cr1, Fe2, La2, Mo2, Na2, Rb2, Sc2, 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 7 to 14. Statistics (maximum, minimum, median, mean, standard deviation) were generated from the Excel computer application, and are presented in Table 4. Correlation coefficients for laboratory and field duplicate data are provided in Table 5. A correlation matrix is shown in Table 6.

## INTERPRETATION OF GEOCHEMICAL DATA

Dot-plot maps of selected elements (As, Au, Cr, Cu, Ni, Pb, Y and Zn) are presented in Figures 7 to 14. Most of these elements, either base or precious metals, have been of historical interest and

**Table 4.** 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
Rb1	ppm	5	340.00	27.00	113.48	110.00	39.46

**Table 4.** Continued

		Detection Limit	Maximum	Minimum	Mean	Median	Standard Deviation
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 5.** 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). Determinations for Ag1 and Se1 are not provided because all values were below detection limit

Coefficient (n=30)	Coefficient (n=30)	Coefficient (n=30)	Coefficient (n=30)
Al2	0.911	Cr2	0.739
<b>As1</b>	0.948	<b>Cs1</b>	0.845
As2	0.945	<b>Cu2</b>	0.832
Au1	-0.025	<b>Dy2</b>	0.876
<b>Ba1</b>	0.879	Eu1	0.430
Ba2	0.879	Fe1	0.910
Be2	0.982	<b>Fe2</b>	0.927
Br1	0.466	Hf1	0.704
Ca2	0.828	K2	0.954
Cd2	0.326	La1	0.716
Ce1	0.685	<b>La2</b>	0.819
<b>Ce2</b>	0.798	Li2	0.879
Co1	0.899	Lu1	0.821
<b>Co2</b>	0.903	Mg2	0.939
<b>Cr1</b>	0.819		
		Mn2	0.863
		<b>Mo1</b>	-0.048
		Mo2	0.084
		Na1	0.898
		<b>Na2</b>	0.964
		Nb2	0.883
		Ni2	0.960
		P2	0.823
		Pb2	0.651
		Rb1	0.229
		<b>Rb2</b>	0.963
		Sb1	0.998
		Sc1	0.913
		<b>Sc2</b>	0.924
		Sm2	0.813
		Sr2	0.984
		Ta1	0.918
		Tb1	0.697
		Th1	0.822
		Ti2	0.968
		U1	0.959
		V2	0.929
		W1	0.849
		Y2	0.872
		Yb1	0.927
		Zn2	0.912
		Zr1	0.768
		<b>Zr2</b>	0.818

**Table 6. Correlation matrix**

	Ag4	A12	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	Cs1	Cu2	Dy2	Eu1	Fe1	Fe2	Hf1	K2	Lu1	La2	Li2	Lu1	Mg2		
Ag4	1.00	-0.05	1.00	-0.10	1.00	-0.12	0.76	1.00	-0.07	0.22	0.25	1.00	-0.17	-0.03	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00				
A12	-0.05	1.00	-0.10	1.00	-0.12	0.76	1.00	-0.07	0.22	0.25	1.00	-0.17	-0.03	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00					
As1	-0.02	-0.10	1.00	-0.10	1.00	-0.12	0.76	1.00	-0.07	0.22	0.25	1.00	-0.17	-0.03	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00				
As2	-0.04	-0.12	0.76	1.00	-0.10	1.00	-0.12	0.76	1.00	-0.07	0.22	0.25	1.00	-0.17	-0.03	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00			
Au1	0.00	-0.07	0.22	0.25	1.00	-0.10	1.00	-0.12	0.76	1.00	-0.07	0.22	0.25	1.00	-0.17	-0.03	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Ba1	-0.06	0.34	0.18	-0.18	-0.01	1.00	-0.17	-0.03	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00			
Ba2	-0.07	0.43	0.04	0.17	-0.03	-0.01	1.00	-0.17	-0.03	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Be2	0.05	0.22	-0.19	-0.15	-0.20	-0.15	-0.13	1.00	-0.18	-0.13	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	0.90	1.00	-0.15	-0.13	1.00	-0.18	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00	
Br1	-0.05	0.35	0.15	0.17	0.07	-0.18	0.13	0.12	-0.05	1.00	-0.15	-0.13	0.90	1.00	-0.15	-0.13	0.90	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Ca2	0.08	0.21	-0.14	-0.12	-0.07	0.14	0.13	0.12	-0.05	1.00	-0.15	-0.13	0.90	1.00	-0.15	-0.13	0.90	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Cd2	0.05	-0.07	-0.29	-0.28	-0.16	0.00	0.03	0.26	-0.17	0.08	1.00	-0.15	-0.13	0.90	1.00	-0.15	-0.13	0.90	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00	
Ce1	-0.05	0.19	0.22	0.28	0.04	0.17	-0.03	0.90	1.00	-0.15	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24
Ce2	-0.08	0.19	0.20	0.35	0.05	0.26	0.24	0.21	0.05	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24	0.15	0.05	0.26	0.24	
Co1	-0.04	0.26	0.43	0.47	0.24	0.26	0.24	0.20	-0.26	0.11	-0.01	0.03	-0.19	0.83	1.00	-0.15	-0.13	0.90	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00	
Co2	-0.02	0.38	0.25	0.40	0.18	0.31	0.35	0.03	0.01	-0.54	0.08	-0.12	-0.37	0.10	0.16	0.53	0.45	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Cr1	-0.01	-0.06	0.26	0.40	0.18	0.31	0.35	0.03	0.01	-0.54	0.08	-0.12	-0.37	0.10	0.16	0.53	0.45	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Cr2	-0.09	0.34	0.24	0.39	0.23	0.25	0.24	0.23	-0.45	0.23	-0.08	-0.39	0.20	0.32	0.71	0.69	0.76	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Cs1	-0.03	0.36	0.09	0.11	-0.04	0.23	0.21	0.27	-0.03	0.02	-0.04	0.15	0.11	0.05	0.07	-0.05	0.12	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Cs2	-0.02	0.19	0.35	0.48	0.17	0.23	0.17	0.12	-0.02	0.04	-0.04	0.15	0.11	0.06	0.08	-0.04	0.12	1.00	-0.15	-0.13	0.90	-0.15	-0.13	-0.09	1.00	-0.15	-0.12	-0.05	1.00	1.00		
Dy2	-0.02	0.20	0.11	0.22	0.14	0.22	0.17	0.11	0.04	0.12	0.16	0.25	0.10	0.50	0.67	0.41	0.39	0.04	0.12	-0.05	0.42	1.00	-0.15	-0.13	-0.09	1.00	1.00					
Eu1	-0.05	0.21	0.24	0.32	0.13	0.24	0.21	0.16	0.13	-0.23	0.04	-0.23	0.55	0.53	0.49	0.48	0.35	0.08	0.28	0.35	0.07	0.39	0.50	1.00	-0.15	-0.13	-0.09	1.00	1.00			
Fe1	-0.08	0.45	0.38	0.43	0.15	0.21	0.22	0.23	-0.23	0.40	-0.02	-0.45	0.35	0.35	0.49	0.81	0.74	0.42	0.72	0.07	0.58	0.38	0.40	0.42	0.95	1.00	-0.15	-0.13	-0.09	1.00	1.00	
Fe2	-0.09	0.53	0.26	0.44	0.14	0.24	0.22	0.21	-0.21	0.40	-0.01	-0.44	0.31	0.48	0.76	0.75	0.42	0.77	0.11	0.58	0.40	0.42	0.42	0.95	1.00	-0.15	-0.13	-0.09	1.00	1.00		
Hf1	0.01	0.09	-0.09	-0.11	-0.03	0.38	0.37	-0.07	-0.13	0.62	0.11	0.06	-0.13	-0.24	-0.06	-0.12	-0.21	-0.19	-0.04	-0.07	-0.07	-0.24	-0.21	-0.04	-0.07	-0.24	-0.21	-0.04	-0.07	1.00		
K2	0.03	0.31	-0.20	-0.12	-0.23	0.23	0.24	0.17	-0.02	0.02	-0.03	0.31	0.14	0.10	-0.22	-0.17	-0.02	0.03	-0.34	-0.34	-0.08	-0.24	-0.21	-0.04	-0.24	-0.21	-0.04	-0.24	1.00			
La1	-0.10	0.20	0.17	0.22	0.06	0.31	0.26	0.00	-0.05	0.02	-0.03	0.84	0.55	0.28	0.30	0.12	0.20	0.19	0.27	0.31	0.52	0.28	0.25	0.09	0.14	0.00	0.00	0.00	0.00	0.00		
La2	-0.17	0.21	0.12	0.29	0.07	0.33	0.31	0.04	-0.05	0.02	-0.03	0.73	0.80	0.47	0.48	0.35	0.08	0.28	0.35	0.07	0.58	0.57	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40		
L12	-0.07	0.47	0.11	0.22	0.01	0.19	0.19	0.33	-0.16	0.15	-0.17	0.22	0.36	0.42	0.41	0.14	0.42	0.49	0.37	0.25	0.17	0.50	0.56	-0.26	0.15	0.21	0.35	1.00	-0.06			
Lu1	-0.01	0.16	-0.04	-0.02	-0.01	0.08	0.07	0.11	-0.11	0.15	0.10	0.46	0.21	0.02	-0.08	-0.10	-0.04	0.07	0.04	0.07	0.04	0.20	0.23	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	
Mn1	0.08	0.35	0.22	0.34	0.16	0.34	0.29	-0.24	0.08	0.18	-0.31	0.34	0.52	0.82	0.79	0.53	0.78	0.05	0.61	0.36	0.45	0.74	0.75	-0.17	0.26	0.49	0.48	-0.01	1.00	-0.01		
Mg2	0.04	0.13	0.25	0.44	0.18	0.15	0.13	0.00	-0.09	0.07	0.02	-0.37	0.32	0.42	0.54	0.30	0.42	0.08	0.59	0.43	0.41	0.52	0.56	-0.17	0.35	0.51	0.43	0.05	0.54	-0.01		
Mn2	0.00	0.05	-0.02	0.00	-0.01	0.00	0.03	0.01	0.06	0.03	0.01	-0.02	0.01	-0.02	0.01	-0.02	0.01	-0.02	0.03	0.01	0.02	0.03	0.01	0.02	0.03	0.01	0.02	0.03	0.01	0.02	0.03	
Nd2	-0.03	0.10	-0.23	-0.26	-0.16	-0.07	-0.05	0.59	-0.31	0.52	0.31	0.06	0.26	-0.22	-0.23	-0.50	-0.36	0.41	-0.11	-0.01	-0.19	-0.24	-0.09	0.03	0.10	0.24	0.18	0.22	0.20	0.18	0.22	0.20
Sb1	-0.26	0.02	-0.44	0.36	0.16	0.14	0.19	0.22	-0.05	0.12	0.78	0.24	0.03	0.30	0.30	0.22	0.24	-0.21	0.15	0.13	0.29	0.20	0.19	0.26	0.28	0.27	0.26	0.25	0.24	0.23	0.22	
Sb1	-0.05	0.55	0.14	0.28	0.13	0.51	-0.45	0.13	0.21	-0.29	0.31	0.36	0.16	0.11	-0.07	0.73	0.50	0.72	0.11	0.41	0.24	0.47	0.70	0.67	0.13	-0.16	0.38	0.30	0.11	0.73	-0.05	
Sb2	-0.05	0.06	-0.01	0.00	-0.02	0.01	0.03	0.01	0.06	0.03	-0.10	0.00	-0.02	0.01	-0.02	0.03	-0.02	0.01	0.03	0.02	0.03	0.01	0.02	0.03	0.01	0.02	0.03	0.01	0.02	0.03		
Sf1	-0.03	0.21	0.18	0.21	0.04	0.28	0.24	0.03	-0.04	0.13	-0.08	0.85	0.60	0.29	0.32	0.11	0.16	0.20	0.30	0.49	0.58	0.28	0.25	0.13	0.19	0.92	0.75	0.19	0.56	0.26	0.26	
Sf2	-0.08	0.27	-0.21	-0.15	-0.14	0.13	0.19	0.26	-0.10	0.05	0.85	0.16	0.18	0.12	-0.03	0.13	-0.29	-0.16	0.20	-0.08	0.19	0.18	0.02	0.01	0.44	0.30	0.17	0.17	-0.08	0.19	0.16	0.16</td

**Table 6.** Continued

	Mn2	Mo1	Mo2	Na1	Na2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Sm1	Sm2	Ta1	Tb1	Th1	Ti2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
Ag4																													
Al2																													
As1																													
As2																													
Au1																													
Ba1																													
Be2																													
Bf1																													
Ca2																													
Cd2																													
Ce1																													
Ce2																													
Co1																													
Co2																													
Cr1																													
Cr2																													
Cs1																													
Cs2																													
Dy2																													
Eu1																													
Fe1																													
Fe2																													
Hf1																													
K2																													
La1																													
La2																													
L12																													
L1u1																													
Mg2																													
Mn2	0.01																												
Mo1	-0.03																												
Mo2	-0.10																												
Na1	-0.13																												
Na2	-0.23																												
Nb2	-0.57																												
P2	-0.31																												
Pb2	-0.17																												
Rb1	-0.07																												
Rb2	-0.04																												
Sb1	0.08																												
Sc1	0.39																												
Sc2	0.42																												
Se1	-0.02																												
Sm1	0.38																												
St2	0.04																												
Ta1	-0.14																												
Tb1	0.31																												
Th1	0.18																												
Ti2	0.16																												
Ui	0.12																												
V2	0.36																												
W1	0.12																												
Y2	0.48																												
Yb1	0.06																												
Zn2	0.35																												
Zr1	-0.09																												
Zr2	0.05																												

are described below. Ytterbium, a light rare earth, was chosen to represent the rare-earth elements (other rare earths are not discussed here but most have similar patterns of background and elevated values) given the recent increased interest in rare-earth elements 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.

Other element plots are presented in Appendix B. The following is a preliminary interpretation. 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>).

### **ARSENIC (As)**

Approximately 40 percent of the arsenic values identified in till samples are slightly (> than 10 ppm) to very elevated (up to 295 ppm, Figure 7). The highest arsenic values (161, 200 and 295 ppm) are found in till overlying the metasedimentary rocks of the Gander Group, two of which are adjacent to the Wing Pond Shear zone.

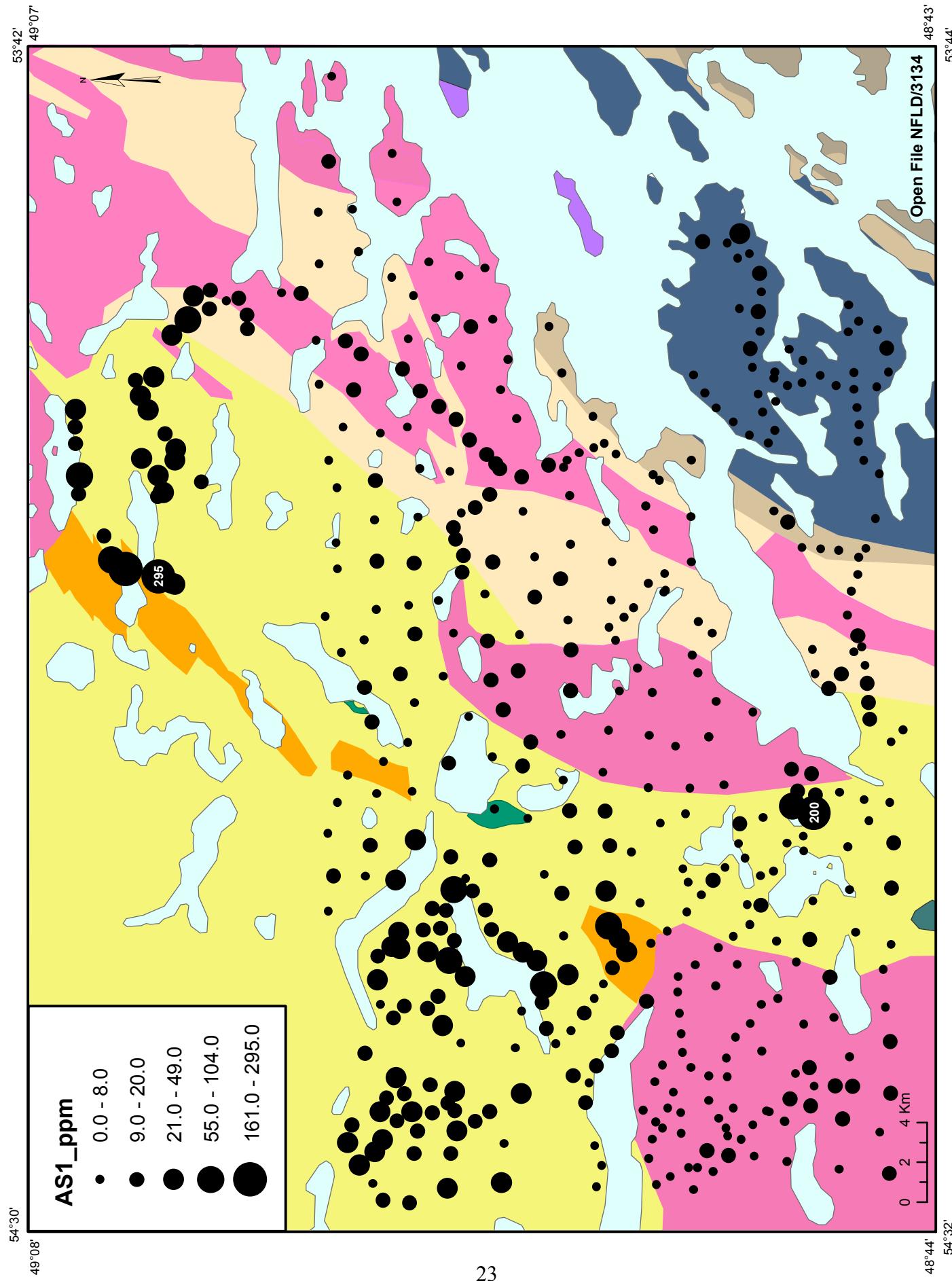
Arsenic has often been considered a pathfinder for gold in geochemical exploration. In this study, the spatial distribution of arsenic is not consistent with that of gold and there is only a low correlation between arsenic and gold (0.25). Arsenic is moderately correlated with cobalt (0.47), chromium (0.39), copper (0.48), iron (0.44), magnesium (0.34), manganese (0.44), nickel (0.45), and antimony (0.36) (Table 6). Field and laboratory duplicates showed a high degree of correlation, and the data is thus considered accurate and precise (Table 4).

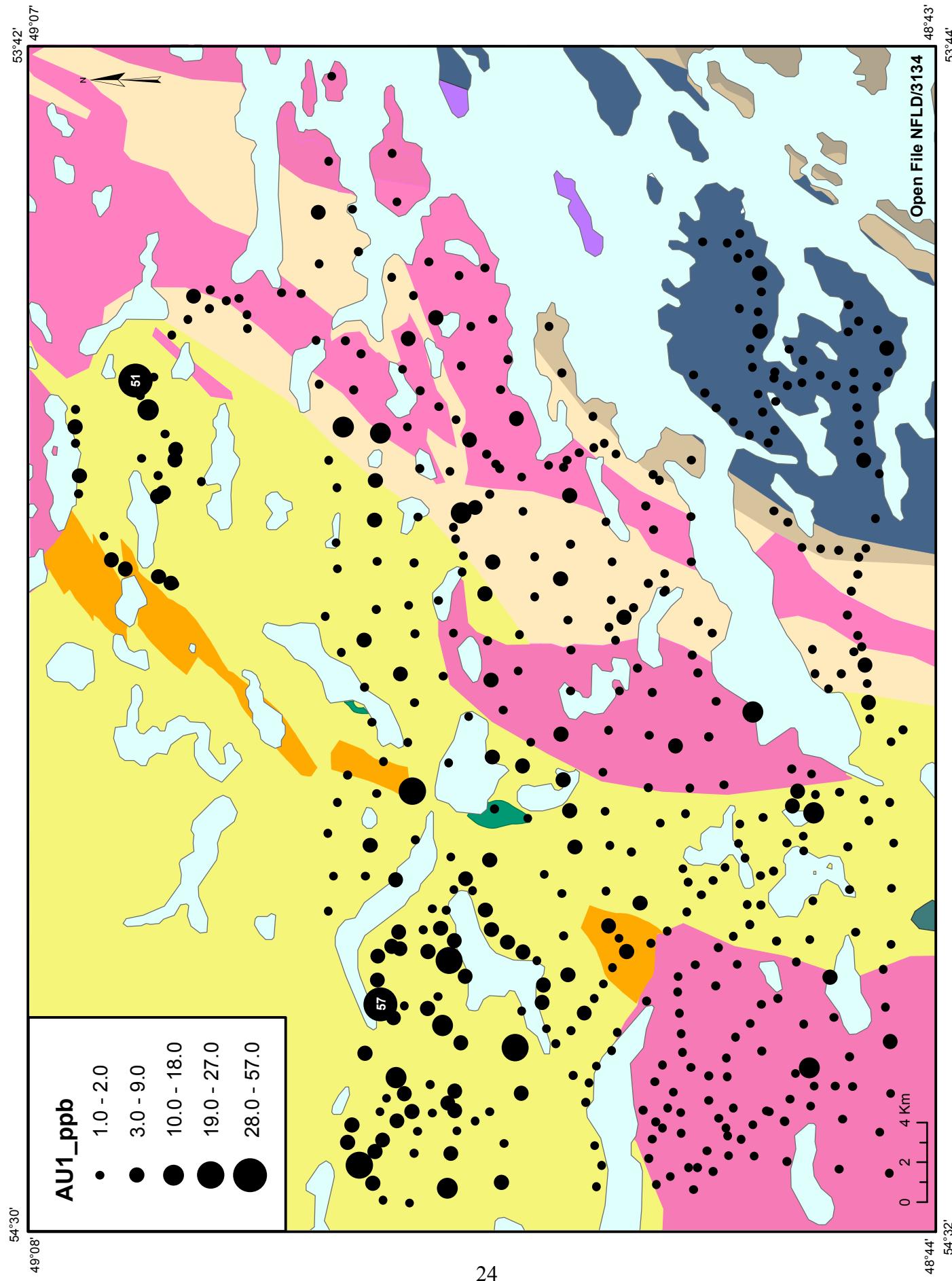
Arsenic is also a factor in human health. The Canadian soil quality guidelines indicate values below 12 ppm are acceptable for residential use. There are no known mineral occurrences of arsenic in the study area. About 26 percent of the data points are above this value within the study area, and occur mostly in till overlying metasedimentary rocks of the Gander Group. Elevated arsenic levels have also been documented in well water throughout the Gander area; details of this study are discussed in Serpa *et al.* (2009).

### **GOLD (Au)**

The gold in till data is difficult to interpret, and it shows a spotty distribution (Figure 8). The small (<1 kg) sample is likely a factor and caution must be exercised when interpreting anomalies, due to the 'nugget effect'.

Approximately 4 percent of the gold values are slightly elevated to elevated (8.4 to 57 ppb). 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 57 ppb, located near the western end of Home Pond (sample 7262, Figure 12). 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 poorly correlated with all other elements analyzed (Table 6). Laboratory duplicates showed a low degree of correlation (-0.025, Table 4).

## **CHROMIUM (Cr)**

The highest chromium value is 920 ppm (sample 7269), part of a cluster of very elevated chromium values (490 to 920 ppm) found southeast of Jonathan's Pond (Figure 1), where high nickel values were also recorded (Figure 9).

Chromium correlates moderately to well with copper (0.50), europium (0.35), iron (0.77), lithium (0.42), magnesium (0.78), manganese (0.42), nickel (0.84), scandium (0.50), and vanadium (0.74), vanadium (0.73), and zinc (0.49) (Table 6). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## **COPPER (Cu)**

Anomalous levels of copper in till (>26 ppm) are common throughout, particularly in till overlying metasedimentary rocks of the Jonathans Pond Formation (Figure 10). The highest copper value recorded was 153 ppm in the area east of Soulis Pond (Figure 1; sample 7260). This sample is part of a cluster of slightly elevated to elevated copper values ranging from 40 to 153 ppm. Elevated copper values were also found southeast of Jonathan's Pond (Figure 1).

Copper correlates moderately to well with arsenic (0.48), cerium (0.65), cobalt (0.73), iron (0.58), magnesium (0.61), manganese (0.59), and nickel (0.69) (Table 6). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

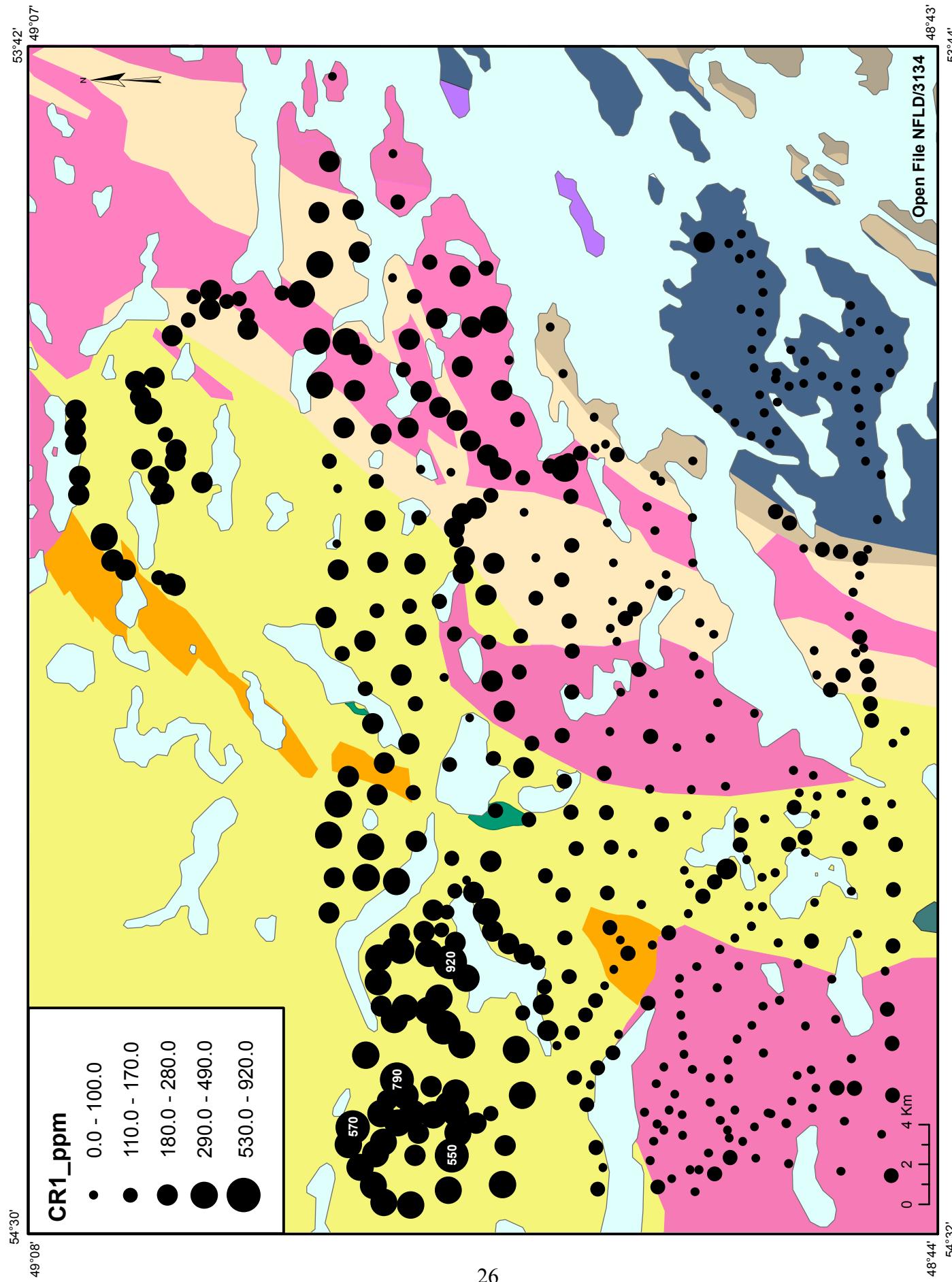
## **LEAD (Pb)**

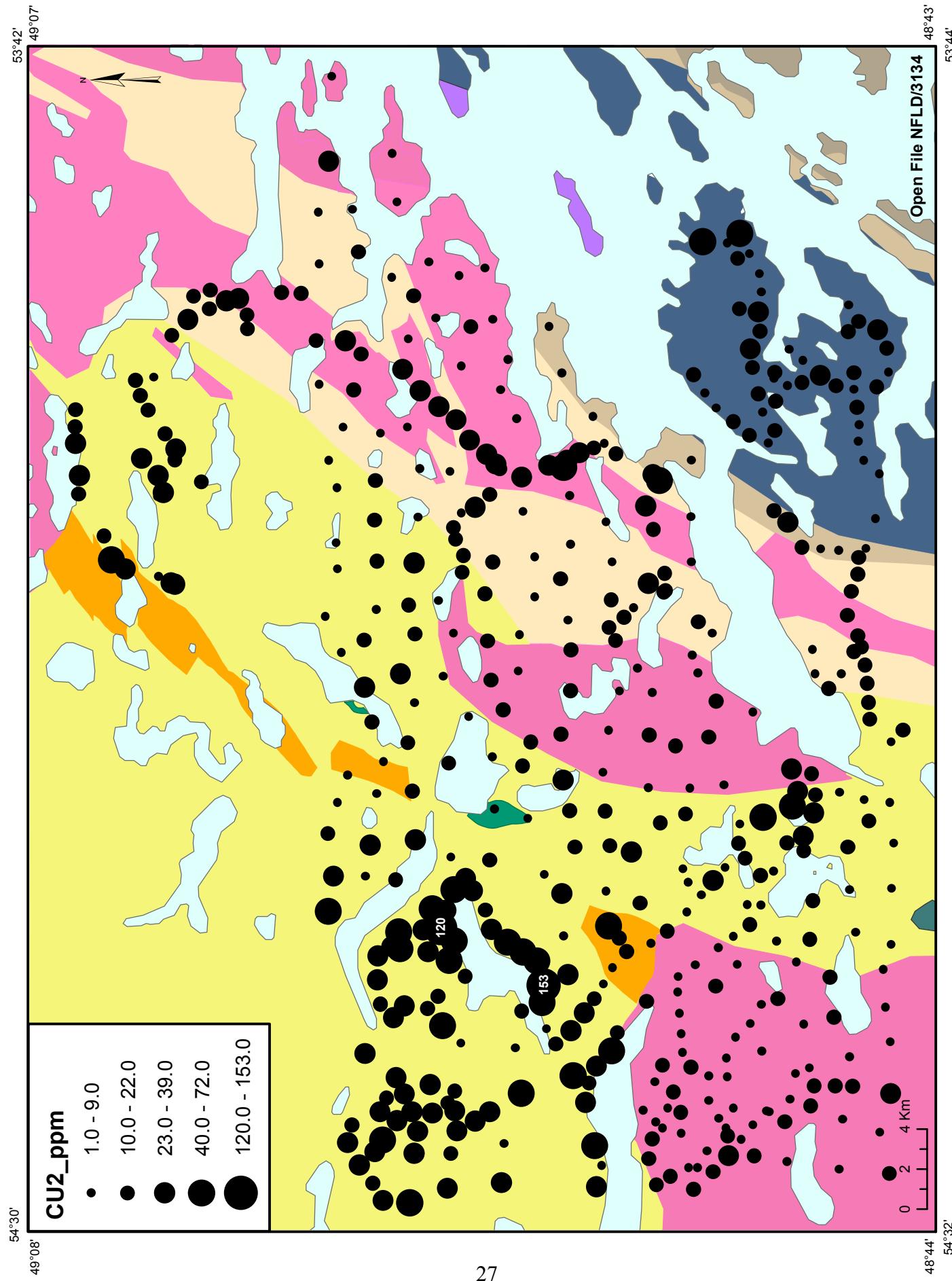
Approximately 26 percent of the data have anomalous values of lead (>15 ppm). The highest lead values is 276 ppm (sample 7390), associated with one anomalous value in till overlying bedrock of the Musgravetown Group (Figure 11). Approximately 4% of the data are elevated to very elevated with values above 34 ppm; the distribution of the highest lead values is non-clustered. No lead occurrences have been identified in this area.

Lead is moderately- to well-correlated with cerium (0.35), cobalt (0.28), iron (0.28), magnesium (0.36), strontium (0.35), and zinc (0.82) (Table 6). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## **NICKEL (Ni)**

Approximately 25 percent of the data have anomalous levels of nickel (above 26 ppm). The highest nickel value is 117 ppm (sample 7390), associated with till overlying bedrock of the Musgravetown Group (Figure 12). A cluster of elevated nickel values (58 to 115 ppm) occur in till





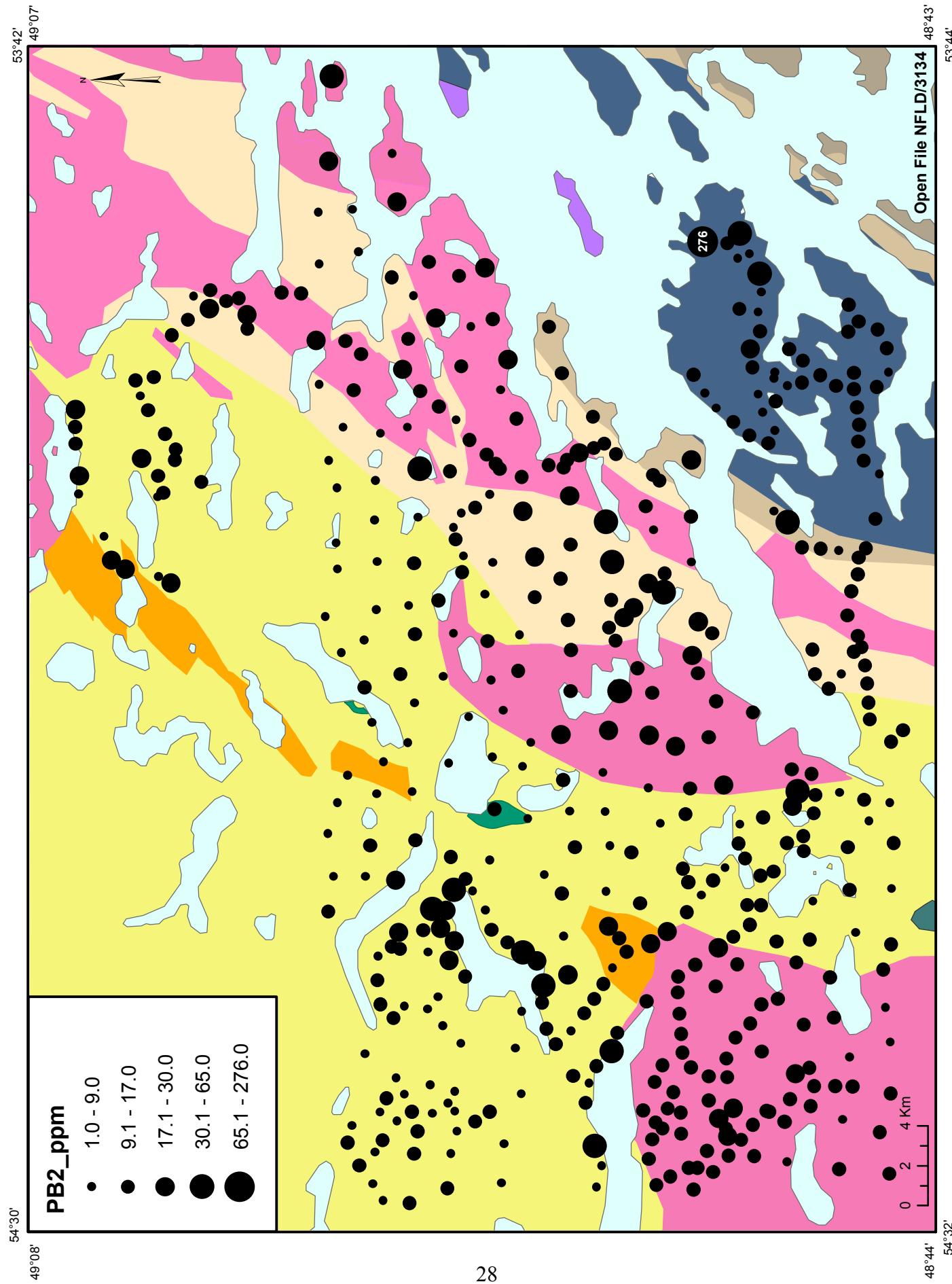


Figure 11. Distribution of lead ( $Pb_2$ ) in till.

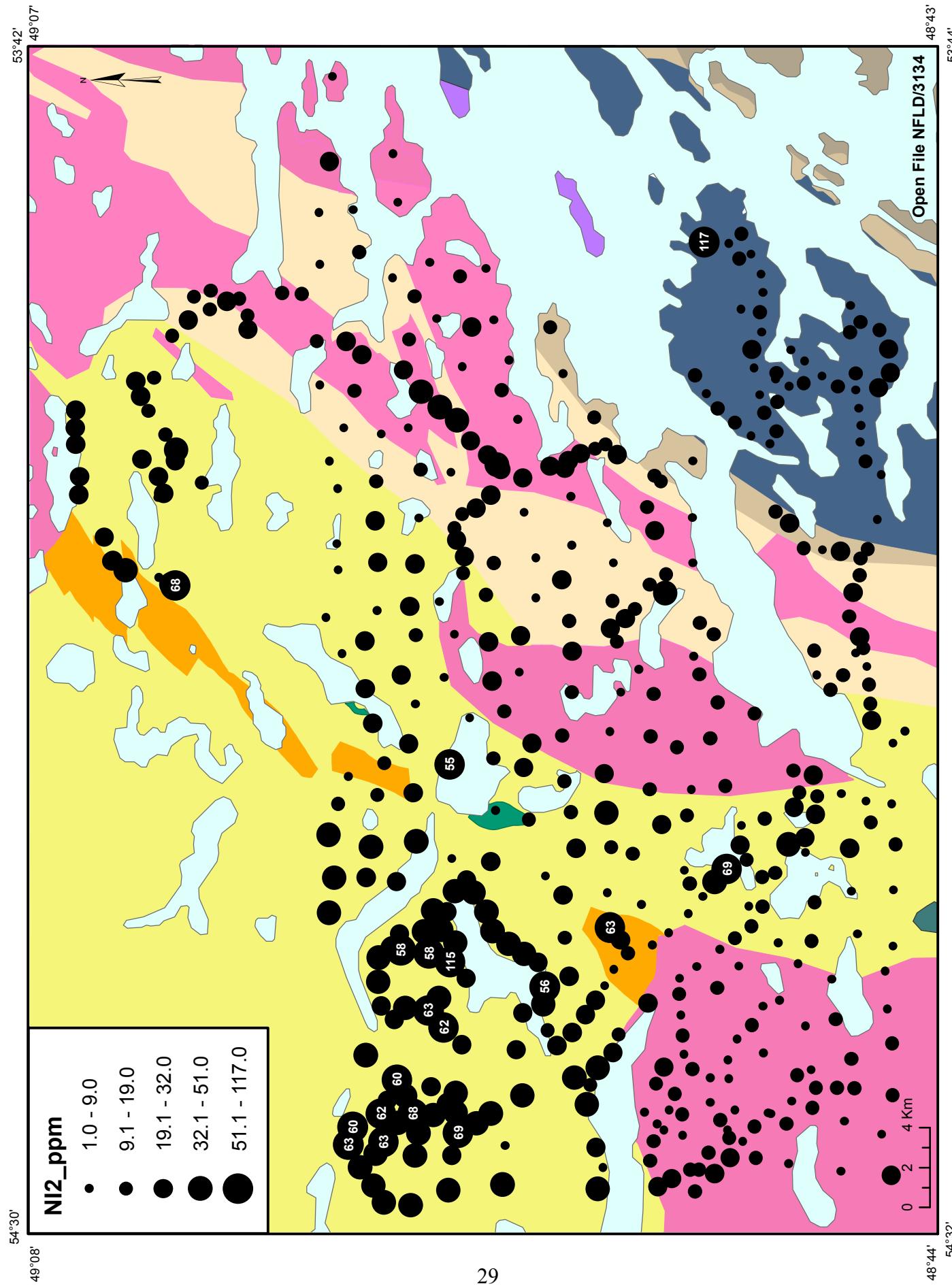


Figure 12. Distribution of nickel (Ni2) in till.

overlying the Jonathans Pond Formation southeast of Jonathan's Pond and in the Soulis Pond area (Figure 1). There are no known nickel occurrences in this area.

Nickel is moderately- to well-correlated with arsenic (0.45), cerium (0.49), cobalt (0.83), chromium (0.84), copper (0.69), iron (0.69), lithium (0.44), magnesium (0.86), manganese (0.57), scandium (0.61), vanadium (0.53), and zinc (0.59) (Table 6). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## YTTERBIUM (Yb)

Anomalous ytterbium values ( $>9.5$  ppm) are scattered throughout the study area. The highest value is 56 ppm (sample 7387), associated with till overlying bedrock of the Musgravetown Group (Figure 13). Elevated ytterbium values ( $>23.2$  ppm) occur in several small clusters in till overlying bedrock of the Musgravetown Group (25 to 56 ppm), Hare Bay Gneiss (34 to 37 ppm) and Gander Lake granite (25 to 28 ppm).

Ytterbium 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). 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) (Table 6). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is thus considered accurate and precise.

## ZINC (Zn)

Approximately 25 percent of the data have slightly elevated to elevated zinc values (54 ppm to 138 ppm); the distribution of these values is non-clustered. One highly elevated zinc value of 910 ppm (sample 7390) was recorded in till overlying rocks of the Musgravetown Group (Figure 14). No known zinc occurrences have been identified in the study area.

Zinc is moderately- to well-correlated with barium (0.40), cerium (0.25), hafnium (0.31), lanthanum (0.28), lutetium (0.39), niobium (0.37), scandium (0.25), terbium (0.34), and ytterbium (0.43) (Table 6). Field and laboratory duplicates showed a high degree of correlation (Table 4), and the data is considered accurate and precise.

## SUMMARY

The study area has evidence of two 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; Scott, 1994). The eastward ice-flow event was followed by a north to northeastward ice-flow, likely sourced from the Middle Ridge area (Rogerson, 1982). The northward flow is only present in the western portion of the field area. East of this area no striation or landform evidence of the northward flow is observed. Till occurs mostly as a veneer where hummocky and bouldery

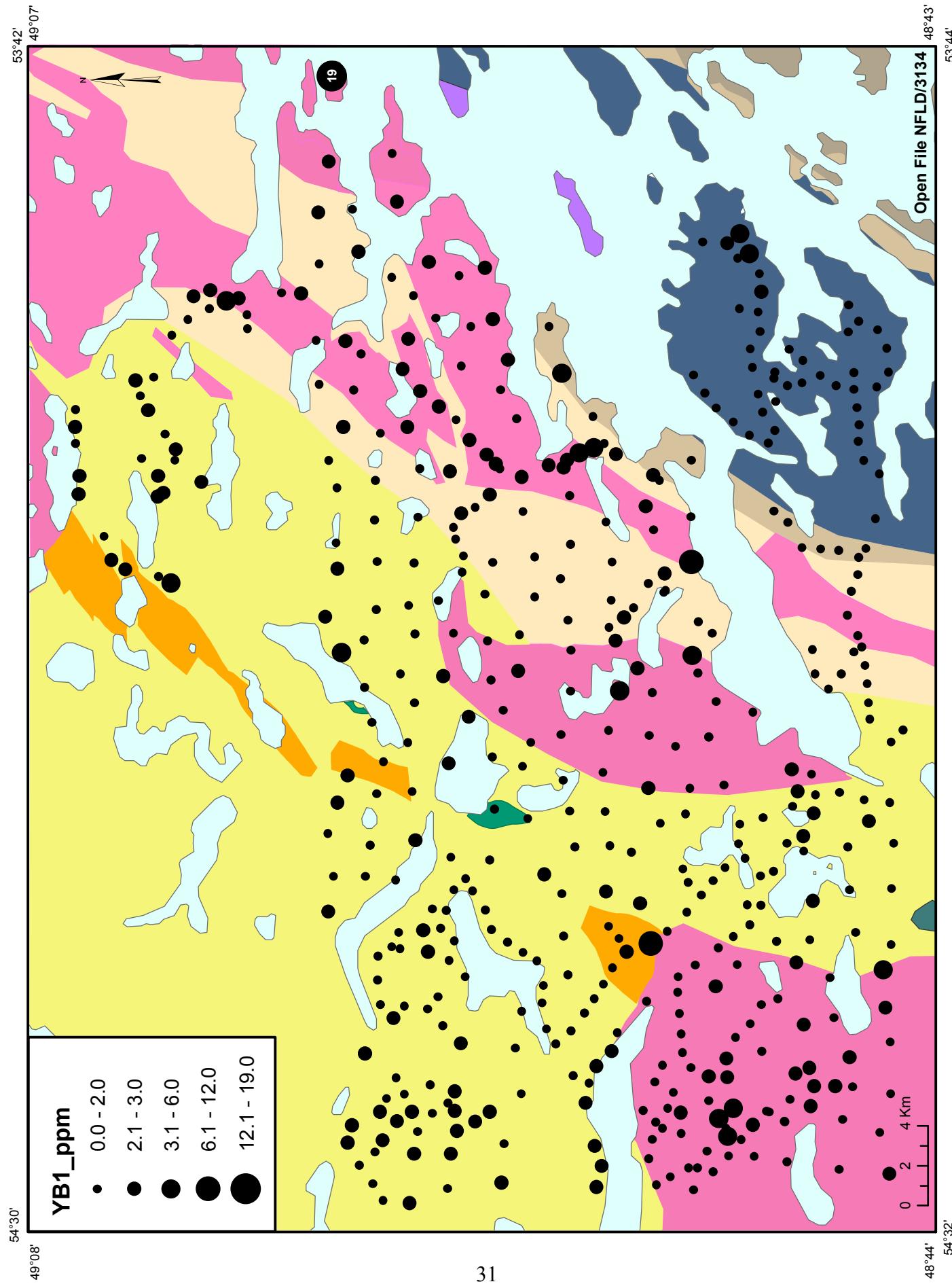


Figure 13. Distribution of ytterbium ( $Yb$ ) in till.

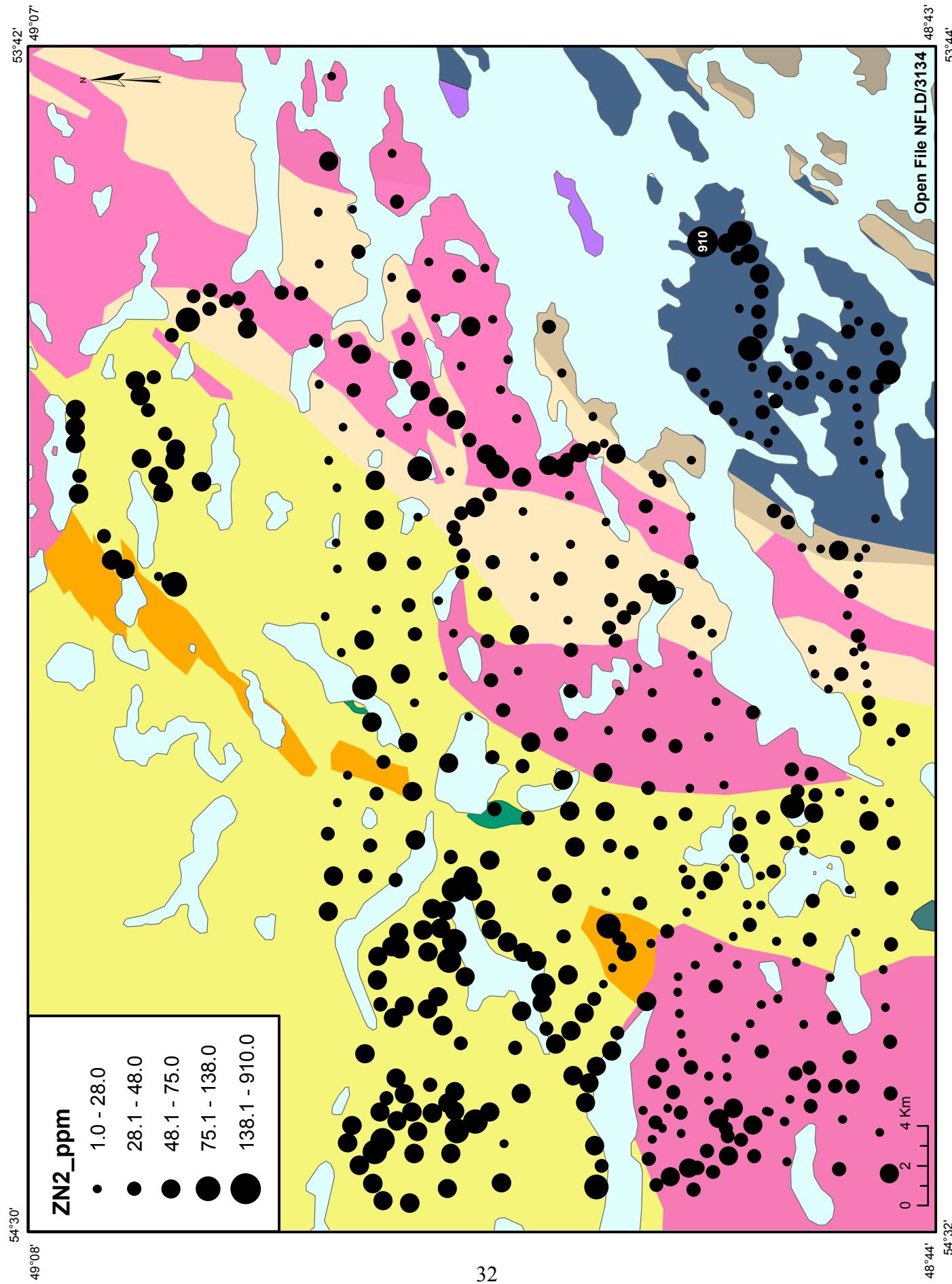


Figure 14. Distribution of zinc (Zn2) in till.

terrain are common, likely formed by a stagnating remnant ice centre, previously postulated by Grant (1974). Landform evidence supporting the presence (and possible extent) of stagnant ice includes hummocky moraine at the eastern end of Gander Lake, hummocky topography south of Gander Lake, and esker-like ridges at the eastern end of Gander Lake, Joe Batt's Brook, and Fox Pond. The area became ice-free sometime before 12.2 ka (11.3 cal years BP) based on shells from the Gander River valley (McCuaig, 2006).

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

1. Despite the presence of two ice flows, only one till unit was observed, although it should be noted that fieldwork was limited to natural exposures up to 2 m thick, and separate till units may be found at depth, in areas of thick till. Based on striation and glacial landform evidence, the regional eastward ice-flow event was the dominant ice-flow event to have affected the area.
2. Evidence for northward ice flow is present in the westernmost portion of the study area. West of the study area, evidence of northward flow is more prominent and two ice-flow directions should be taken into account for mineral exploration purposes (St. Croix and Taylor, 1990, 1991; Batterson and Vatcher, 1991; Scott, 1994). Future till sampling and surficial mapping in areas to the west and north of the study area, conducted in the 2010 field season, should help to resolve the extent of the northward flow and the dominant ice-flow direction to be considered in future mineral exploration strategies.
3. Sampling in glaciofluvial, fluvial and marine settings should be avoided due to the possibility of sediment reworking, and the difficulty in defining distances and directions of transport. These areas include the Butts Pond–Gambo area, valley bottoms and areas below the 45 m marine limit.
4. Hummocky deposits south of Gander Lake likely formed in a stagnating glacial environment and may contain a greater proportion of supraglacial (and more far travelled) sediment than basally-deposited till and less likely to be representative of the underlying bedrock.

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**APPENDIX A**

**Field and Geochemical Data**

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7002	c	702891	5404215	21	27	112.3	02D/16	46.28	0.5	4.88	1.7	4	1	240	234	4.2	14	0.32	0.5	29	1	5	18	16		
7003	c	683421	5417681	21	27	136.1	02D/16	30.39	0.5	7.07	5.7	7	1	520	500	2.8	30	0.31	0.5	93	81	15	21	120	76	
7004	c	684499	5417423	21	27	94.9	02D/16	28.83	0.5	5.80	1.1	4	1	400	416	0.9	13	0.44	0.1	47	38	5	12	69	62	
7005	c	685494	5417754	21	27	81.9	02D/16	30.13	0.5	6.46	5.9	8	2	460	444	3.3	4	0.59	0.1	110	91	15	20	120	70	
7007	c	687661	5418211	21	27	73.3	02D/16	39.95	0.5	6.07	10.0	10	1	440	406	2.7	2	0.47	0.5	92	85	15	19	130	63	
7008	c	688649	5418046	21	27	66.4	02D/16	23.63	0.5	7.18	1.5	3	1	260	305	1.7	51	0.37	0.2	48	38	13	19	68	69	
7009	c	689485	5417681	21	27	59.5	02D/16	35.33	0.5	6.27	10.0	11	1	360	340	3.3	23	0.39	0.1	98	88	11	17	150	72	
7010	c	690258	5416900	21	27	78.5	02D/16	32.82	0.5	6.27	8.7	10	1	420	398	3.7	6	0.58	0.2	99	69	14	20	110	67	
7011	c	691168	5416620	21	27	114.9	02D/16	41.71	0.5	6.29	10.0	11	1	320	315	4.1	26	0.44	0.5	81	49	5	11	90	44	
7013	c	692752	5415173	21	27	81.4	02D/16	35.28	0.5	7.00	8.7	10	1	330	317	2.8	13	0.39	0.2	74	45	9	15	150	81	
7015	c	693997	5413567	21	27	127.4	02D/16	46.07	0.5	4.50	3.8	5	1	220	229	4.2	6	0.50	0.5	62	42	1	8	80	30	
7016	c	694573	5412708	21	27	114.5	02D/16	23.14	0.5	6.84	6.8	8	1	190	189	4.2	49	0.42	0.2	67	37	1	7	82	39	
7017	c	693507	5411683	21	27	230.1	02D/16	50.55	0.5	5.11	2.3	4	1	250	263	5.1	3	0.53	0.5	62	48	6	9	52	27	
7018	c	696008	5410795	21	27	173.1	02D/16	40.76	0.5	5.36	4.7	6	1	230	225	4.2	11	0.45	0.5	62	49	3	7	73	34	
7019	c	696598	5409967	21	27	113.5	02D/16	50.28	0.5	5.07	3.5	5	1	200	203	4.3	16	0.54	0.5	51	35	1	5	62	25	
7020	c	697587	5410093	21	27	83.9	02D/16	49.69	0.5	4.76	0.6	3	1	250	228	4.1	1	0.63	0.5	63	44	1	7	73	28	
7022	c	697574	5409406	21	27	79.3	02D/16	47.79	0.5	5.17	10.0	10	1	200	190	3.8	2	0.45	0.2	46	31	6	9	78	34	
7023	c	699269	5408779	21	27	133.9	02D/16	30.39	0.5	5.89	3.4	5	1	350	351	3.4	4	0.58	0.5	73	40	5	11	85	46	
7024	c	700709	5408099	21	27	84.5	02D/16	41.79	0.5	5.01	7.5	8	1	270	253	3.4	4	0.63	0.5	69	47	8	13	110	68	
7025	c	699934	5410209	21	27	75.8	02D/16	60.93	0.5	4.21	4.6	6	1	180	192	3.6	3	0.61	0.5	42	34	3	6	69	27	
7026	c	699064	5409448	21	27	84.7	02D/16	59.11	0.5	4.22	7.0	8	1	190	195	3.6	3	0.60	0.1	44	34	5	8	77	27	
7027	c	700307	5407249	21	27	88.3	02D/16	55.29	0.5	4.65	2.8	4	1	220	221	3.2	8	0.52	0.5	41	32	4	8	44	24	
7028	c	701046	5407280	21	27	87.5	02D/16	55.99	0.5	4.91	5.5	7	1	270	257	3.6	2	0.60	0.2	73	58	8	14	110	52	
7029	c	702195	5406745	21	27	111.7	02D/16	36.76	0.5	6.24	200.0	171	13	380	373	3.3	27	0.42	0.4	87	62	14	17	84	57	
7030	c	703121	5406669	21	27	129.8	02D/16	39.67	0.5	5.59	10.0	11	1	270	272	3.8	36	0.46	0.5	75	63	4	9	87	46	
7031	c	703263	5405470	21	27	141.0	02D/16	39.27	0.5	4.70	4.5	5	1	250	242	2.7	16	0.38	0.5	52	29	1	7	89	32	
7032	c	702727	5402925	21	27	87.3	02D/09	51.84	0.5	4.70	2.3	3	1	200	214	3.6	15	0.62	0.5	35	29	3	6	29	17	
7033	c	687766	5412035	21	27	109.6	02D/16	55.59	0.5	4.70	2.7	5	1	250	246	4.1	2	0.57	0.5	48	44	3	7	62	25	
7034	c	725929	5430307	21	27	64.2	02C/13	52.45	0.5	3.37	14.0	14	2	200	199	1.9	2	0.59	0.1	64	60	11	13	390	57	
7035	c	728080	5435661	21	27	46.9	02F/04	43.31	0.5	4.60	9.1	10	1	380	362	4.1	17	0.79	0.5	86	59	9	14	150	49	
7036	c	725278	5429514	21	27	57.4	02C/13	45.98	0.5	4.42	9.2	9	1	270	260	1.6	15	0.49	0.1	74	60	9	12	280	64	
7037	c	724521	5427410	21	27	90.0	02C/13	42.90	0.5	5.44	11.0	11	1	390	379	2.8	11	0.44	0.5	110	98	14	17	160	61	
7038	c	723429	5426537	21	27	92.9	02C/13	39.65	0.5	5.62	13.0	12	1	440	394	2.3	3	0.41	0.5	97	90	18	19	210	76	
7039	c	722635	5425607	21	27	131.1	02C/13	39.55	0.5	5.55	13.0	13	1	370	351	1.9	15	0.37	0.1	80	66	15	17	210	75	
7040	c	720956	5424060	21	27	90.1	02C/13	41.59	0.5	5.01	14.0	14	3	310	290	2.1	20	0.45	0.5	97	73	12	15	220	67	
7042	c	720232	5423194	21	27	91.8	02C/13	39.59	0.5	5.23	8.6	10	2	360	331	2.5	8	0.62	0.5	88	68	11	14	180	60	
7043	c	719090	5421443	21	27	68.4	02D/16	41.84	0.5	5.62	14.0	14	1	430	394	2.4	5	0.44	0.5	100	83	16	18	140	65	
7044	c	719679	5420072	21	27	46.8	02D/16	46.95	0.5	5.00	10.0	9	2	340	327	2.5	13	0.58	0.1	89	74	15	14	140	52	
7045	c	719584	5419329	21	27	43.8	02D/16	48.29	0.5	5.42	7.6	8	1	300	291	2.9	17	0.98	0.2	87	75	15	19	290	69	
7046	c	727247	5435231	21	27	134.2	02F/04	42.79	0.5	4.74	14.0	13	1	300	305	3.3	23	0.60	0.5	68	53	9	13	120	42	
7047	c	726543	5435219	21	27	180.3	02F/04	38.38	0.5	5.40	18.0	17	1	440	404	2.3	18	0.39	0.5	75	58	9	13	190	74	
7048	c	719508	5422544	21	27	131.6	02D/16	31.91	0.5	5.97	9.2	12	1	340	329	1.9	41	0.37	0.1	93	69	9	14	190	67	
7049	c	719751	5422754	21	27	123.3	02D/16	38.03	0.5	5.74	18.0	17	2	410	381	2.3	5	0.36	0.2	94	76	19	21	170	74	
7050	c	719950	5419155	21	27	45.4	02C/13	44.13	0.5	5.46	6.8	8	1	370	345	3.2	3	0.77	0.5	89	67	11	15	130	53	
7051	c	720324	5418552	21	27	50.6	02C/13	24.51	0.5	6.58	7.9	9	1	450	437	4.1	15	0.79	0.1	140	109	20	24	150	57	
7052	c	720550	5417812	21	27	64.3	02C/13	47.16	0.5	5.50	2.2	4	1	440	409	3.1	15	0.93	0.5	150	134	5	12	59	33	
7053	c	720784	5417277	21	27	56.4	02C/13	49.42	0.5	4.96	3.0	4	1	350	332	3.2	12	0.68	0.5	69	52	4	9	78	40	

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt grams	Ag4 ppm	Al2 ppm	As1 ppm	As2 ppm	Au1 ppm	Ba1 ppm	Ba2 ppm	Be2 ppm	Br1 ppm	Ca2 ppm	Cd2 ppm	Ce1 ppm	Ce2 ppm	Co1 ppm	Co2 ppm	Cr1 ppm	Cr2 ppm
7054	c	720246	5416687	21	27	32.1	02C/13	36.78	0.5	6.18	3.2	5	1	440	390	3.8	8	0.82	0.1	89	72	12	15	120	60
7055	c	719209	5414837	21	27	48.9	02D/16	52.09	0.5	5.10	1.4	3	1	320	310	3.1	11	0.88	0.5	63	53	5	9	76	41
7056	c	714236	5414236	21	27	53.0	02D/16	46.68	0.5	4.99	4.5	6	1	270	255	3.9	2	0.56	0.5	66	52	4	8	70	34
7057	c	713735	5415066	21	27	42.3	02D/16	46.66	0.5	6.04	2.7	4	1	390	395	9.2	10	0.62	0.5	60	55	6	10	44	34
7058	c	704422	5407857	21	27	65.0	02D/16	42.41	0.5	5.44	9.4	9	1	340	309	3.3	5	0.43	0.5	78	57	8	12	75	44
7059	c	703293	5407565	21	27	0.0	02D/16	49.10	0.5	5.38	10.0	11	3	280	283	3.2	9	0.49	0.5	66	45	7	10	79	40
7060	c	725959	5431762	21	27	33.5	02C/13	46.16	0.5	3.98	7.3	7	1	210	197	2.5	19	0.60	0.2	87	79	8	11	310	63
7061	bc	721974	5424734	21	27	110.2	02C/13	37.47	0.5	5.68	14.0	14	2	370	340	1.7	11	0.36	0.1	78	56	13	16	210	81
7062	c	718919	5414507	21	27	76.0	02D/16	45.04	0.5	5.32	2.5	4	1	360	329	3.4	4	0.79	0.5	71	48	6	10	63	34
7063	c	717634	5415209	21	27	96.2	02D/16	44.48	0.5	5.18	3.3	5	1	350	330	3.8	8	0.69	0.5	90	72	5	10	67	34
7065	c	716457	5414806	21	27	106.7	02D/16	35.98	0.5	6.72	3.4	4	1	250	241	3.0	17	0.86	0.2	56	35	10	12	74	43
7066	c	713294	5414282	21	27	38.8	02D/16	13.31	0.5	9.36	4.0	6	1	430	489	10.4	72	0.08	0.3	47	53	16	22	130	130
7067	c	713391	5414203	21	27	44.3	02D/16	23.06	0.5	5.78	5.7	7	1	250	246	4.6	27	0.51	0.5	57	38	8	9	82	37
7068	c	710131	5412865	21	27	49.5	02D/16	31.11	0.5	8.20	1.3	4	1	950	975	2.9	5	3.37	0.5	50	28	3	18	19	19
7069	c	711243	5411854	21	27	69.6	02D/16	48.67	0.5	5.00	5.2	6	1	200	213	4.1	20	0.50	0.5	44	31	5	6	61	28
7070	c	711823	5412557	21	27	46.6	02D/16	35.16	0.5	5.87	6.4	7	1	250	259	4.7	55	0.40	0.1	170	117	10	10	88	49
7071	c	709240	5412578	21	27	66.0	02D/16	52.13	0.5	4.63	2.7	4	1	220	232	3.5	3	0.59	0.5	51	37	4	6	51	28
7072	c	707822	5411676	21	27	65.6	02D/16	49.64	0.5	5.08	4.1	6	1	300	286	3.6	23	0.70	0.5	81	48	8	10	93	40
7073	c	728495	5437100	21	27	58.5	02F/04	45.56	0.5	4.41	10.0	9	2	330	300	3.3	18	0.52	0.5	78	46	5	10	12	210
7074	c	728184	5437921	21	27	114.5	02F/04	40.18	0.5	4.59	22.0	20	4	350	348	1.6	7	0.29	0.5	87	57	14	15	170	48
7076	c	724121	5439942	21	27	106.2	02F/04	29.19	0.5	5.30	23.0	24	1	370	394	1.5	39	0.35	0.5	62	35	10	15	210	63
7077	c	723942	5440853	21	27	138.6	02F/04	43.97	0.5	4.59	16.0	15	51	300	296	1.8	23	0.50	0.5	78	49	13	16	270	71
7078	c	723185	5440617	21	27	95.2	02F/04	29.54	0.5	6.05	21.0	20	1	400	407	2.1	57	0.34	0.1	77	52	11	15	200	85
7079	c	722455	5440217	21	27	75.2	02F/04	51.65	0.5	3.22	36.0	31	18	210	216	1.3	2	0.47	0.2	70	48	14	16	370	51
7080	c	721249	5439370	21	27	106.0	02F/04	22.87	0.5	5.57	17.0	17	1	380	417	1.7	14	0.24	0.5	73	49	7	11	140	65
7081	c	720484	5438822	21	27	124.2	02F/04	37.13	0.5	5.60	30.0	25	3	440	395	1.8	9	0.27	0.5	100	72	19	21	210	72
7083	c	722473	5443879	21	27	125.0	02F/04	39.22	0.5	5.13	27.0	22	1	340	312	2.0	32	0.31	0.1	73	49	11	14	180	59
7084	c	721603	5443892	21	27	119.3	02F/04	42.39	0.5	5.11	15.0	14	3	360	342	2.5	10	0.49	0.5	75	49	11	14	200	64
7085	c	720776	5443871	21	27	108.1	02F/04	38.24	0.5	5.42	20.0	18	2	400	365	2.3	21	0.58	0.5	87	55	13	15	210	73
7086	c	719167	5443679	21	27	101.4	02F/04	23.53	0.5	6.30	89.3	77	6	180	210	2.5	184	0.39	0.4	99	72	16	13	190	91
7087	c	718249	5443724	21	27	99.8	02E/01	31.53	0.5	6.58	10.0	11	1	480	471	2.2	25	0.27	0.5	120	89	17	22	190	88
7088	c	714460	5441358	21	27	71.6	02E/01	38.44	0.5	5.06	161.0	126	7	340	318	1.7	25	0.43	0.5	140	99	22	23	240	83
7089	c	714958	5442000	21	27	82.8	02E/01	39.24	0.5	5.14	42.0	36	1	310	302	1.7	10	0.21	0.1	93	58	14	16	180	60
7090	c	707280	5409817	21	27	29.3	02D/16	6.26	0.5	7.56	6.0	8	12	270	309	4.5	104	0.60	0.5	110	88	20	18	68	54
7091	c	718841	5437543	21	27	63.4	02E/01	37.87	0.5	5.22	19.0	18	2	360	361	1.2	12	0.21	0.1	77	53	12	15	220	68
7092	c	719948	5438871	21	27	136.7	02F/04	35.59	0.5	5.83	23.0	20	5	380	359	1.7	41	0.23	0.1	91	62	13	14	190	69
7093	c	727542	5437149	21	27	26.5	02F/04	55.25	0.5	3.65	13.0	13	1	240	242	3.1	4	0.63	0.5	67	44	11	14	270	43
7094	c	718110	5439736	21	27	101.2	02E/01	25.87	0.5	4.96	9.4	9	7	470	465	1.0	7	0.10	0.5	60	39	6	11	140	57
7095	c	713759	5439066	21	27	69.5	02E/01	44.15	0.5	6.11	46.0	38	5	470	431	2.3	3	0.16	0.1	140	94	23	22	180	75
7096	c	718302	5439451	21	27	36.6	02E/01	41.55	0.5	5.11	26.0	23	4	380	374	1.7	4	0.27	0.2	100	74	12	15	220	70
7097	c	719150	5439722	21	27	126.0	02F/04	41.11	0.5	5.30	28.0	25	1	330	331	1.5	12	0.32	0.1	93	63	12	14	270	73
7098	c	720040	5440550	21	27	89.9	02F/04	16.43	0.5	7.48	28.0	29	1	290	320	2.1	137	0.17	0.3	70	59	13	15	260	97
7099	c	713697	5438867	21	27	74.6	02E/01	25.26	0.1	6.72	23.0	23	1	370	387	2.0	48	0.05	0.3	94	73	18	19	200	142
7100	c	713759	5439066	21	27	100.7	02E/01	23.47	0.5	0.01	295.0	1	7	450	1	0.1	43	0.05	0.1	80	1	21	1	170	1
7102	c	714096	5439699	21	27	85.5	02E/01	50.34	0.5	4.05	77.3	66	8	310	288	1.7	3	0.34	0.2	72	67	16	20	200	47
7103	c	714914	5442065	21	27	152.0	02E/01	43.99	0.5	4.17	19.0	18	2	260	252	1.4	25	0.42	0.5	48	44	6	12	300	57
7104	c	716119	5442421	21	27	82.2	02F/04	26.20	0.5	7.17	54.9	50	1	520	498	2.8	48	0.21	0.2	58	54	13	19	150	97
7105	c	727011	5438218	21	27																				

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7106	c	726207	5439018	21	27	99.5	02F/04	34.29	0.5	5.50	29.0	26	1	330	313	2.1	88	0.25	0.5	59	50	7	12	180	63	
7107	c	686116	5413451	21	27	102.7	02D/16	35.08	0.5	5.08	0.3	3	1	340	328	3.5	9	0.38	0.5	68	34	1	6	41	17	
7108	c	687148	5413439	21	27	103.1	02D/16	34.83	0.5	5.24	2.9	5	1	370	327	4.8	1	0.72	0.5	87	69	6	11	53	31	
7109	c	684837	5415043	21	27	72.3	02D/16	44.32	0.5	5.66	3.5	5	1	280	271	4.5	14	0.54	0.5	52	44	4	9	62	33	
7110	c	683821	5414880	21	27	86.5	02D/16	45.79	0.5	5.47	6.1	7	1	260	242	5.3	6	0.50	0.5	94	87	10	12	81	39	
7111	c	688671	5414697	21	27	109.9	02D/16	41.95	0.5	5.85	1.3	3	1	370	339	4.4	8	0.42	0.5	70	64	3	8	42	27	
7112	c	687265	5415339	21	27	98.1	02D/16	33.44	0.5	5.95	2.3	4	1	320	301	4.3	12	0.36	0.5	79	55	1	8	59	34	
7113	c	687373	5414095	21	27	101.2	02D/16	37.66	0.5	6.03	2.3	5	1	350	335	4.3	17	0.44	0.5	66	52	2	8	64	32	
7114	c	689545	5414347	21	27	124.6	02D/16	42.26	0.5	6.19	5.4	7	1	350	346	5.1	9	0.46	0.5	71	72	7	12	88	48	
7115	c	689874	5411151	21	27	151.6	02D/16	44.33	0.5	5.65	2.0	4	1	260	265	4.9	31	0.46	0.5	63	59	1	6	42	27	
7116	c	688942	5411092	21	27	122.2	02D/16	44.32	0.5	5.08	4.1	6	1	280	261	4.4	12	0.47	0.5	75	64	2	8	53	30	
7117	c	688986	5412047	21	27	133.0	02D/16	38.19	0.5	5.40	2.4	4	1	300	284	4.1	13	0.48	0.5	78	56	4	8	61	27	
7118	c	687382	5410797	21	27	111.9	02D/16	43.45	0.5	5.93	2.7	5	1	330	301	6.0	7	0.65	0.5	120	99	4	10	32	21	
7119	c	696598	5409967	21	27	108.9	02D/16	43.07	0.5	5.87	6.0	7	1	330	298	5.4	2	0.55	0.5	100	65	5	11	88	37	
7120	c	688878	5411539	21	27	111.8	02D/16	42.63	0.5	6.13	3.4	6	1	320	301	5.6	1	0.54	0.5	89	72	5	9	53	26	
7122	c	683983	5411085	21	27	156.2	02D/16	47.51	0.5	5.44	6.8	8	1	350	319	4.6	5	0.85	0.5	110	92	6	14	55	32	
7123	c	686709	5408246	21	27	170.4	02D/16	47.33	0.5	4.80	2.5	4	1	240	244	3.5	19	0.55	0.5	49	42	1	7	46	25	
7124	c	687192	5409005	21	27	161.6	02D/16	53.74	0.5	4.44	3.9	4	1	220	208	3.5	1	0.57	0.5	45	41	4	8	51	24	
7125	c	689131	5407670	21	27	171.0	02D/16	36.59	0.5	5.62	5.1	6	1	260	230	6.1	35	0.44	0.5	81	61	3	9	61	32	
7126	c	689412	5406963	21	27	154.5	02D/16	46.91	0.5	5.23	10.0	10	12	220	211	6.6	11	0.45	0.1	63	50	5	9	84	28	
7127	c	688493	5406722	21	27	190.0	02D/16	40.57	0.5	5.34	8.0	8	1	270	260	3.2	5	0.44	0.5	66	43	6	10	89	39	
7128	c	688471	5404803	21	27	121.6	02D/16	45.62	0.5	4.45	14.0	13	1	210	200	3.2	15	0.54	0.5	59	52	9	12	120	38	
7129	c	688488	5405691	21	27	164.4	02D/16	43.19	0.5	5.11	9.3	11	1	230	232	3.1	19	0.59	0.5	67	42	6	11	120	40	
7130	c	687477	5406900	21	27	212.3	02D/16	45.49	0.5	4.85	9.0	9	1	260	260	3.6	13	0.55	0.5	78	47	5	9	78	31	
7131	c	685188	5423882	21	27	128.9	02D/16	34.86	0.5	5.92	22.0	19	3	310	293	1.6	19	0.55	0.1	72	57	17	18	320	95	
7132	c	688899	5427748	21	27	130.1	02D/16	30.81	0.5	6.41	25.0	24	16	270	253	1.4	53	0.72	0.2	59	48	14	17	790	130	
7133	c	688090	5427332	21	27	143.8	02D/16	37.71	0.5	5.69	15.0	14	4	300	266	1.3	27	0.53	0.5	63	42	13	15	360	99	
7134	c	688556	5426041	21	27	114.9	02D/16	42.83	0.5	4.48	17.0	16	1	250	234	1.3	15	0.41	0.1	58	50	9	13	210	66	
7135	c	687208	5426949	21	27	148.5	02D/16	39.25	0.5	5.97	30.0	26	5	370	348	1.9	3	0.51	0.2	90	76	26	25	340	109	
7136	c	686210	5426675	21	27	147.2	02D/16	35.04	0.5	5.91	17.0	16	1	350	320	1.6	15	0.46	0.2	72	60	16	19	270	92	
7137	c	687140	5425936	21	27	116.8	02D/16	37.40	0.5	5.52	16.0	15	1	290	278	1.5	31	0.56	0.5	55	58	11	14	320	86	
7138	c	685104	5426842	21	27	126.5	02D/16	38.26	0.5	5.64	17.0	14	1	330	314	1.7	16	0.42	0.5	75	57	13	16	250	77	
7139	c	687205	5428848	21	27	119.5	02D/16	40.84	0.5	5.33	25.0	22	1	310	287	1.4	5	0.66	0.2	76	63	20	21	440	113	
7141	c	687881	5428322	21	27	117.4	02D/16	44.31	0.5	4.41	17.0	15	1	210	209	1.2	13	0.36	0.1	64	55	10	12	230	64	
7142	c	686746	5427701	21	27	145.8	02D/16	30.52	0.5	6.13	10.0	11	3	340	330	1.5	11	0.46	0.1	74	49	11	15	330	96	
7143	c	687683	5428420	21	27	140.1	02D/16	36.36	0.5	6.20	32.0	26	4	400	378	1.8	6	0.48	0.1	99	91	23	23	370	113	
7144	c	687635	5425144	21	27	115.5	02D/16	25.14	0.5	7.00	14.0	14	9	330	341	1.7	51	0.43	0.1	46	42	13	17	330	119	
7145	c	688215	5424788	21	27	116.4	02D/16	33.05	0.5	6.12	22.0	20	7	400	362	1.8	3	0.42	0.1	84	66	17	20	340	99	
7146	c	687234	5424792	21	27	128.7	02D/16	34.78	0.5	5.94	17.0	15	3	390	371	1.9	10	0.46	0.5	95	81	15	17	390	109	
7147	c	688236	5424677	21	27	113.5	02D/16	33.17	0.5	6.63	21.0	20	1	400	398	2.1	34	0.38	0.2	63	60	22	23	380	136	
7148	c	687188	54223047	21	27	176.7	02D/16	30.57	0.5	6.12	14.0	13	1	510	460	2.4	2	0.25	0.5	99	72	18	20	130	63	
7149	c	686715	5423771	21	27	154.9	02D/16	32.18	0.5	6.87	15.0	14	1	570	519	3.0	2	0.29	0.5	100	76	19	20	180	80	
7150	c	685106	5425000	21	27	116.1	02D/16	30.73	0.5	5.78	10.0	10	3	340	296	1.5	23	0.59	0.1	61	45	11	15	550	101	
7152	c	683345	5425166	21	27	143.6	02D/16	39.70	0.5	5.23	22.0	20	10	230	227	1.4	21	0.49	0.1	64	52	14	17	370	91	
7153	c	682605	54227062	21	27	134.7	02D/15	45.88	0.5	4.47	19.0	17	1	250	263	1.4	2	0.66	0.1	71	65	15	17	340	75	
7154	c	686510	5429966	21	27	79.1	02D/16	40.27	0.5	5.34	14.0	14	6	300	284	1.4	12	0.72	0.1	64	50	12	15	570	118	
7155	c	685648	5430186	21	27	105.0	02D/16	34.27	0.5	5.65	49.0	42	3	310	289	1.6	29	0.72	0.2	99	97	23	25	490	132	

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7156	c	695242	5426145	21	27	154.1	02D/16	34.35	0.5	6.18	23.0	22	4	300	281	1.5	36	0.36	0.1	67	56	15	18	360	103	
7157	c	696333	5426400	21	27	117.4	02D/16	38.80	0.5	5.65	16.0	15	1	420	359	2.0	11	0.29	0.5	120	110	17	18	190	72	
7158	c	691919	5422872	21	27	135.0	02D/16	36.29	0.5	5.75	16.0	15	4	290	257	1.4	40	0.49	0.2	65	46	14	17	370	89	
7159	c	691521	5425401	21	27	130.0	02D/16	34.95	0.5	6.15	32.0	27	16	320	290	1.9	20	0.63	0.1	85	61	17	19	530	122	
7160	c	692371	5426173	21	27	131.0	02D/16	28.08	0.5	6.34	12.0	12	4	330	321	1.4	13	0.58	0.1	62	48	17	21	480	133	
7161	c	692508	5427332	21	27	121.4	02D/16	30.63	0.5	6.60	17.0	17	1	270	277	1.3	23	0.37	0.2	76	60	10	15	300	104	
7163	c	695442	5411551	21	27	164.2	02D/16	49.32	0.5	4.91	3.8	7	1	220	226	4.9	5	0.50	0.5	61	46	3	6	71	26	
7164	c	686696	5408212	21	27	177.8	02D/16	50.09	0.5	4.56	6.0	7	1	250	229	3.8	6	0.58	0.5	67	52	6	9	77	30	
7166	c	687246	5409143	21	27	168.5	02D/16	50.08	0.5	4.54	3.1	4	1	220	218	4.6	6	0.57	0.5	66	49	4	7	60	22	
7167	c	686533	5409818	21	27	155.6	02D/16	43.67	0.5	5.76	4.0	6	1	330	301	6.6	6	0.73	0.5	120	96	6	12	82	31	
7168	c	684964	5409754	21	27	191.4	02D/16	45.08	0.5	5.22	7.9	8	1	270	246	4.2	6	0.56	0.5	72	53	8	11	84	37	
7169	c	685792	5410397	21	27	171.6	02D/16	46.01	0.5	5.43	1.9	4	1	340	317	4.6	10	0.52	0.5	92	69	4	8	49	22	
7170	c	686358	5411174	21	27	152.6	02D/16	55.49	0.5	4.91	4.0	6	1	240	241	5.0	4	0.74	0.5	82	68	5	10	59	24	
7171	c	689020	5418849	21	27	91.1	02D/16	35.17	0.5	6.63	11.0	11	2	500	435	2.5	15	0.38	0.5	88	72	17	20	150	83	
7173	c	727943	5436283	21	27	0.0	02F/04	34.26	0.5	5.99	5.1	6	1	340	327	2.5	24	0.58	0.5	110	67	10	14	160	61	
7174	c	728318	5432521	21	27	94.0	02F/04	41.42	0.5	4.37	12.0	11	1	270	256	2.6	21	0.38	0.5	75	59	7	12	290	63	
7175	c	730415	5429645	21	27	66.5	02C/13	37.56	0.5	5.15	6.4	7	2	230	232	1.9	58	0.45	0.5	68	57	7	11	240	72	
7176	c	732548	5429953	21	27	48.9	02C/13	34.44	0.5	4.67	7.3	7	1	200	197	1.3	92	0.34	0.5	58	31	1	7	250	54	
7177	c	739232	5430979	21	27	53.7	02C/13	27.72	0.5	7.63	1.0	3	1	140	148	7.0	33	0.45	0.5	74	20	1	3	-10	7	
7178	c	mudboil	729911	5426107	21	27	125.3	02C/13	31.26	0.5	3.85	2.4	4	1	290	261	1.0	5	0.31	0.5	70	34	1	9	170	28
7179	c	mudboil	729200	5424581	21	27	175.4	02C/13	32.81	0.5	5.25	7.9	10	1	340	308	1.3	22	0.39	0.5	69	44	4	12	200	57
7181	c	mudboil	729608	5423291	21	27	171.6	02C/13	32.62	0.5	4.88	1.5	3	1	510	482	1.3	14	0.60	0.5	61	24	1	12	130	26
7182	c	mudboil	727015	5422894	21	27	141.2	02C/13	26.80	0.5	5.96	6.3	8	1	400	394	1.5	13	1.14	0.5	70	32	1	14	380	160
7184	c	724992	5422137	21	27	44.9	02C/13	28.87	0.5	8.18	0.5	3	1	700	671	2.9	14	2.89	0.5	34	22	1	17	16	11	
7185	c	723737	5431619	21	27	85.1	02C/13	39.48	0.5	3.93	3.0	3	1	260	248	1.4	5	0.25	0.5	46	29	2	7	290	37	
7186	c	721605	5430401	21	27	123.8	02C/13	34.29	0.5	2.50	1.7	1	11	180	172	0.7	2	0.11	0.5	57	28	1	5	230	23	
7187	c	728346	5433519	21	27	45.3	02F/04	46.29	0.5	3.41	7.3	7	1	200	187	2.0	14	0.41	0.5	51	46	8	12	170	47	
7188	bc	719933	5431136	21	27	109.5	02C/13	17.32	0.5	4.46	2.3	3	1	250	269	2.9	9	0.20	0.5	52	30	1	7	140	50	
7189	c	718546	5430720	21	27	125.4	02D/16	26.03	0.5	4.40	0.7	1	1	390	380	1.1	5	0.20	0.5	27	15	1	7	55	36	
7190	c	715800	5430754	21	27	76.8	02D/16	21.64	0.5	3.99	0.6	1	1	340	327	0.8	4	0.04	0.5	27	15	1	7	89	38	
7191	c	714484	5430700	21	27	116.9	02D/16	31.00	0.5	3.04	2.3	2	1	190	184	0.4	1	0.26	0.5	67	37	3	8	240	36	
7192	c	712088	5431311	21	27	115.1	02E/01	28.32	0.5	4.28	5.5	6	1	370	363	0.8	2	0.10	0.5	78	41	1	6	210	40	
7193	c	710261	5430500	21	27	136.2	02D/16	23.96	0.5	5.80	1.8	5	1	440	437	0.8	2	0.07	0.5	140	59	1	8	120	55	
7194	c	704117	5430188	21	27	83.1	02D/16	26.26	0.5	5.68	4.5	6	1	360	360	1.2	2	0.19	0.5	61	44	1	8	260	64	
7195	bc	702726	5430705	21	27	92.2	02D/16	23.52	0.5	4.64	6.3	7	1	310	312	0.9	2	0.11	0.5	80	60	2	8	340	64	
7196	c	721597	5422170	21	27	79.2	02C/13	30.73	0.5	3.33	1.0	1	1	330	326	0.9	2	0.22	0.5	80	35	1	7	180	26	
7197	c	719377	5425037	21	27	75.8	02D/16	23.67	0.5	6.04	0.8	2	1	780	783	1.0	5	1.06	0.5	110	24	1	7	32	32	
7198	c	716551	5424860	21	27	111.4	02D/16	35.90	0.5	5.21	14.0	14	1	180	179	1.2	30	0.42	0.1	52	40	8	11	210	62	
7200	c	701183	5431184	21	27	94.2	02E/01	29.75	0.5	5.50	3.8	5	1	360	351	1.3	5	0.46	0.5	61	49	10	13	470	112	
7201	c	699038	5430886	21	27	68.7	02E/01	29.07	0.5	6.20	11.0	12	1	400	393	1.8	40	0.34	0.5	57	53	13	16	270	116	
7202	c	697275	5431147	21	27	122.2	02E/01	36.97	0.5	5.50	4.7	6	1	410	359	1.7	7	0.38	0.5	77	78	18	20	210	75	
7203	c	690131	5429310	21	27	97.1	02D/16	33.47	0.5	5.37	19.0	16	3	330	297	1.5	5	0.44	0.5	75	60	13	17	310	96	
7205	c	690648	5424497	21	27	71.0	02D/16	32.54	0.5	5.51	5.2	6	3	360	332	1.7	5	0.40	0.5	66	43	6	12	340	75	
7206	c	6835604	5422339	21	27	160.8	02D/16	22.77	0.5	5.72	1.1	4	1	370	418	1.4	2	0.11	0.5	42	27	1	10	200	63	
7207	c	700848	5426775	21	27	62.8	02D/16	34.24	0.5	5.78	22.0	20	1	420	385	2.3	9	0.35	0.5	80	72	16	18	260	90	
7208	bc	704715	5425100	21	27	56.8	02D/16	21.84	0.5	7.00	17.0	17	1	480	481	2.5	2	0.38	0.5	84	68	21	24	150	95	
7209	c	707056	5424100	21	27	56.6	02D/16	27.17	0.5	6.03	2.2	4	1	420	422	1.4	2	0.44	0.5	83	44	1	8	80	45	

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7210	mudboil	709082	5425384	21	27	147.1	02D/16	25.93	0.5	543	2.9	4	1	400	426	1.1	5	0.17	0.5	51	25	1	9	86	43	
7211	mudboil	711247	5424858	21	27	62.2	02D/16	29.81	0.5	4.09	3.4	4	1	240	245	0.7	6	0.20	0.5	54	27	1	7	130	35	
7212	c	712889	5425630	21	27	71.5	02D/16	31.68	0.5	4.03	3.5	4	1	240	252	0.8	4	0.22	0.5	43	24	1	8	140	34	
7214	c	717360	5421377	21	27	36.2	02D/16	23.55	0.5	7.68	0.6	2	1	260	283	5.3	6	0.42	0.5	37	16	1	4	31	13	
7215	c	715063	5420788	21	27	143.1	02D/16	26.46	0.5	5.63	5.4	7	1	420	423	1.9	9	0.69	0.5	55	25	1	10	90	30	
7216	bc	713061	5420780	21	27	62.7	02D/16	27.86	0.5	4.53	8.9	9	1	210	241	1.4	74	0.28	0.1	38	35	1	9	110	43	
7217	c	711171	5421535	21	27	61.4	02D/16	32.97	0.5	5.72	5.6	6	1	390	365	1.9	10	0.38	0.5	73	49	8	14	170	70	
7218	c	709340	5421612	21	27	49.1	02D/16	28.65	0.5	4.94	18.0	17	1	350	352	0.9	5	0.49	0.5	76	29	3	11	160	43	
7219	bc	705759	5420970	21	27	122.8	02D/16	31.83	0.5	5.93	13.0	13	1	340	321	2.0	24	0.31	0.5	68	48	9	15	150	66	
7220	bc	704564	5421394	21	27	72.8	02D/16	28.91	0.5	5.77	14.0	15	8	250	265	1.7	52	0.31	0.2	57	40	7	13	180	71	
7221	c	701936	5421120	21	27	53.8	02D/16	53.07	0.5	4.06	5.2	6	1	230	222	1.4	6	0.40	0.5	43	35	5	10	170	52	
7222	c	699115	5420298	21	27	127.4	02D/16	28.35	0.5	5.51	3.0	5	1	400	398	2.0	4	0.27	0.5	75	48	2	9	110	51	
7223	bc	696025	5419326	21	27	76.3	02D/16	47.52	0.5	4.21	2.6	4	1	250	250	1.7	4	0.47	0.5	53	37	5	10	130	38	
7224	c	698281	5417192	21	27	68.8	02D/16	28.78	0.5	5.45	38.0	34	1	500	487	2.4	15	0.23	0.1	66	42	2	10	110	57	
7225	bc	700574	5416991	21	27	53.8	02D/16	30.02	0.5	6.93	16.0	16	1	270	267	2.0	57	0.32	0.2	61	36	7	13	110	68	
7226	bc	702303	5417231	21	27	52.9	02D/16	29.46	0.5	6.74	10.0	11	1	360	359	2.5	20	0.31	0.5	65	47	10	16	110	78	
7227	c	723484	54222502	21	27	98.9	02C/13	32.29	0.5	4.24	4.6	7	1	270	269	1.2	20	0.42	0.5	62	35	1	9	200	53	
7228	c	722016	5421701	21	27	98.8	02C/13	38.01	0.5	4.06	1.2	3	6	290	283	1.7	2	0.33	0.5	62	27	1	6	120	20	
7229	c	724313	5419419	21	27	59.0	02D/16	26.10	0.5	6.52	0.3	2	1	650	654	2.3	2	0.46	0.5	57	15	6	13	36	14	
7230	c	716843	5417201	21	27	50.2	02D/16	22.49	0.5	8.22	0.3	4	1	310	328	11.4	4	0.12	0.5	13	8	1	3	13	8	
7231	mudboil	714833	5416887	21	27	112.1	02D/16	24.71	0.5	9.32	4.6	7	1	240	238	4.1	66	0.31	0.3	60	37	1	8	72	53	
7232	c	710868	5416713	21	27	95.3	02D/16	43.44	0.5	5.01	5.6	7	1	370	343	2.7	5	0.59	0.5	74	62	7	11	100	49	
7234	bc	709486	5415627	21	27	42.1	02D/16	32.66	0.5	5.49	3.5	5	1	380	378	1.8	10	0.65	0.5	59	26	1	10	110	49	
7235	bc	708344	5416521	21	27	44.5	02D/16	30.98	0.5	7.34	1.1	4	1	100	726	1.8	26	1.04	0.5	38	18	7	20	67	29	
7236	bc	706367	5417069	21	27	53.4	02D/16	24.98	0.5	8.04	1.5	4	1	590	622	4.2	6	1.84	0.5	27	21	1	11	30	37	
7237	bc	704249	5417344	21	27	105.0	02D/16	27.88	0.5	6.18	6.8	8	1	340	344	3.2	31	0.29	0.5	74	40	9	13	150	98	
7238	c	708262	5414885	21	27	43.6	02D/16	43.85	0.5	5.31	4.8	6	1	280	282	3.3	8	0.44	0.5	65	40	3	8	95	44	
7239	bc	703472	5415066	21	27	83.3	02D/16	29.46	0.5	5.03	1.5	3	1	350	366	1.1	8	0.62	0.5	63	36	5	12	55	56	
7240	c	703459	5412979	21	27	141.9	02D/16	36.38	0.5	4.36	0.6	2	1	270	263	2.8	3	0.32	0.5	59	24	1	5	59	21	
7241	c	703627	5411275	21	27	110.9	02D/16	31.99	0.5	6.15	4.3	6	1	180	181	2.2	57	0.99	0.2	64	26	1	6	95	70	
7242	c	701693	5414464	21	27	89.4	02D/16	36.09	0.5	6.40	3.5	5	1	300	305	2.5	16	0.38	0.5	54	30	7	11	120	72	
7243	mudboil	697769	5415495	21	27	92.2	02D/16	32.23	0.5	7.27	5.0	7	3	300	316	2.8	20	0.29	0.5	72	50	4	9	96	51	
7245	mudboil	697788	5406794	21	27	84.4	02D/16	24.86	0.5	6.79	1.3	2	1	660	610	0.9	8	2.26	0.5	48	25	1	15	30	56	
7246	c	694705	5407615	21	27	146.1	02D/16	40.41	0.5	5.14	5.0	6	1	210	217	3.8	23	0.43	0.5	81	47	2	8	73	26	
7247	bc	684683	5408117	21	27	179.7	02D/16	33.45	0.5	5.21	5.0	6	1	260	273	2.6	16	0.41	0.5	57	32	1	7	62	28	
7248	c	684086	5402948	21	27	177.0	02D/16	38.66	0.5	6.06	19.0	18	1	330	328	3.4	2	0.40	0.5	89	70	14	18	120	56	
7249	c	683635	5422451	21	27	152.4	02D/16	35.34	0.5	6.00	23.0	21	6	350	335	1.8	7	0.47	0.5	89	68	17	21	380	91	
7250	c	686163	5403427	21	27	194.8	02D/16	44.74	0.5	5.32	2.6	7	1	250	252	4.2	9	0.38	0.5	48	41	1	6	51	23	
7251	c	689955	5404970	21	27	101.7	02D/16	38.63	0.5	5.06	3.3	4	1	270	266	3.7	3	0.47	0.5	57	36	3	10	100	37	
7252	c	691585	5407259	21	27	111.4	02D/16	39.54	0.5	5.25	7.3	8	1	220	215	4.6	17	0.42	0.5	61	41	1	7	74	30	
7253	c	692438	5403144	21	27	140.1	02D/16	31.85	0.5	4.12	2.7	3	1	210	210	3.2	3	0.39	0.5	51	30	1	7	110	26	
7254	c	694344	5403260	21	27	106.4	02D/16	26.11	0.5	5.65	3.2	5	1	230	249	4.5	7	0.48	0.5	100	37	1	6	44	11	
7255	c	695611	5402868	21	27	110.6	02D/16	43.53	0.5	5.87	5.7	7	1	220	219	4.3	4	0.43	0.5	47	34	3	8	110	34	
7256	c	698433	5402836	21	27	75.6	02D/09	26.74	0.5	5.94	10.0	10	1	210	195	2.1	42	0.32	0.5	43	28	2	8	120	51	
7257	bc	700697	5402730	21	27	346.5	02D/09	44.77	0.5	5.29	10.0	10	1	210	177	3.0	5	0.44	0.5	40	28	4	9	150	43	
7258	c	714832	5412906	21	27	68.1	02D/16	25.88	0.5	8.06	0.3	2	1	510	514	1.6	6	1.52	0.5	220	53	1	19	93	65	
7259	c	719946	5412920	21	27	104.3	02D/16	34.79	0.5	5.17	2.8	3	1	370	339	2.6	6	0.64	0.5	47	31	1	8	70	19	

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7309	c	711528	5417051	21	27	76.3	02D/16	44.60	0.5	6.27	5.8	8	2	280	288	3.6	24	0.47	0.5	85	56	7	10	96	62	
7310	bc	712026	5416292	21	27	107.5	02D/16	46.08	0.5	5.38	4.4	7	3	300	311	3.2	20	0.73	0.5	98	78	8	12	110	70	
7311	c	712902	5416924	21	27	124.1	02D/16	41.72	0.5	5.52	4.9	6	1	350	324	3.5	21	0.50	0.5	95	68	7	10	85	47	
7312	bc	712517	5415810	21	27	128.7	02D/16	32.49	0.5	6.87	7.1	11	1	340	368	3.2	44	0.70	0.1	76	51	6	13	120	72	
7313	bc	699467	5411199	21	27	75.2	02D/16	37.44	0.5	4.54	5.8	7	1	300	284	2.8	4	0.37	0.5	58	30	2	9	200	119	
7314	c	700682	5410532	21	27	63.1	02D/16	38.60	0.5	6.23	2.8	10	1	310	271	4.2	6	0.47	0.5	70	39	2	14	120	66	
7315	c	701659	5410463	21	27	68.2	02D/16	44.66	0.5	5.31	9.3	4	2	270	311	3.5	16	0.36	0.5	70	28	10	8	150	39	
7316	c	701991	5409299	21	27	91.5	02D/16	46.79	0.5	5.26	4.5	5	1	230	231	3.7	8	0.46	0.5	64	38	8	11	90	40	
7317	c	702553	5407822	21	27	119.5	02D/16	37.51	0.5	7.06	91.1	76	3	520	486	3.5	3	0.31	0.3	100	76	10	14	110	62	
7318	c	704171	5406853	21	27	67.6	02D/16	37.23	0.5	5.65	11.0	11	1	300	284	3.6	12	0.37	0.5	72	54	10	13	91	46	
7319	c	688188	5413816	21	27	114.9	02D/16	39.52	0.5	6.14	4.2	6	1	350	323	4.9	16	0.43	0.5	84	63	6	10	86	38	
7320	c	688697	5414751	21	27	110.1	02D/16	42.97	0.5	6.19	2.9	5	1	330	325	5.1	23	0.45	0.5	76	53	5	10	74	36	
7322	c	692874	5408573	21	27	102.7	02D/16	50.66	0.5	4.60	6.2	7	1	210	210	4.3	9	0.55	0.5	53	36	3	6	65	24	
7323	c	692603	5409387	21	27	126.3	02D/16	53.93	0.5	4.46	5.2	6	1	180	188	5.2	10	0.48	0.5	47	33	1	5	66	22	
7324	c	691632	5409936	21	27	168.9	02D/16	54.42	0.5	4.60	5.9	6	1	200	193	3.9	7	0.52	0.5	47	31	3	7	76	27	
7325	c	690929	5410691	21	27	169.3	02D/16	44.61	0.5	5.32	4.6	6	1	260	236	5.7	14	0.47	0.5	81	46	4	8	68	28	
7326	c	686372	5414349	21	27	95.3	02D/16	45.81	0.5	5.51	1.6	5	1	310	302	4.4	27	0.44	0.5	83	64	3	7	47	24	
7327	bc	699992	5424988	21	27	107.6	02D/16	30.60	0.5	5.22	9.4	11	2	340	336	1.3	7	0.13	0.5	73	47	5	11	120	50	
7328	bc	698909	5424240	21	27	94.0	02D/16	42.13	0.5	5.91	2.9	24	7	360	261	2.7	5	0.34	0.2	89	59	7	19	79	115	
7329	c	697335	5423273	21	27	113.9	02D/16	34.98	0.5	6.29	10.0	11	3	390	362	2.1	20	0.38	0.5	72	49	13	15	300	82	
7330	c	696359	5422972	21	27	120.3	02D/16	36.18	0.5	5.74	16.0	15	3	350	334	2.0	17	0.35	0.5	100	73	19	20	220	75	
7332	c	695728	5422162	21	27	135.7	02D/16	38.13	0.5	5.80	29.0	27	3	400	386	2.3	5	0.35	0.1	110	81	20	21	190	69	
7333	c	695223	5421359	21	27	114.9	02D/16	34.08	0.5	5.84	36.0	31	5	440	408	2.3	5	0.38	0.2	100	72	25	24	220	76	
7334	c	692692	5420402	21	27	68.5	02D/16	38.79	0.5	5.78	14.0	14	3	380	362	2.6	4	0.47	0.5	130	105	16	19	230	74	
7335	bc	691366	5420178	21	27	66.2	02D/16	38.08	0.5	5.50	13.0	13	2	330	321	1.7	18	0.34	0.5	69	42	7	14	230	60	
7336	c	690597	5419723	21	27	73.1	02D/16	39.39	0.5	5.75	3.4	5	1	410	378	2.3	6	0.56	0.5	89	71	12	17	96	54	
7337	c	684516	5429604	21	27	150.4	02D/16	37.28	0.5	5.43	27.0	23	25	290	257	1.5	15	0.48	0.2	73	56	18	19	370	101	
7338	c	683598	5428923	21	27	148.6	02D/16	32.07	0.5	5.98	7.7	9	5	340	321	1.5	5	0.75	0.5	67	42	21	23	460	104	
7339	c	682748	5428391	21	27	159.9	02D/15	36.56	0.5	5.66	12.0	14	2	290	272	1.6	25	0.70	0.5	72	47	15	16	340	89	
7340	c	687833	5407950	21	27	190.6	02D/16	53.79	0.5	4.73	9.1	11	1	220	231	3.2	11	0.58	0.5	54	43	5	9	73	29	
7341	c	689428	5412937	21	27	155.9	02D/16	41.87	0.5	5.75	6.2	8	1	310	281	4.9	21	0.62	0.5	82	52	7	11	93	40	
7342	c	690163	5413358	21	27	160.8	02D/16	48.55	0.5	4.95	5.0	7	1	280	267	4.4	6	0.55	0.5	60	29	1	7	81	22	
7343	c	691113	5413406	21	27	164.1	02D/16	49.09	0.5	5.24	3.4	5	1	290	274	4.4	14	0.54	0.5	78	54	4	8	72	29	
7344	c	692126	5413502	21	27	160.4	02D/16	49.40	0.5	5.27	2.5	4	1	250	246	4.8	14	0.56	0.5	38	4	8	8	78	30	
7345	c	693207	5413593	21	27	143.1	02D/16	43.54	0.5	5.41	3.9	5	1	280	256	5.1	13	0.52	0.5	89	52	5	8	84	32	
7346	c	710428	5406824	21	27	104.8	02D/16	47.46	0.5	5.19	4.5	6	1	240	222	3.7	5	0.56	0.5	59	45	4	8	93	35	
7347	c	709194	5406692	21	27	113.0	02D/16	38.17	0.5	4.64	3.5	5	2	280	269	2.8	7	0.36	0.5	51	25	2	7	78	29	
7348	c	708462	5406004	21	27	71.0	02D/16	45.57	0.5	4.95	8.7	9	2	250	230	3.7	1	0.46	0.5	56	43	7	9	120	38	
7349	c	709190	5405379	21	27	98.6	02D/16	38.79	0.5	5.57	9.4	10	1	260	243	3.7	19	0.35	0.5	52	28	6	10	140	49	
7350	c	710302	5404750	21	27	56.6	02D/16	56.60	0.5	4.61	4.8	6	1	210	207	3.7	6	0.55	0.5	41	30	5	8	98	28	
7351	bc	717384	5408767	21	27	86.7	02D/16	29.77	0.5	7.89	0.9	4	1	460	439	1.7	18	0.13	0.5	46	41	19	19	120	101	
7352	c	716823	5408063	21	27	83.7	02D/16	41.74	0.5	6.44	14.0	14	1	340	312	4.0	11	0.38	0.5	72	55	13	15	120	60	
7353	c	715562	5407333	21	27	76.4	02D/16	47.73	0.5	4.90	3.6	6	1	300	279	3.6	8	0.60	0.5	61	51	5	9	78	30	
7354	c	715487	5406392	21	27	84.2	02D/16	45.52	0.5	4.93	4.8	6	1	250	238	3.5	19	0.55	0.5	58	41	4	8	110	32	
7355	c	715393	5405507	21	27	126.7	02D/16	33.22	0.5	8.72	1.1	4	1	270	259	0.8	59	1.88	0.2	54	50	26	30	120	87	
7356	c	715046	5404496	21	27	76.8	02D/16	47.19	0.5	4.94	7.7	8	1	260	248	3.7	1	0.55	0.5	78	62	8	11	130	38	
7357	c	714202	5404547	21	27	64.9	02D/16	45.82	0.5	5.42	3.2	5	1	240	236	3.2	27	0.66	0.5	65	47	6	9	83	35	

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Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7359	c	713356	5404865	21	27	59.5	02D/16	36.13	0.5	6.53	6.6	7	1	320	315	3.6	50	0.47	0.5	7.6	57	7	12	100	51	
7360	c	712148	5405071	21	27	65.5	02D/16	45.88	0.5	4.95	5.5	7	2	250	242	3.8	5	0.50	0.5	50	37	5	8	99	34	
7361	c	710546	5404360	21	27	42.7	02D/16	50.05	0.5	4.87	5.2	6	1	230	232	3.6	6	0.59	0.5	50	38	5	8	95	30	
7362	c	709626	5404178	21	27	66.9	02D/16	59.23	0.5	4.36	5.9	7	5	190	201	3.5	2	0.65	0.5	42	31	4	7	110	26	
7363	c	708719	5404066	21	27	104.6	02D/16	54.34	0.5	4.70	9.0	10	1	220	212	3.8	15	0.60	0.5	47	37	9	11	110	35	
7364	c	720891	5404518	21	27	114.9	02C/13	54.52	0.5	4.54	3.1	4	1	240	226	3.1	3	0.61	0.5	39	32	3	7	60	22	
7365	c	719918	5404234	21	27	92.2	02D/16	46.31	0.5	4.85	5.4	7	3	260	262	3.5	4	0.61	0.5	60	48	5	9	75	29	
7366	c	719240	5403462	21	27	25.7	02D/09	58.04	0.5	4.53	2.1	5	1	220	210	4.1	4	0.71	0.5	40	35	3	7	76	24	
7367	c	716986	5403661	21	27	50.4	02D/16	44.86	0.5	4.82	5.0	6	2	250	222	3.4	8	0.52	0.5	57	44	5	9	99	31	
7368	c	715514	5404124	21	27	69.7	02D/16	49.46	0.5	4.83	3.7	5	1	230	208	3.3	10	0.57	0.5	49	32	4	7	84	28	
7369	c	711109	5404545	21	27	46.8	02D/16	37.29	0.5	6.10	11.0	11	1	400	352	3.7	4	0.38	0.5	71	53	10	13	110	58	
7370	c	707748	5404006	21	27	140.8	02D/16	49.82	0.5	5.01	12.0	12	3	190	186	4.1	17	0.56	0.5	52	32	6	9	140	37	
7371	c	705782	5402869	21	27	115.6	02D/09	53.70	0.5	4.51	5.9	7	2	210	198	3.7	3	0.61	0.5	47	37	5	8	97	28	
7372	c	706373	5402264	21	27	68.0	02D/09	45.26	0.5	5.03	3.0	5	1	330	304	3.9	1	0.46	0.5	66	53	4	7	28	19	
7373	c	706917	5403930	21	27	127.9	02D/16	40.42	0.5	5.87	15.0	15	2	330	295	4.3	1	0.61	0.5	67	55	9	13	120	56	
7374	c	724232	5412813	21	27	55.6	02C/13	41.36	0.5	5.65	5.0	7	2	380	339	3.6	6	0.47	0.5	64	49	7	11	84	39	
7375	c	723319	5412229	21	27	94.7	02C/13	47.61	0.5	5.14	3.3	5	1	260	234	3.3	31	0.60	0.5	54	36	5	8	76	29	
7376	c	722560	5411663	21	27	87.2	02C/13	41.92	0.5	5.42	5.1	7	1	320	283	3.6	3	0.63	0.5	60	47	10	13	83	36	
7377	c	721862	5410797	21	27	103.7	02C/13	43.72	0.5	5.44	6.9	8	1	260	242	3.6	23	0.48	0.5	74	54	7	11	100	43	
7379	c	721196	5409988	21	27	94.5	02C/13	50.06	0.5	4.82	4.5	6	1	260	230	3.7	24	0.60	0.5	66	55	4	8	82	31	
7380	c	720800	5409044	21	27	76.3	02C/13	57.29	0.5	4.75	4.5	6	2	270	238	4.1	8	0.49	0.5	59	45	4	9	86	29	
7381	c	721430	5408717	21	27	83.2	02C/13	48.14	0.5	5.42	2.7	5	1	340	306	3.1	28	0.65	0.5	89	77	6	10	77	33	
7382	c	722350	5409319	21	27	54.4	02C/13	42.07	0.5	6.04	4.5	6	1	310	260	3.2	28	0.52	0.5	45	35	5	10	80	35	
7383	c	723257	5409547	21	27	33.4	02C/13	53.87	0.5	4.93	2.8	5	1	250	236	3.0	13	0.61	0.5	56	46	5	8	77	28	
7384	c	722902	5408668	21	27	43.4	02C/13	39.84	0.5	5.72	6.1	7	1	290	266	3.4	20	0.60	0.5	120	106	7	12	90	37	
7385	c	724054	5408765	21	27	50.3	02C/13	43.18	0.5	4.95	3.0	5	1	250	226	3.1	4	0.51	0.5	60	47	4	8	77	29	
7386	c	727548	5410498	21	27	85.3	02C/13	47.66	0.5	4.90	4.3	8	1	260	241	3.3	20	0.59	0.5	69	47	4	9	89	31	
7387	c	731322	5410459	21	27	47.7	02C/13	41.01	0.5	5.90	33.0	30	1	330	287	3.4	22	0.70	0.2	240	195	19	24	74	30	
7388	c	730325	5409982	21	27	58.9	02C/13	33.96	0.5	6.97	8.0	10	1	300	275	3.9	3	0.67	0.5	73	58	7	11	95	36	
7389	c	729307	5409478	21	27	62.8	02C/13	40.84	0.2	5.93	15.0	16	4	530	477	2.5	16	0.26	0.5	120	108	3	8	43	19	
7390	c	730907	5412351	21	27	45.1	02C/13	35.22	0.5	7.06	15.0	15	2	220	199	1.9	39	1.93	0.7	200	162	42	45	260	183	
7391	c	726388	5405036	21	27	52.6	02C/13	42.20	0.5	5.06	6.8	9	1	300	261	3.7	13	0.64	0.5	77	58	5	10	78	30	
7392	c	727754	5405015	21	27	85.4	02C/13	42.45	0.5	5.14	4.1	6	2	290	261	3.7	13	0.64	0.5	77	58	5	10	78	30	
7393	c	726912	5404494	21	27	70.9	02C/13	31.77	0.5	7.62	5.9	9	2	250	235	3.1	34	0.47	0.5	65	50	5	11	80	48	
7394	c	726509	5405535	21	27	72.6	02C/12	41.72	0.5	5.56	3.3	6	1	310	284	3.7	12	0.65	0.5	64	49	6	10	75	35	
7395	c	725554	5403088	21	27	78.7	02C/12	44.44	0.5	5.89	11.0	11	4	320	301	3.9	14	0.55	0.5	72	59	11	15	100	50	
7397	c	724348	5402990	21	27	59.6	02C/12	33.99	0.5	6.48	2.9	5	1	200	186	1.7	39	1.83	0.2	49	39	22	34	96	62	
7398	c	723608	5403589	21	27	76.8	02C/12	42.10	0.5	5.81	7.7	9	1	330	303	4.4	5	0.44	0.5	74	71	9	14	74	46	
7399	c	723507	5404749	21	27	43.3	02C/13	52.07	0.5	4.69	1.3	4	1	230	217	3.2	18	0.53	0.5	38	34	1	5	45	17	
7400	c	724345	5404743	21	27	80.1	02C/13	42.38	0.5	5.36	2.6	5	1	260	236	2.8	53	0.63	0.5	51	40	1	6	42	22	
7401	c	724209	5406434	21	27	89.4	02C/13	45.47	0.5	5.11	4.0	7	1	330	292	4.3	2	0.65	0.5	76	69	5	10	68	30	
7402	c	721723	5404473	21	27	114.8	02C/13	51.87	0.5	4.70	3.7	6	1	240	226	3.5	16	0.60	0.5	52	44	4	9	72	25	
7403	c	725519	5407996	21	27	40.6	02C/13	40.93	0.5	5.91	5.7	8	1	270	254	2.9	30	0.59	0.5	51	44	4	9	66	31	
7404	bc	724953	5407302	21	27	60.8	02C/13	40.87	0.5	5.07	5.6	7	1	280	234	3.8	19	0.47	0.5	160	138	14	14	54	24	
7405	bc	724062	5407352	21	27	48.8	02C/13	49.26	0.5	5.03	3.1	5	1	270	275	3.7	4	0.56	0.5	88	77	4	9	72	32	
7406	c	723822	5408718	21	27	39.7	02C/13	49.34	0.5	5.54	5.2	8	1	320	316	3.4	22	0.85	0.5	140	135	8	13	73	31	

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7408	c	723673	5408089	21	27	54.0	02C/13	50.16	0.5	5.03	2.6	5	1	270	238	3.2	14	0.71	0.5	5.5	52	4	9	76	28	
7409	c	724601	5409831	21	27	38.2	02C/13	50.07	0.5	5.06	3.2	5	1	260	253	3.5	16	0.60	0.5	62	50	4	9	77	31	
7410	c	725537	5409944	21	27	62.7	02C/13	42.34	0.5	6.03	11.0	11	1	330	307	4.2	15	0.53	0.5	90	77	8	13	86	41	
7412	c	726407	5409466	21	27	70.7	02C/13	46.69	0.5	5.10	7.7	9	5	300	274	3.4	16	0.63	0.5	88	71	10	13	77	27	
7413	c	727390	5409555	21	27	66.8	02C/13	45.25	0.5	5.21	10.0	13	1	240	224	3.2	29	1.11	0.5	57	48	9	14	100	50	
7414	c	728397	5409391	21	27	96.7	02C/13	44.95	0.5	5.87	1.9	5	1	310	300	2.9	27	1.41	0.5	58	50	6	13	79	38	
7415	c	730087	5410579	21	27	83.3	02C/13	42.42	0.5	5.55	8.0	9	1	290	255	3.5	22	1.01	0.5	77	57	11	16	86	36	
7416	c	730841	5411095	21	27	72.9	02C/13	43.11	0.5	5.30	2.9	5	1	240	218	3.3	34	0.69	0.5	54	42	5	9	93	30	
7417	c	723678	5405637	21	27	63.9	02C/13	53.06	0.5	4.83	4.2	6	1	260	236	3.6	4	0.53	0.5	56	39	6	8	87	27	
7418	c	722122	5417855	21	27	90.8	02C/13	53.02	0.5	5.34	2.7	5	1	360	357	2.9	30	0.82	0.5	73	63	5	10	84	39	
7700	bc	729799	5431603	21	27	125.1	02C/13	34.13	0.5	5.00	2.5	3	1	270	264	1.7	27	0.24	0.5	52	22	1	7	310	39	
7701	bc	732402	5431659	21	27	107.0	02C/13	30.94	0.5	5.15	5.0	5	5	310	312	1.5	18	0.22	0.5	64	34	1	9	220	49	
7702	c	734949	5431124	21	27	76.3	02C/13	33.61	0.5	5.75	9.4	10	1	360	343	2.7	10	0.57	0.5	88	65	10	15	250	64	
7703	c	735335	5427935	21	27	108.0	02C/13	29.00	0.5	7.37	1.8	6	1	300	316	1.9	100	0.36	0.5	48	33	1	8	74	31	
7704	c	732926	54227706	21	27	122.7	02C/13	33.29	0.5	5.10	2.7	4	1	250	254	2.1	60	0.43	0.5	72	44	1	9	120	35	
7705	c	729117	54227966	21	27	105.0	02C/13	26.98	0.5	7.39	0.3	2	1	200	228	3.8	4	0.12	0.5	28	17	1	2	10	7	
7706	mudboil	728196	5426876	21	27	87.7	02C/13	37.29	0.5	5.27	6.9	7	1	260	247	2.0	11	0.36	0.5	76	50	8	11	160	57	
7707	c	726652	5423984	21	27	169.0	02C/13	37.56	0.5	5.19	9.4	9	2	330	300	1.7	77	0.43	0.5	77	54	10	14	270	64	
7708	c	726043	5427124	21	27	140.1	02C/13	31.46	0.5	5.74	1.9	4	3	260	266	1.8	38	0.48	0.5	99	55	7	14	240	72	
7709	mudboil	724656	5424462	21	27	161.8	02C/13	30.14	0.5	5.03	4.8	5	1	290	282	1.4	25	0.36	0.5	83	26	1	8	200	30	
7710	c	723466	5428987	21	27	145.5	02C/13	40.33	0.5	4.50	10.0	9	1	270	242	1.5	14	0.35	0.5	67	44	8	11	260	57	
7711	c	721305	5428830	21	27	108.1	02C/13	32.55	0.5	4.06	1.5	2	13	310	295	2.0	7	0.39	0.5	67	23	1	8	190	28	
7712	c	718918	5428801	21	27	76.3	02D/16	21.10	0.5	7.79	12.0	13	3	200	230	2.2	138	0.37	0.5	48	38	6	13	140	74	
7713	c	716937	5428834	21	27	130.6	02D/16	26.86	0.5	5.66	7.5	10	3	230	362	1.5	50	0.30	0.5	60	59	4	16	190	70	
7714	c	714865	5428700	21	27	149.7	02D/16	32.79	0.5	5.60	10.0	10	1	380	363	1.5	26	0.29	0.5	79	63	11	16	200	76	
7715	c	712439	5428752	21	27	150.5	02D/16	27.74	0.5	5.03	1.9	3	1	430	413	1.2	8	0.13	0.5	29	21	3	10	130	55	
7716	bc	704789	5428379	21	27	83.3	02D/16	36.07	0.5	5.76	3.9	5	3	400	360	1.7	6	0.38	0.5	72	53	11	14	250	80	
7717	c	710891	5429361	21	27	159.4	02D/16	31.70	0.5	5.34	6.3	7	1	320	321	1.2	15	0.29	0.5	73	50	5	10	250	81	
7718	c	708527	5429333	21	27	90.7	02D/16	19.48	0.5	7.18	8.9	10	1	540	557	2.4	20	0.34	0.5	79	67	16	19	150	80	
7719	c	719506	5426561	21	27	134.8	02D/16	23.04	0.5	7.19	3.7	6	1	250	270	3.4	73	0.23	0.3	50	41	6	11	100	63	
7720	c	706764	5428970	21	27	99.3	02D/16	37.95	0.3	5.31	14.0	13	2	320	322	1.5	20	0.27	0.2	62	47	12	14	280	77	
7721	c	704789	5428379	21	27	102.0	02D/16	31.70	0.5	5.34	6.3	7	1	280	261	1.5	2	0.31	0.5	56	36	7	11	270	48	
7722	mudboil	703191	5428731	21	27	134.8	02D/16	23.04	0.5	7.19	3.7	6	1	320	321	1.2	15	0.29	0.5	73	50	5	10	250	81	
7723	c	717081	5426649	21	27	123.7	02D/16	33.14	0.5	4.89	3.6	5	2	450	432	1.6	8	0.23	0.5	35	22	3	10	110	48	
7724	c	714761	5426858	21	27	146.5	02D/16	38.81	0.5	4.93	8.8	9	1	280	247	1.4	21	0.27	0.2	68	55	10	13	190	60	
7725	c	712645	5427105	21	27	161.6	02D/16	39.01	0.5	4.85	6.0	7	2	310	282	1.6	12	0.34	0.5	64	50	10	13	160	56	
7726	c	700580	5429067	21	27	104.3	02D/16	30.53	0.5	6.35	14.0	16	6	230	225	1.4	65	0.42	0.2	51	40	15	16	360	130	
7727	c	699036	5429304	21	27	102.0	02D/16	32.84	0.5	5.26	6	6	1	400	372	1.4	3	0.40	0.5	62	45	11	14	410	103	
7728	c	698846	5427760	21	27	126.9	02D/16	33.49	0.5	5.80	11.0	11	1	350	326	1.4	9	0.51	0.5	67	51	12	16	450	112	
7729	c	692997	5425653	21	27	100.8	02D/16	31.88	0.5	6.63	6.0	7	1	440	405	2.5	25	0.27	0.5	71	55	11	16	130	65	
7730	c	692247	5421433	21	27	97.7	02D/16	31.58	0.5	5.51	5.4	7	27	330	305	1.2	5	0.55	0.5	63	43	10	15	410	89	
7731	c	690408	5421764	21	27	166.8	02D/16	21.11	0.5	6.45	23.0	23	5	250	263	1.5	57	0.28	0.4	65	55	17	20	320	112	
7732	bc	688107	5421450	21	27	58.4	02D/16	23.52	0.5	5.13	38.0	38	4	330	320	1.5	17	0.61	0.4	65	61	12	18	410	150	
7733	bc	707765	5426837	21	27	124.8	02D/16	41.44	0.5	4.94	8.4	9	24	270	257	1.4	27	0.27	0.1	59	51	9	14	140	57	
7734	c	705744	5427156	21	27	84.6	02D/16	29.37	0.5	5.97	3.6	6	2	430	386	1.8	12	0.34	0.5	67	52	12	16	210	96	
7735	c	707766	5426837	21	27	143.3	02D/16	24.63	0.5	6.02	2.9	5	1	330	336	1.5	31	0.15	0.5	53	40	1	10	130	61	
7736	c	709204	5427535	21	27	165.4	02D/16	37.92	0.5	4.89	10.0	10	3	330	288	1.7	20	0.30	0.1	76	58	17	18	210	62	
7737	c	711209	5426814	21	27	159.8	02D/16	33.63	0.5	5.35	8.8	10	1	290	244	1.2	79	0.23	0.2	59	47	8	11	190	67	
7738																										

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Sample_Num	Horizon	Easting	Northing	Zone	NAD	Elevation	NTS	Wt	Ag4	Al2	As1	As2	Au1	Ba1	Ba2	Be2	Br1	Ca2	Cd2	Ce1	Ce2	Co1	Co2	Cr1	Cr2	
								grams	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7740	bc	714808	5422893	21	27	160.4	02D/16	29.88	0.5	6.73	13.0	16	5	160	166	1.8	102	0.35	0.2	100	63	6	10	240	69	
7741	c	713217	5423295	21	27	149.5	02D/16	42.89	0.5	4.68	6.5	7	3	270	258	1.3	17	0.40	0.5	70	46	8	11	220	56	
7742	c	710852	5423160	21	27	76.8	02D/16	40.07	0.5	4.81	12.0	11	1	350	312	1.7	1	0.45	0.1	83	60	12	14	160	50	
7743	c	708880	5422988	21	27	59.6	02D/16	41.75	0.5	4.88	13.0	12	3	270	270	1.5	3	0.36	0.1	81	63	12	14	180	57	
7744	c	707388	5422379	21	27	78.5	02D/16	44.59	0.5	4.38	13.0	13	2	240	243	1.6	24	0.40	0.5	65	50	8	12	190	51	
7745	c	705019	5422912	21	27	62.5	02D/16	35.36	0.5	5.82	3.6	5	4	430	383	1.8	9	0.35	0.5	61	45	7	12	170	60	
7746	mudboil	702396	54222807	21	27	68.9	02D/16	28.08	0.5	6.08	5.6	7	1	370	367	1.2	10	0.64	0.5	62	46	6	13	120	55	
7747	c	699857	54223050	21	27	95.4	02D/16	38.66	0.5	5.58	11.0	11	3	320	313	2.0	32	0.32	0.1	73	55	9	13	180	60	
7748	bc	694086	5419109	21	27	91.8	02D/16	31.25	0.5	7.01	28.0	27	8	340	340	2.9	27	0.33	0.1	84	70	17	19	130	66	
7749	c	698172	5419424	21	27	128.9	02D/16	33.51	0.5	6.09	10.0	11	2	440	407	2.7	4	0.36	0.5	100	76	15	17	150	65	
7750	c	700507	5418762	21	27	81.7	02D/16	36.58	0.5	5.80	15.0	14	8	450	409	2.5	3	0.34	0.5	97	74	13	16	160	59	
7751	bc	702312	5419028	21	27	50.1	02D/16	30.58	0.5	7.30	11.0	11	3	290	294	1.9	34	0.27	0.2	68	43	17	19	140	69	
7752	mudboil	727087	5425749	21	27	124.2	02C/13	29.71	0.5	5.69	5.2	6	3	400	368	1.3	4	0.53	0.5	47	30	1	12	180	44	
7753	bc	726646	5420049	21	27	68.9	02C/13	27.27	0.5	6.19	7.4	8	1	380	382	1.5	52	0.97	0.2	47	44	10	18	99	80	
7754	mudboil	718149	5419032	21	27	145.4	02D/16	34.33	0.5	3.60	1.0	3	4	320	314	1.2	8	0.20	0.5	91	54	1	10	150	29	
7755	mudboil	715700	5418988	21	27	135.0	02D/16	32.30	0.5	4.12	1.8	3	2	330	302	1.4	10	0.34	0.5	84	48	1	9	130	33	
7756	c	713985	5419484	21	27	130.0	02D/16	41.02	0.5	5.18	10.0	9	3	340	308	2.1	36	0.45	0.5	68	53	8	11	150	53	
7757	c	711898	5419115	21	27	150.3	02D/16	44.30	0.5	4.45	6.4	7	2	290	282	2.1	26	0.47	0.5	61	48	4	9	140	44	
7758	c	710391	5418968	21	27	104.1	02D/16	42.76	0.5	5.06	10.0	10	2	330	313	2.4	5	0.46	0.5	87	76	8	12	140	58	
7759	c	708354	5418995	21	27	60.2	02D/16	46.29	0.5	5.10	11.0	11	1	300	285	2.6	4	0.48	0.1	94	66	8	11	160	59	
7761	mudboil	706165	5419461	21	27	69.9	02D/16	41.26	0.5	5.32	7.2	8	3	290	282	2.4	18	0.40	0.1	74	59	11	14	160	55	
7762	mudboil	703863	5419365	21	27	57.4	02D/16	21.27	0.5	8.62	5.7	9	3	210	221	2.2	77	0.14	0.3	62	58	25	28	130	107	
7763	c	706120	5415037	21	27	52.7	02D/16	46.68	0.5	4.87	4.0	5	1	300	294	3.2	5	0.48	0.5	83	60	4	8	110	45	
7764	c	705562	5413690	21	27	60.0	02D/16	34.05	0.5	6.95	6.3	7	3	250	231	3.3	51	0.36	0.5	71	45	4	9	96	52	
7765	c	706032	5412039	21	27	118.6	02D/16	46.40	0.5	5.25	6.5	8	1	250	235	5.0	6	0.51	0.5	56	38	5	7	89	43	
7766	c	706032	5412039	21	27	118.6	02D/16	46.40	0.5	5.35	3.3	5	1	260	246	4.2	5	0.59	0.5	66	46	3	7	90	39	
7767	c	702170	5413195	21	27	92.9	02D/16	48.25	0.5	5.68	3.8	5	1	250	236	3.8	4	0.40	0.5	58	39	5	8	100	44	
7768	bc	700234	5415925	21	27	90.6	02D/16	36.10	0.5	6.77	4.9	6	2	330	281	3.7	17	0.31	0.5	86	51	9	12	93	48	
7769	c	695757	5408638	21	27	99.5	02D/16	45.75	0.5	4.90	4.7	5	2	240	216	4.2	12	0.46	0.5	49	32	4	7	73	28	
7770	c	695840	5406938	21	27	92.7	02D/16	44.18	0.5	4.96	14.0	13	2	200	193	3.6	3	0.45	0.1	87	50	7	12	120	43	
7771	c	690238	5409384	21	27	107.2	02D/16	48.91	0.5	5.17	3.0	4	1	200	196	5.1	1	0.35	0.5	70	52	2	7	67	26	
7772	bc	684315	5405477	21	27	182.7	02D/16	35.56	0.5	5.91	6.9	8	1	260	254	3.3	46	0.39	0.5	50	36	4	8	65	32	
7773	c	686834	5405312	21	27	181.2	02D/16	39.99	0.5	4.74	9.5	10	1	190	198	3.0	35	0.36	0.5	55	31	3	8	98	39	
7774	c	688120	5402892	21	27	143.2	02D/16	42.41	0.5	5.27	18.0	16	2	270	254	3.0	16	0.44	0.1	63	48	10	13	130	49	
7776	c	690706	5402897	21	27	137.7	02D/16	41.31	0.5	5.82	10.0	10	4	200	203	3.4	35	0.45	0.1	50	32	5	8	130	42	
7777	c	691943	5405754	21	27	102.0	02D/16	34.84	0.5	6.18	7.0	8	1	230	219	3.9	56	0.44	0.5	69	46	5	9	96	43	
7778	c	694601	5410604	21	27	206.9	02D/16	46.29	0.5	5.11	3.7	6	1	240	236	4.3	15	0.46	0.5	72	51	3	7	79	29	
7779	bc	693946	5405941	21	27	93.2	02D/16	54.33	0.5	4.61	11.0	11	7	180	182	3.6	2	0.42	0.1	52	33	5	8	100	31	
7780	c	696224	5404648	21	27	99.3	02D/16	25.77	0.5	6.80	1.9	4	1	260	273	5.4	29	0.60	0.5	66	41	1	9	51	31	
7781	mudboil	698356	5404962	21	27	82.8	02D/16	40.52	0.5	5.33	6.3	7	1	200	190	3.2	4	0.34	0.5	41	22	1	6	83	27	
7782	c	700512	5405043	21	27	178.5	02D/16	41.73	0.5	5.49	8.5	9	2	260	244	3.7	24	0.43	0.5	62	46	8	11	120	58	
7783	c	701807	5403978	21	27	209.8	02D/16	28.80	0.5	7.95	6.2	7	2	560	546	2.5	2	0.23	0.5	88	77	10	15	110	79	
7784	c	717107	5412943	21	27	150.9	02D/16	40.19	0.5	5.45	1.1	3	1	350	348	3.0	16	0.55	0.5	53	37	2	9	59	26	

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Sample_Num	Cs1	Cu2	Dy2	Eu	Fel	Fe2	Hf1	K2	Lal	La2	L2	Lul	Mg2	Mn2	Mol	Mo2	Nal	Na2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Sm1
	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7002	6.9	1	0.6	0.3	0.8	0.77	7	2.62	15	21.0	0.26	0.18	423	1	1	1.90	1.69	9	4	186	15	200	224	0.4	4.1	3.6	1	2.8	
7003	7.6	3.5	3.0	1.1	3.9	3.80	8	2.25	42	36	38.8	0.52	0.96	909	1	1	1.40	1.17	14	35	588	6	120	141	0.5	15.8	14.2	1	7.2
7004	4.7	5	1.1	1.0	4.1	3.82	11	1.58	22	17	11.9	0.53	0.41	733	1	1	1.40	1.25	12	9	497	5	87	87	0.5	16.4	15.7	1	4.1
7005	10.0	52	4.1	5.4	4.5	4.31	8	2.35	45	37	37.0	0.59	0.96	979	1	1	1.60	1.42	13	30	761	35	140	136	0.6	16.2	15.4	1	9.0
7007	5.8	30	2.3	1.1	4.0	3.77	8	2.15	34	28	34.0	0.49	0.87	1054	1	1	1.70	1.47	11	33	526	11	140	135	0.9	14.9	13.7	1	6.4
7008	6.1	11	1.3	0.9	4.7	4.69	5	1.04	22	15	21.5	0.34	0.34	635	1	1	1.00	0.99	13	12	1064	8	57	62	0.2	13.0	12.3	1	4.0
7009	9.3	32	2.7	1.6	4.1	3.88	7	1.67	38	29	48.1	0.57	0.83	728	1	1	1.60	1.39	12	36	288	13	91	96	1.0	14.0	12.7	1	6.8
7010	9.4	46	2.9	1.5	4.0	3.79	9	2.13	41	30	42.6	0.52	0.91	1017	1	1	1.70	1.52	12	31	725	38	130	134	0.9	14.9	13.8	1	8.1
7011	8.7	18	2.0	1.0	2.4	2.26	9	2.12	34	23	38.2	0.40	0.53	651	1	1	1.90	1.65	11	16	222	12	140	141	0.3	10.0	8.8	1	6.4
7013	9.2	17	1.3	0.9	4.1	3.92	9	1.53	31	19	51.8	0.34	0.67	686	1	1	1.50	1.31	12	27	672	11	97	102	0.9	13.1	12.1	1	5.8
7015	7.4	1	1.0	0.6	2.0	1.94	11	1.69	26	20	28.7	0.22	0.26	734	10	10	1.70	1.63	12	4	176	13	120	124	0.2	5.7	4.9	1	4.8
7016	5.5	2	1.3	0.8	3.1	2.99	10	1.47	27	15	24.1	0.29	0.24	561	1	1	1.50	1.34	11	6	2281	14	110	111	0.2	7.0	5.7	1	5.1
7017	7.2	12	2.1	0.5	1.9	1.81	8	2.26	24	19	32.8	0.37	0.35	735	1	1	1.80	1.72	9	12	763	14	170	178	0.2	5.9	5.9	1	5.1
7018	6.8	6	0.8	0.8	1.9	1.76	8	1.94	23	17	28.4	0.32	0.30	541	1	1	1.80	1.75	8	12	321	17	150	151	0.2	5.5	5.0	1	4.3
7019	4.7	5	1.6	0.8	1.1	1.08	7	1.92	23	17	20.6	0.32	0.25	509	1	1	1.80	1.81	6	7	540	12	140	145	0.2	4.4	4.0	1	4.5
7020	4.5	2	1.5	0.9	0.8	0.88	9	1.93	28	21	25.9	0.35	0.31	638	1	1	1.90	1.84	7	8	752	15	140	140	0.3	5.1	4.5	1	5.5
7022	5.0	9	0.7	0.8	2.4	2.15	8	1.53	20	11	22.3	0.26	0.25	600	1	1	1.70	1.59	7	10	338	13	110	107	0.3	5.4	4.7	1	3.6
7023	8.8	8	1.3	1.1	1.8	1.79	8	2.05	29	19	34.4	0.43	0.47	770	1	1	1.80	1.68	10	11	362	13	140	135	0.4	10.9	10.5	1	5.8
7024	5.7	16	2.0	0.8	2.4	2.23	9	1.65	28	22	30.1	0.27	0.60	818	1	1	1.80	1.61	8	45	513	10	120	104	0.7	8.5	7.8	1	6.0
7025	3.7	13	1.4	0.7	1.5	1.50	7	1.68	18	14	16.9	0.23	0.25	557	1	1	1.70	1.73	5	12	692	13	120	115	0.3	3.8	3.3	1	3.8
7026	3.7	13	1.4	0.6	1.8	1.63	8	1.64	20	14	17.4	0.26	0.27	727	1	1	1.70	1.75	6	10	701	13	110	112	0.3	4.2	3.7	1	4.1
7027	4.0	18	1.6	0.6	1.8	1.67	7	1.94	18	14	18.5	0.28	0.30	692	1	1	1.70	1.76	9	8	623	9	140	135	0.5	4.9	4.7	1	3.9
7028	4.7	30	2.1	0.8	3.3	2.90	10	1.86	32	22	29.8	0.48	0.63	1087	1	1	1.60	1.61	10	25	704	11	120	122	1.2	8.9	8.5	1	6.2
7029	8.5	37	2.6	1.2	4.2	3.94	8	2.20	39	26	42.8	0.51	0.64	1161	1	1	1.40	1.22	13	22	577	16	140	135	1.8	13.2	11.9	1	7.4
7030	6.3	11	1.9	1.0	2.1	2.11	8	1.93	26	20	30.4	0.44	0.48	613	1	1	1.70	1.63	9	19	439	10	130	126	1.0	8.6	8.0	1	5.2
7031	6.2	3	0.7	0.6	1.5	1.44	11	1.77	24	14	23.4	0.52	0.21	539	1	1	1.50	1.41	9	4	350	8	130	119	0.7	7.7	6.5	1	4.4
7032	5.3	7	1.3	0.3	1.3	1.20	7	2.25	15	13	19.0	0.32	0.28	467	1	1	1.90	1.77	9	6	465	9	170	168	0.5	4.3	3.9	1	3.1
7033	5.3	8	2.0	0.8	1.8	1.70	9	1.92	24	19	26.1	0.40	0.30	607	1	1	1.60	1.74	7	8	602	13	130	129	0.2	5.4	5.1	1	5.3
7034	2.6	29	2.6	1.0	3.1	2.47	13	0.89	26	20	20.9	0.49	0.57	844	1	1	1.50	1.22	7	22	719	15	52	41	1.7	10.0	7.8	1	5.6
7035	12.0	23	3.8	1.4	3.1	2.75	13	1.44	39	26	45.7	0.53	0.68	882	1	1	1.40	1.17	13	16	1351	12	97	93	1.2	12.2	10.5	1	8.0
7036	3.9	19	2.1	0.9	2.9	2.66	11	1.18	27	20	26.4	0.46	0.65	698	1	1	1.40	1.22	8	25	470	13	70	60	1.6	10.5	9.3	1	5.2
7037	7.4	29	2.0	0.9	3.5	3.18	10	1.79	31	23	42.4	0.52	0.79	942	1	1	1.40	1.19	11	26	649	21	110	105	1.6	13.8	12.1	1	6.0
7038	6.5	34	2.5	1.1	4.0	3.63	10	1.85	33	26	34.5	0.52	0.93	1040	1	1	1.40	1.21	11	33	652	17	110	98	1.8	16.0	13.9	1	6.3
7039	5.8	29	2.5	0.8	3.9	3.46	10	1.64	34	25	34.1	0.53	0.90	902	1	1	1.40	1.23	10	34	387	11	97	87	1.8	14.9	12.9	1	6.5
7040	4.9	31	2.3	1.0	3.6	3.20	13	1.31	37	24	29.9	0.67	0.76	680	1	1	1.50	1.33	10	26	273	11	82	67	1.7	13.5	11.7	1	7.0
7042	5.3	24	3.2	1.6	3.0	2.73	11	1.70	37	29	33.2	0.51	0.78	712	1	1	1.60	1.44	10	24	675	17	97	94	1.3	12.3	11.1	1	7.7
7043	6.0	35	2.3	1.7	3.6	3.36	9	1.90	33	27	32.2	0.51	0.82	954	1	1	1.60	1.36	10	32	533	12	110	103	1.9	14.0	13.3	1	7.0
7044	5.4	31	2.4	1.4	3.1	2.74	10	1.63	29	22	32.1	0.45	0.67	805	1	1	1.60	1.40	12	27	734	16	100	89	1.4	10.6	9.8	1	5.9
7048	5.2	20	3.0	1.7	3.0	2.94	9	1.44	38	28	34.9	0.53	0.80	633	1	1	1.30	1.20	9	23	296	11	88	87	1.1	13.4	12.5	1	7.3
7049	6.1	32	2.5	1.4	4.0	3.68	10	1.76	34	25	33.9	0.34	0.90	1118	1	1	1.40	1.19	10	35	351	10	110	108	1.8	17.4	16.0	1	7.3
7050	4.9	30	3.7	1.2	3.2	2.94	11	2.18	35	27	37.8	0.51	0.84	820	1	1	1.80	1.64	11	24	1025	17	130	135	1.0	11.6	10.8	1	7.4
7051	5.8	39	6.5	1.5	4.4	3.89	17	2.35	40	33	38.5	0.70	0.82	1295	1	1	1.90	1.59	15	23	1539	27	140	144	0.7	15.5	13.9	1	10.3
7052	3.6	14	7.0	1.2	2.8	2.65	20	2.88	41	40	26.6	0.70	0.59	607	1	1	1.90	1.84	13	11	1394	16	150	155	0.4	10.0	9.6	1	10.4
7053	4.2	9	2.6	0.8	2.3	2.04	13	2.14	24	20	19.5	0.39	0.41	518	1	1	1.80	1.70	10	13	583	14	130	130	0.6	7.2	6.6	1	5.7

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eu1	Fel	Fe2	Hf1	K2	La1	La2	L1	Mg2	Mn2	Mo1	Mo2	Na1	Na2	Nd2	P2	Pb2	Rb1	Rb2	Sc1	Sc2	Se1	Sml			
554	6.4	3.2	1.3	4.0	3.26	10	2.62	31	24	44.3	0.44	0.83	868	1	1	2.20	1.81	13	21	656	15	170	161	0.4	12.9	11.1	1	6.9	
555	3.9	2.6	3.4	0.8	2.5	2.26	11	2.14	26	23	18.8	0.46	0.45	573	1	1	1.90	1.82	9	13	716	12	130	137	0.3	7.6	7.1	1	6.3
556	5.3	1.3	2.4	1.1	1.9	1.81	9	2.19	29	24	20.8	0.50	0.34	677	1	1	1.90	1.78	9	15	662	13	170	165	0.5	6.0	5.5	1	6.0
557	10.0	26	3.1	0.9	2.1	2.12	10	3.00	25	21	86.8	0.38	0.49	884	1	1	1.90	1.83	11	12	1116	26	180	194	0.2	7.6	7.6	1	5.4
558	5.8	33	1.7	1.1	2.7	2.45	9	1.90	30	19	31.0	0.46	0.54	703	1	1	1.70	1.59	9	19	321	11	130	127	1.2	10.0	9.0	1	5.6
559	5.2	31	2.4	1.3	2.4	2.11	9	1.93	29	21	27.7	0.52	0.53	648	1	1	1.70	1.55	8	16	498	44	120	127	1.6	9.0	8.3	1	5.8
560	3.5	20	2.9	1.3	2.9	2.54	13	0.88	25	21	29.0	0.43	0.62	583	1	1	1.20	1.08	8	18	687	21	57	52	1.3	9.5	8.7	1	5.8
561	5.3	24	1.7	1.1	3.7	3.38	9	1.53	30	23	32.5	0.39	0.87	693	1	1	1.40	1.27	10	33	160	8	92	83	1.8	14.1	13.3	1	6.1
562	4.8	59	2.8	1.2	2.5	2.14	11	2.31	26	21	25.5	0.39	0.56	598	1	1	2.00	1.83	9	13	663	13	160	144	0.3	8.6	8.0	1	6.3
563	5.7	29	3.1	1.1	2.2	1.97	12	2.37	30	24	24.9	0.48	0.41	682	1	1	2.00	1.75	10	13	761	17	160	158	0.5	7.9	7.2	1	6.8
565	6.0	14	1.7	0.8	3.2	3.01	9	1.71	19	12	27.4	0.16	0.71	449	1	1	1.70	1.49	10	20	250	9	120	121	0.3	10.8	10.1	1	4.3
566	19.0	21	2.4	0.6	7.9	8.25	8	2.71	22	18	225.2	0.03	1.68	1363	4	5	0.59	0.53	27	41	467	65	150	176	0.2	19.9	18.4	1	3.4
567	6.0	9	3.3	1.0	2.7	2.52	5	2.20	20	14	35.2	0.03	0.34	778	1	1	1.60	1.54	10	10	1702	25	150	151	0.4	6.5	6.1	1	5.3
568	2.3	1	1.2	1.5	1.7	1.66	102	2.16	23	42	0.42	0.44	628	1	2	2.40	2.35	20	2	162	26	58	66	0.3	30.4	29.0	1	4.0	
569	4.9	6	1.3	0.7	1.6	1.52	6	1.84	16	13	20.6	0.03	0.25	484	1	1	1.80	1.68	7	10	552	12	130	131	0.3	4.3	4.0	1	3.3
570	8.4	21	2.3	1.5	2.5	2.17	9	1.83	31	19	39.5	0.03	0.44	608	1	1	1.80	1.55	8	18	252	19	130	125	0.6	8.8	7.7	1	6.1
571	4.1	9	1.7	0.6	1.6	1.48	8	2.12	20	16	16.8	0.03	0.26	515	1	1	1.80	1.85	7	12	670	12	150	151	0.5	4.2	4.0	1	4.3
572	5.2	12	2.7	1.2	2.9	2.20	12	2.12	30	21	22.8	0.05	0.48	554	1	1	2.20	1.73	9	14	580	13	150	145	0.4	9.1	7.4	1	6.3
573	5.2	15	1.8	1.2	2.5	2.06	13	1.43	31	19	30.7	0.13	0.51	740	1	1	1.60	1.29	9	17	711	14	96	85	1.0	9.1	7.3	1	5.5
574	4.1	19	2.0	1.2	2.7	2.45	12	1.32	36	24	23.1	0.26	0.55	965	1	1	1.40	1.14	8	19	378	9	77	72	2.9	10.7	9.4	1	6.5
575	10.0	8	1.2	0.9	2.9	2.93	10	1.48	26	16	29.0	0.20	0.47	700	1	1	1.00	0.98	13	11	513	15	86	100	1.1	10.7	10.2	1	4.5
576	4.8	21	2.5	1.4	3.0	2.80	11	1.30	33	23	25.6	0.26	0.74	1004	1	1	1.20	1.11	10	26	479	12	77	76	1.1	10.6	9.6	1	6.0
577	7.5	18	1.9	1.4	3.6	3.55	9	1.75	33	24	34.6	0.22	0.81	840	1	1	1.10	1.01	12	28	447	9	98	107	1.5	13.1	12.1	1	5.8
578	3.1	21	2.6	1.1	3.0	2.82	15	0.91	28	21	16.8	0.30	0.50	1228	1	1	1.20	1.06	10	19	621	16	55	51	2.5	7.6	6.7	1	5.3
579	8.1	14	2.0	1.2	2.3	2.23	9	1.78	30	22	18.7	0.17	0.48	694	1	1	1.20	0.98	10	14	410	13	98	118	5.3	13.3	12.3	1	4.9
580	6.4	28	2.6	1.4	4.0	3.53	11	1.81	38	28	29.8	0.20	0.82	1067	1	1	1.40	1.12	11	35	439	12	110	101	3.8	14.1	12.2	1	7.1
581	5.2	18	1.4	0.9	2.9	2.71	11	1.46	29	20	27.6	0.18	0.58	1072	1	1	1.30	1.17	11	21	249	20	91	83	0.6	10.0	9.0	1	5.4
582	5.5	16	2.7	1.2	3.0	2.74	11	1.58	33	23	29.5	0.19	0.71	1012	1	1	1.40	1.23	11	26	567	11	96	92	0.6	11.0	10.2	1	6.5
583	6.1	23	2.6	1.3	3.3	2.99	10	1.66	36	24	29.9	0.25	0.80	946	1	1	1.40	1.19	11	31	734	11	100	97	0.8	12.6	11.3	1	6.7
584	3.4	33	4.7	2.0	5.8	5.01	5	0.88	35	25	19.2	0.21	0.51	632	1	1	0.81	0.66	11	21	1189	19	46	52	0.8	12.4	10.2	1	6.8
585	7.5	16	2.8	1.3	5.2	4.66	11	2.06	41	31	55.2	0.23	0.88	809	1	1	1.30	1.08	19	27	467	1	120	138	0.6	18.8	15.6	1	6.1
586	5.1	38	3.1	1.7	4.7	4.07	11	1.10	39	27	42.4	0.26	0.91	1058	1	1	1.40	1.10	14	49	671	21	66	70	7.1	14.5	11.9	1	7.0
587	5.0	23	2.1	1.1	3.7	3.28	11	1.27	31	19	31.3	0.18	0.57	1115	1	1	1.40	1.06	10	27	621	12	82	84	3.8	11.7	9.6	1	5.7
588	3.7	9	4.9	1.8	4.5	4.24	4	1.30	42	36	27.3	0.06	0.56	798	1	1	1.40	1.31	11	15	951	16	76	84	0.3	13.6	13.3	1	7.6
589	4.8	18	1.8	1.1	4.1	3.75	12	1.16	27	19	24.1	0.17	0.49	795	1	1	1.20	0.98	11	18	952	13	76	71	2.4	10.9	9.5	1	5.2
590	6.2	16	1.9	0.9	4.2	3.77	11	1.40	35	25	30.9	0.11	0.71	729	1	1	1.30	1.10	11	26	642	11	92	90	3.4	12.5	11.0	1	6.5
591	3.8	18	2.3	1.0	2.2	2.04	13	1.17	24	17	23.9	0.14	0.44	1044	1	1	1.40	1.24	8	14	879	22	73	73	1.0	6.5	5.8	1	5.0
592	6.7	1	1.2	1.0	2.3	2.24	14	1.77	27	18	9.2	0.25	0.31	773	1	1	1.00	0.97	11	9	312	1	110	118	3.0	12.9	11.6	1	4.7
593	4.6	31	2.3	1.3	3.4	3.09	12	1.58	37	27	26.9	0.15	0.79	814	1	1	1.40	1.23	10	28	421	16	91	83	6.3	12.1	11.0	1	7.0
594	4.6	23	2.3	1.4	3.4	3.11	11	1.40	35	25	28.0	0.26	0.75	766	1	1	1.40	1.18	10	29	355	15	85	85	2.7	12.9	11.6	1	6.4
595	7.9	27	2.5	1.1	4.5	4.83	6	1.31	30	24	34.8	0.10	0.56	608	2	1	0.68	0.60	14	25	752	26	80	93	1.6	11.9	11.6	1	5.2
596	12.0	37	1.7	1.5	5.0	4.97	10	1.48	37	30	73.5	0.41	1.23	521	1	1	0.84	0.75	12	68	650	8	92	108	12.2	15.0	13.4	1	6.6
597	4.6	31	2.3	1.3	3.4	3.09	13	2.09	48	32	37.8	0.31	0.87	1265	1	1	1.40	1.03	10	39	556	26	120	116	17.3	16.5	13.3	1	8.9
598	4.0	44	3.1	1.2	3.3	3.07	12	1.26	29	23	24.8	0.56	0.56	1987	1	1	0.5	0.38	1	1	1	110	1	107	152	0.5	1	6.6	
599	3.3	11	2.0	0.6	2.6	2.53	10	1.04	24	19	21.0	0.43	0.56	975	1	1	1.20	1.05	11	27	629	26	78	74	4.8	9.4	8.6	1	6.1
600	8.4	39	2.7	1.9	4.6	3.93	13	2.09	48	32	37.8	0.31	0.87	1265	1	1	1.40	1.03	10	39	556	26	120	116	17.3	16.5	13.3	1	8.9
601	7.7	1	0.5	0.8	4.7	0.01	10	0.01	33	1	0.5	0.38	0.03	1	1	1.20	0.01	1	1	1	110	1	107	15.2	0.5	1	6.6		
602	4.0	3.3	11	2.0	0.6	2.53	10	1.04	24	19	21.0	0.43	0.56	975	1	1	1.20	1.05	11	27	629	26	78	74	4.8	9.4	8.6	1	6.1
603	4.0	44	3.1	1.2	3.3	3.07	12	1.26	29	23	24.8	0.56	0.56	1987	1	1	1.20	1.05	11	27	629	26	78	74	4.8	9.4	8.6	1	6.1
604	4.0	3.3	11	2.0	0.6	2.53	10	1.04	24	19	21.0	0.43	0.56	975	1	1	1.20	1.05	11	27	629	26	7						

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eu1	Fel1	Fe2	Hf1	K2	Lal1	La2	Li2	Lul1	Mg2	Mn2	Mo1	Mo2	Na1	Na2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sb2	Sc1	Sc2	Se1	Se2	Sm1
7106	6.8	19	1.7	0.9	3.2	2.97	9	1.25	30	21	29.6	0.45	0.53	649	3	4	1.10	1.02	9	19	382	13	75	70	2.2	10.5	9.1	1	5.6		
7107	6.9	1	0.6	0.6	0.5	0.45	13	2.30	31	17	14.4	0.49	0.12	412	1	1	1.70	1.58	9	1	222	14	150	140	0.2	6.2	4.8	1	5.4		
7108	8.1	10	3.5	1.1	2.5	2.33	10	2.36	40	31	33.5	0.54	0.42	722	1	1	2.00	1.79	10	12	971	15	180	165	0.2	8.0	7.0	1	8.3		
7109	8.0	11	1.1	1.1	0.7	2.0	1.84	6	2.12	25	18	35.3	0.22	0.38	513	1	1	2.00	1.81	7	11	403	14	160	152	0.2	7.3	6.3	1	4.6	
7110	6.2	10	2.5	1.0	1.9	1.75	7	1.92	28	20	27.8	0.23	0.31	709	1	2	2.00	1.86	7	11	333	15	140	132	0.2	6.9	6.0	1	6.2		
7111	7.4	4	1.6	0.6	0.6	2.2	2.07	10	2.37	29	22	31.7	0.26	0.32	526	1	1	2.00	1.81	11	7	461	14	160	150	0.1	6.8	5.8	1	5.5	
7112	12.0	1	2.1	1.2	2.0	1.84	8	2.10	32	21	37.6	0.30	0.21	428	1	1	1.70	1.48	10	5	249	14	160	145	0.2	8.8	7.7	1	7.0		
7113	8.5	4	1.2	0.7	2.1	1.96	11	2.32	32	21	30.4	0.42	0.28	538	1	1	1.80	1.59	11	9	531	14	160	151	0.2	7.7	6.7	1	5.7		
7114	8.9	15	1.5	0.7	0.7	2.4	2.36	7	2.41	31	25	46.8	0.34	0.54	668	1	1	1.90	1.71	10	22	512	15	170	164	0.2	9.0	8.5	1	5.7	
7115	6.0	5	2.1	0.7	1.8	1.72	11	2.21	30	24	30.5	0.45	0.27	552	1	1	1.90	1.75	11	6	205	14	150	142	0.2	6.3	5.5	1	5.9		
7116	5.5	7	2.0	1.0	1.7	1.71	10	1.91	34	25	27.1	0.47	0.34	614	1	1	1.90	1.75	9	9	231	13	140	120	0.3	7.0	6.3	1	6.6		
7117	6.2	1	1.6	0.6	2.1	2.02	13	2.05	37	23	30.7	0.48	0.32	641	1	1	1.90	1.73	11	7	189	15	140	118	0.2	7.2	6.0	1	7.0		
7118	9.5	9	5.1	0.8	2.6	2.30	15	3.20	49	37	53.0	1.00	0.47	830	1	1	2.30	1.99	15	15	975	26	240	197	0.2	11.1	10.0	1	10.7		
7119	9.4	9	2.2	1.1	2.6	2.28	13	2.42	48	29	45.8	1.00	0.52	756	1	1	2.20	1.89	10	14	717	14	180	154	0.4	10.5	8.8	1	8.0		
7120	11.0	4	3.2	0.8	2.7	2.39	12	2.88	41	30	64.7	0.73	0.52	775	1	1	2.30	1.91	14	11	869	22	220	179	0.3	10.9	9.4	1	8.3		
7122	8.8	13	5.5	1.4	2.8	2.86	14	2.64	42	38	52.4	0.29	0.54	1039	1	1	1.90	1.90	12	12	1515	20	190	160	0.3	8.4	8.5	1	10.5		
7123	4.6	9	2.0	0.6	1.4	1.35	9	1.87	22	20	20.6	0.35	0.27	572	1	1	1.60	1.68	8	7	612	11	130	113	0.2	4.8	4.6	1	4.7		
7124	3.9	6	2.1	0.3	1.7	1.67	8	1.83	20	17	17.7	0.29	0.24	758	1	1	1.70	1.77	7	7	747	13	130	111	0.2	4.2	3.8	1	4.4		
7125	7.8	7	1.8	1.1	2.3	2.09	10	1.83	33	24	45.6	0.45	0.37	858	1	1	1.90	1.68	13	10	225	19	170	134	0.4	8.7	7.4	1	6.2		
7126	6.7	7	2.3	0.3	2.6	2.28	8	1.89	25	18	37.7	0.25	0.32	1065	1	1	2.00	1.73	12	9	853	17	160	136	0.4	6.6	5.6	1	5.1		
7127	5.6	16	1.4	0.3	2.5	2.17	9	1.74	27	17	30.9	0.34	0.44	699	1	1	1.80	1.63	9	16	367	14	120	103	0.7	9.2	7.9	1	4.9		
7128	4.0	14	1.7	0.3	2.6	2.45	7	1.47	20	13	25.5	0.32	0.33	783	1	1	1.70	1.57	7	14	415	17	98	83	0.6	5.9	5.2	1	3.8		
7129	4.8	14	2.4	1.3	2.4	2.08	10	1.51	31	20	28.0	0.51	0.42	861	1	1	1.80	1.58	9	15	676	10	100	91	0.7	8.4	6.9	1	6.1		
7130	4.6	18	2.2	1.3	2.3	2.01	12	1.75	34	19	21.6	0.46	0.37	783	1	1	2.10	1.78	8	12	617	13	120	103	0.6	8.1	6.6	1	6.6		
7131	4.8	28	1.8	1.1	4.1	3.86	8	1.35	26	18	35.9	0.39	0.99	879	1	1	1.40	1.23	9	51	327	7	85	76	1.2	15.8	14.5	1	5.2		
7132	4.7	35	2.2	1.1	3.8	3.67	7	1.08	24	18	42.9	0.42	1.28	647	1	1	1.40	1.23	9	60	466	8	56	60	1.2	16.9	15.6	1	5.1		
7133	4.3	30	2.0	1.2	3.4	3.20	8	1.20	30	19	32.8	0.41	0.98	700	1	1	1.50	1.30	8	47	317	6	66	64	1.5	14.6	13.2	1	5.6		
7134	3.0	24	2.1	0.6	2.9	2.89	10	1.05	25	18	20.5	0.46	0.68	641	1	1	1.30	1.26	8	32	426	9	62	57	0.9	10.6	10.2	1	4.9		
7135	5.0	38	3.0	1.2	5.0	4.76	8	1.72	37	26	37.9	0.55	1.26	1482	1	1	1.30	1.20	10	68	520	14	100	87	2.0	19.3	17.9	1	7.5		
7136	4.9	24	2.4	1.2	4.1	3.97	9	1.50	31	21	34.1	0.46	0.99	812	1	1	1.50	1.32	10	44	439	10	91	85	1.1	16.0	14.8	1	6.1		
7137	4.5	36	2.3	1.1	3.5	3.38	9	1.30	31	21	28.6	0.44	0.92	682	1	1	1.40	1.33	9	37	270	9	77	70	1.1	14.1	12.9	1	5.9		
7138	4.4	25	2.1	1.2	3.7	3.35	9	1.43	30	19	27.6	0.54	0.85	767	1	1	1.60	1.36	9	35	281	10	84	78	0.9	14.7	12.9	1	6.0		
7139	4.8	29	2.3	1.1	4.5	3.95	8	1.37	29	20	30.4	0.46	1.19	929	1	1	1.70	1.38	9	62	232	8	81	71	1.4	17.5	15.4	1	5.6		
7140	3.3	21	2.0	1.1	2.9	2.66	12	0.91	24	17	21.3	0.45	0.60	522	1	1	1.40	1.28	7	25	183	11	53	54	1.0	11.1	9.8	1	4.7		
7141	5.3	24	2.2	1.2	3.3	3.16	9	1.35	32	21	37.0	0.50	1.05	671	1	1	1.50	1.29	9	47	247	5	92	87	1.2	16.2	14.7	1	6.2		
7142	6.5	52	2.7	1.4	4.9	4.65	8	1.81	38	27	38.5	0.57	1.28	1241	1	1	1.40	1.22	11	63	401	12	110	96	1.7	19.8	17.7	1	7.3		
7143	7.6	13	1.9	0.9	4.1	4.14	6	1.65	23	17	43.6	0.42	1.04	787	1	1	1.10	1.07	11	35	262	1	100	96	1.0	17.8	16.6	1	4.6		
7144	6.3	22	2.4	1.6	4.2	4.03	9	1.58	34	21	35.2	0.55	0.93	747	1	1	1.40	1.22	10	44	153	7	110	97	1.5	17.7	16.4	1	6.4		
7145	7.4	26	2.8	1.6	4.2	3.91	8	1.76	37	26	34.8	0.52	1.11	932	1	1	1.40	1.25	10	45	365	8	100	95	1.2	17.0	15.4	1	7.3		
7146	5.3	24	2.2	1.2	3.3	3.16	9	1.34	28	18	35.4	0.39	0.95	682	1	1	1.50	1.31	9	30	140	5	93	83	1.0	16.6	15.2	1	5.8		
7147	5.4	32	2.2	1.0	4.7	4.64	7	1.89	29	20	38.4	0.41	1.30	1022	1	1	1.40	1.26	8	34	353	12	59	54	0.9	13.6	12.6	1	5.5		
7148	6.8	29	3.3	2.1	4.3	3.83	10	2.13	47	32	29.3	0.61	0.86	1308	1	1	1.50	1.24	11	33	236	12	130	107	0.7	15.4	13.5	1	8.6		
7149	8.3	32	2.9	1.1	4.6	4.21	9	2.54	44	31	37.3	0.70	1.03	1093	1	1	1.50	1.20	11	39	449	12	150	135	0.8	18.7	16.0	1	8.4		
7150	5.3	11	1.9	0.8	3.3	3.17	9	1.34	28	18	35.4	0.39	0.95	682	1	1	1.50	1.31	9	30	140	5	93	83	1.0	16.6	15.2	1	5.8		
7151	3.5	24	2.4	1.4	3.7	3.51	10	0.99	25	17	24.8	0.51	0.75	761	1	1	1.40	1.26	8	34	353	12	59	54	0.9	13.6	12.6	1	5.5		
7152	3.3	41	2.4	0.9	3.4	3.35	10	1.18	27	20	21.5	0.51	0.85	908	1	1	1.40	1.38	8	36	488	12	65	57	1.1	12.8	12.4	1	5.5		
7153	4.2	21	2.6	1.4	3.4	3.31	9	1.31	28	21	36.2	0.48	1.14	686	1	1	1.50	1.33	9	60	501	2	72	68	1.5	15.5	14.4	1	6.2		
7154	5.4	32	3.6	1.6	4.9	4.71	8	1.31	32	23	43.8	0.60	1.21	1349	1	1	1.40	1.24	11	63	507	12	87	75	1.7	17.6	16.4	1	7.0		

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eul	Fel	Hf1	K2	Lal	La2	L12	Lul	Mg2	Mn2	Mol	Mo2	Nal	Na2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Sml	
7156	5.1	25	2.3	1.4	3.8	3.66	9	1.29	29	20	34.8	0.46	0.99	63.5	1	1	1.30	1.15	10	58	289	3	78	76	1.4	16.1	14.1	1	5.8
7157	10.0	33	2.8	1.2	3.9	3.59	10	1.69	34	25	37.4	0.56	0.86	90.0	1	1	1.40	1.25	10	35	467	14	110	95	1.0	14.8	13.2	1	7.0
7158	7.2	25	2.5	1.2	4.5	3.93	10	1.19	30	19	42.9	0.50	0.84	79.0	1	1	1.50	1.19	9	29	316	10	69	67	1.3	15.7	13.0	1	6.1
7159	5.9	56	3.0	1.1	4.3	4.16	9	1.39	35	27	45.4	0.40	1.30	93.4	1	1	1.30	1.17	10	62	330	6	82	81	2.0	16.9	16.1	1	7.9
7160	5.9	18	1.8	0.8	3.7	3.64	7	1.55	26	21	54.6	0.38	1.24	81.4	1	1	1.20	1.10	10	63	345	4	100	99	1.5	17.4	16.9	1	5.4
7161	7.6	24	2.0	0.8	4.0	3.92	7	1.30	28	19	45.5	0.47	0.93	64.3	1	1	1.20	1.11	9	38	264	4	79	79	1.5	16.2	15.2	1	5.7
7162	6.2	6	1.7	0.5	1.7	1.47	8	2.09	27	19	25.6	0.68	0.26	56.9	2	3	2.00	1.90	8	8	289	18	150	154	0.2	5.0	4.4	1	4.7
7163	7.4	5	2.9	1.0	2.2	1.98	12	2.63	41	29	30.0	0.91	0.30	60.7	1	1	2.10	1.86	11	6	777	13	200	185	0.1	6.9	6.0	1	7.0
7164	5.0	13	2.2	1.1	2.1	1.96	10	1.75	30	22	22.8	0.72	0.32	76.9	1	1	1.90	1.76	8	10	692	13	130	124	0.4	6.2	5.6	1	5.6
7165	5.1	6	2.4	1.0	1.7	1.53	10	1.92	28	20	19.2	0.76	0.24	67.1	1	1	2.00	1.83	8	6	756	12	150	139	0.3	5.4	4.3	1	5.3
7166	14.0	9	5.3	0.9	2.9	2.55	15	2.65	50	36	58.3	1.30	0.58	100.2	1	1	2.30	1.94	13	12	1387	16	220	206	0.3	11.4	9.5	1	10.0
7167	6.5	13	1.9	0.9	2.2	2.04	8	1.88	32	22	28.5	0.61	0.40	83.2	1	1	2.10	1.81	8	15	722	13	140	135	0.3	7.6	6.8	1	6.0
7168	7.4	5	2.9	1.0	2.2	1.98	12	2.63	41	29	30.0	0.91	0.30	60.7	1	1	2.10	1.86	11	6	777	13	200	185	0.1	6.9	6.0	1	7.0
7169	7.0	9	4.7	0.9	2.2	2.11	12	2.16	34	27	33.8	1.00	0.38	88.9	1	1	1.90	1.90	10	7	1203	16	160	157	0.2	6.6	6.1	1	7.3
7170	7.1	43	2.3	1.0	4.8	4.24	8	2.20	37	26	35.8	0.72	1.01	84.9	1	1	1.50	1.24	13	41	401	11	130	131	0.9	17.1	14.8	1	6.4
7171	7.1	42	2.5	0.3	3.8	3.24	16	1.52	49	30	37.3	0.67	0.74	65.5	1	1	2.00	1.76	12	20	175	12	82	75	0.8	13.3	11.5	1	8.6
7172	3.8	15	2.2	0.8	3.0	2.75	16	1.12	34	26	26.5	0.54	0.58	70.1	1	1	1.40	1.25	11	15	264	11	65	75	1.5	11.5	9.6	1	6.5
7173	3.5	19	2.1	0.3	3.3	2.90	11	1.03	29	24	23.4	0.48	0.58	53.0	1	1	1.50	1.32	10	15	227	8	62	58	1.1	11.9	9.9	1	5.5
7174	4.3	1	0.2	0.3	3.3	2.76	11	0.89	25	14	18.7	0.46	0.32	41.4	1	1	1.30	1.16	9	7	212	9	57	55	1.2	8.9	7.3	1	4.3
7175	5.6	1	0.6	0.3	0.7	0.60	29	1.92	26	14	7.6	0.53	0.17	45.8	13	12	1.50	1.37	20	1	112	25	84	80	0.9	8.9	6.7	1	4.9
7176	10.0	1	0.7	0.8	1.1	1.02	17	2.02	32	17	9.3	0.61	0.58	41.7	1	1	1.40	1.42	16	6	121	16	110	111	1.2	15.4	13.2	1	5.9
7177	2.8	1	2.1	0.3	0.37	24	6.67	18	10	9.4	3.60	0.30	103	1	2	4.00	4.13	22	1	189	46	320	237	0.2	2.4	1.4	1	7.4	
7178	6.8	1	0.8	0.3	0.6	0.58	16	1.30	28	18	7.9	0.41	0.17	38.8	1	2	1.40	1.24	13	2	61	17	78	70	1.5	8.2	6.1	1	5.3
7179	7.4	1	1.3	1.0	2.5	2.27	11	1.45	31	21	27.5	0.38	0.58	49.4	1	1	1.40	1.28	12	12	78	13	99	83	1.6	13.5	11.6	1	5.9
7180	2.1	1	0.8	0.7	1.0	0.79	16	0.73	25	14	10.0	0.52	0.09	47.5	1	1	0.64	0.64	6	2	48	2	43	34	1.9	6.8	5.1	1	4.9
7181	3.2	16	2.0	0.7	2.1	2.07	10	0.80	21	19	23.7	0.33	0.46	74.8	1	1	1.10	1.09	8	15	374	15	49	39	1.5	7.0	6.5	1	4.3
7182	7.1	7.1	3.5	1	1.0	1.08	82	1.75	11	13	2.7	0.72	0.30	58.6	1	2	2.60	2.81	27	1	157	19	51	54	0.1	14.6	13.1	1	4.3
7183	4.2	2	1.0	0.6	1.7	1.50	12	1.09	22	13	19.1	0.33	0.18	45.1	1	1	1.20	1.18	7	5	69	4	74	63	1.5	8.3	7.2	1	3.9
7184	2.1	1	0.8	0.7	1.0	0.79	16	0.73	25	14	10.0	0.52	0.09	47.5	1	1	0.64	0.64	6	2	48	2	43	34	1.9	6.8	5.1	1	4.9
7185	5.6	1	0.8	0.3	1.0	0.91	12	1.37	11	8	9.0	0.38	0.24	56.7	1	1	1.20	1.16	10	3	131	1	74	68	0.3	8.7	7.9	1	2.1
7186	5.4	1	0.6	0.3	1.0	0.96	13	1.40	11	8	7.8	0.31	0.20	623	1	1	0.72	0.71	12	2	84	1	78	67	0.8	10.0	8.8	1	2.3
7187	2.2	1	1.0	0.9	1.9	1.51	15	0.75	30	18	6.8	0.53	0.23	438	1	1	0.88	0.88	8	5	64	1	36	29	2.1	8.8	7.5	1	5.7
7188	10.0	1	0.7	0.3	0.7	0.69	10	1.38	19	14	12.8	0.24	0.22	42.5	1	1	1.10	1.08	10	3	134	7	91	87	1.3	8.8	8.5	1	3.6
7189	5.6	1	0.8	0.3	1.0	0.91	12	1.37	11	8	9.0	0.38	0.24	56.7	1	1	1.20	1.16	10	3	131	1	74	68	0.3	8.7	7.9	1	2.1
7190	5.4	1	0.6	0.3	1.0	0.96	13	1.40	11	8	7.8	0.31	0.20	623	1	1	0.72	0.71	12	2	84	1	78	67	0.8	10.0	8.8	1	2.3
7191	2.2	1	1.0	0.9	1.9	1.51	15	0.75	30	18	6.8	0.53	0.23	438	1	1	0.88	0.88	8	5	64	1	36	29	2.1	8.8	7.5	1	5.7
7192	3.5	1	1.0	0.8	1.2	1.03	13	1.44	36	20	8.5	0.54	0.16	782	1	1	0.73	0.71	8	2	47	4	62	53	1.7	12.0	10.8	1	6.6
7193	9.0	1	1.4	1.3	0.8	0.76	12	2.09	57	28	25.7	0.68	0.21	179	1	1	1.49	0.46	11	3	104	6	88	90	3.2	17.8	16.4	1	10.6
7194	6.4	1	1.3	0.7	1.2	1.14	11	1.75	27	21	7.7	0.50	0.34	302	1	1	1.10	1.08	9	6	98	2	100	93	1.2	15.0	13.7	1	5.0
7195	7.2	1	1.1	1.5	1.8	1.78	12	1.56	35	28	7.7	0.57	0.32	330	1	1	0.75	0.72	9	10	94	1	97	94	1.8	13.6	12.3	1	6.4
7196	2.3	1	0.8	1.1	0.9	0.74	23	1.15	34	17	8.6	0.62	0.12	464	1	1	0.81	0.75	9	1	94	6	54	52	1.3	10.0	7.7	1	6.3
7197	3.5	1	0.2	1.1	0.5	0.58	31	1.98	49	14	8.8	0.38	0.21	234	1	1	1.40	1.53	9	1	160	15	64	65	0.6	11.6	11.6	1	7.8
7198	2.8	15	1.9	0.8	3.3	2.94	10	0.71	21	15	20.3	0.31	0.45	613	1	1	1.30	1.13	9	15	812	9	37	36	1.8	10.3	9.0	1	4.7
7200	4.5	10	1.7	1.3	2.6	2.60	10	1.56	35	22	31.0	0.44	1.03	555	1	1	1.30	1.19	8	39	102	1	95	90	1.3	14.7	13.9	1	5.6
7201	5.6	25	2.3	1.0	4.2	4.17	8	1.84	27	21	32.6	0.49	1.02	741	1	1	1.10	1.09	11	40	425	6	100	112	1.1	15.6	14.8	1	5.2
7202	4.1	44	3.6	1.0	4.6	4.24	11	1.79	29	24	21.1	0.55	0.88	965	1	1	1.50	1.32	10	34	759	14	100	99	0.9	14.2	12.4	1	6.2
7203	4.6	25	2.8	1.4	3.9	3.64	8	1.40	34	27	34.6	0.60	1.00	867	1	1	1.40	1.29	10	41	206	6	84	79	1.9	16.2	14.5	1	7.6
7204	7.5	4	1.6	0.9	2.6	2.42	10	1.62	30	20	30.2	0.48	0.78	625	1	1	1.50	1.26	10	20	108	4	110	94	0.8	15.4	13.2	1	5.5
7205	6.5	1	0.8	0.8	1.4	1.64	10	1.97	18	12	6.1	0.41	0.32	872	1	1	0.69	0.75	10	5	90	1	100	103	0.8	14.8	15.7	1	3.3
7206	15.0	35	2.2	0.3	4.7	4.47	8	1.70	26	21	44.0	0.46	0.94	681	1	1	1.30	1.06	10	45	292	1							

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eu1	Fe1	Fe2	Hf1	K2	Lal	L22	Li2	Lul	Mg2	Mn2	Mol	Mo2	Nal	Na2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Se2	Se3	Sm1
7210	6.3	1	0.8	0.3	0.9	0.89	16	2.05	21	1.3	9.5	0.60	0.22	565	1	1	1.30	1.31	10	3	130	4	110	97	0.8	14.5	13.1	1	4.0		
7211	6.1	1	0.8	0.3	0.7	0.62	10	1.07	22	1.4	9.3	0.45	0.19	370	1	1	1.00	1.00	9	2	94	8	62	60	1.9	9.3	8.2	1	4.0		
7212	7.1	1	0.9	0.3	0.6	0.64	9	1.11	18	1.2	8.6	0.42	0.20	368	1	1	1.10	1.06	11	2	123	14	63	58	1.7	8.9	8.0	1	3.3		
7214	10.0	1	0.4	0.3	0.5	0.44	8	4.42	14	8	22.3	0.03	0.16	261	2	4	2.30	2.30	11	2	318	29	250	235	0.3	4.8	4.5	1	2.6		
7215	5.6	1	0.8	0.3	0.8	0.80	21	2.03	21	1.3	10.1	0.48	0.25	440	1	2	1.80	1.68	13	3	260	21	120	108	0.6	10.0	8.4	1	3.7		
7216	4.3	5	1.3	0.3	4.3	4.66	9	0.98	20	14	20.3	0.37	0.25	396	1	1	0.86	0.86	13	5	744	13	40	53	0.7	7.7	7.8	1	3.8		
7217	7.8	8	1.8	0.9	3.1	2.91	8	1.64	28	22	59.1	0.37	0.79	808	1	1	1.50	1.30	10	25	269	4	110	100	1.1	13.0	12.1	1	5.4		
7218	5.2	1	1.0	1.2	2.1	1.86	15	1.62	31	14	12.8	0.65	0.34	495	1	1	1.30	1.21	11	6	131	11	83	80	0.8	12.3	11.2	1	5.9		
7219	5.3	15	1.7	0.9	3.8	3.61	9	1.51	30	19	30.4	0.48	0.66	655	1	1	1.30	1.18	11	26	441	9	94	91	1.1	12.1	11.3	1	5.4		
7220	4.4	15	1.8	0.9	4.4	4.23	7	1.20	25	16	33.8	0.40	0.54	571	1	1	1.10	1.03	11	25	348	7	73	72	0.8	10.8	10.0	1	4.6		
7221	3.3	8	1.6	0.3	2.0	1.98	9	1.13	20	16	24.8	0.40	0.56	612	1	1	1.20	1.23	8	15	140	6	63	64	0.9	7.8	7.4	1	3.7		
7222	7.3	1	1.2	0.9	1.4	1.47	10	1.96	32	23	20.4	0.51	0.43	565	1	1	1.20	1.24	10	8	160	9	140	119	0.9	12.3	11.5	1	5.6		
7223	3.6	5	2.0	1.0	1.6	1.53	11	1.21	23	17	20.8	0.42	0.43	789	1	1	1.40	1.35	8	12	462	9	73	63	0.6	7.8	7.0	1	4.4		
7224	9.0	7	1.4	1.1	4.2	3.81	10	1.81	30	18	26.5	0.55	0.29	752	1	1	1.10	1.00	12	7	325	6	130	117	12.1	13.3	11.5	1	5.2		
7225	6.2	22	1.6	0.3	3.3	3.35	7	1.30	23	14	55.7	0.37	0.36	569	1	2	1.20	1.13	10	16	358	9	78	75	2.2	11.2	10.6	1	4.7		
7226	6.6	20	1.6	0.9	3.6	3.47	7	1.86	25	18	43.5	0.27	0.77	632	1	1	1.40	1.30	11	37	352	9	120	106	1.2	13.6	12.7	1	5.0		
7227	5.2	3	1.5	1.1	1.6	1.53	12	1.30	26	17	15.1	0.43	0.43	468	1	1	1.30	1.20	9	10	373	8	75	68	1.3	10.0	8.8	1	4.9		
7228	6.0	1	0.7	0.9	0.4	0.41	17	1.58	25	14	7.9	0.39	0.13	362	1	1	1.30	1.23	7	1	105	12	81	77	0.8	6.5	5.2	1	4.7		
7229	5.7	1	1.2	0.3	0.8	0.68	27	3.39	21	8	14.3	0.67	0.18	264	1	1	1.90	2.02	11	1	121	10	150	132	0.3	10.0	8.2	1	4.7		
7230	18.0	1	0.4	0.3	0.6	0.63	7	0.01	6	4	28.7	0.09	0.16	236	1	1	1.80	1.66	11	1	277	37	340	338	0.5	4.3	3.9	1	1.1		
7231	6.0	2	2.1	1.1	4.2	4.07	9	1.36	24	12	38.5	0.11	0.23	396	1	1	1.00	0.95	15	5	1137	32	75	76	0.6	8.9	8.3	1	5.2		
7232	4.3	10	2.9	1.2	2.5	2.30	11	2.00	29	23	20.5	0.44	0.48	654	1	1	1.70	1.62	10	19	696	13	120	106	1.1	9.2	8.4	1	6.1		
7234	6.2	1	0.8	0.3	3.7	3.19	18	1.87	27	12	11.7	0.55	0.25	509	1	1	1.70	1.56	15	5	265	12	110	101	0.9	11.8	9.7	1	5.0		
7235	2.6	1	0.8	0.3	4.6	0.90	9	3.54	14	12	8.3	0.90	0.30	533	1	2	1.60	1.60	27	2	400	39	27	178	0.8	22.6	11.9	1	4.2		
7236	4.4	1	1.8	0.9	2.5	2.62	48	4.27	9	10	4.8	0.34	0.28	408	1	1	2.10	2.25	15	3	294	22	170	176	0.3	12.7	12.9	1	2.6		
7237	5.2	9	1.1	0.3	4.8	4.28	9	1.59	30	16	32.4	0.35	0.40	621	1	1	1.10	1.02	11	20	987	8	95	99	2.1	12.3	11.3	1	5.5		
7238	5.1	3	1.4	1.1	2.6	2.30	12	1.91	25	14	24.6	0.26	0.43	570	1	1	1.70	1.61	10	11	166	11	120	114	0.7	9.3	8.4	1	4.9		
7243	4.6	3	0.7	1.0	2.8	2.68	9	1.48	28	17	11.4	0.47	0.48	602	1	1	1.30	1.32	11	11	323	7	83	81	0.4	12.8	12.7	1	5.1		
7240	8.0	1	0.6	0.3	0.4	0.36	10	2.16	24	12	13.8	0.43	0.12	430	1	1	1.40	1.35	8	1	171	14	160	140	0.3	5.8	4.6	1	4.3		
7241	2.7	6	0.6	0.9	3.4	3.13	7	0.83	28	11	15.6	0.39	0.22	451	1	1	1.50	1.53	8	10	919	18	46	49	0.2	7.4	6.4	1	4.9		
7242	6.6	16	2.1	0.9	4.2	3.78	7	1.64	27	12	37.4	0.36	0.29	433	1	1	1.30	1.15	10	26	1173	9	100	83	0.7	11.3	10.0	1	4.5		
7243	6.5	16	2.7	0.3	4.3	3.89	10	1.88	27	15	27.8	0.48	0.14	536	1	1	1.20	1.03	10	7	271	11	110	88	2.3	13.9	12.3	1	5.4		
7245	8.9	16	5.1	0.3	0.8	4.46	40	0.43	17	8	18.3	0.37	0.93	859	1	1	1.50	1.41	14	18	197	2	160	44	0.9	13.5	22.0	1	3.6		
7246	4.8	8	2.8	1.6	1.9	1.47	11	1.72	31	20	21.7	0.30	0.14	578	1	1	2.40	1.73	7	8	282	9	120	88	0.4	8.1	5.8	1	5.1		
7247	7.4	1	1.9	0.3	0.7	0.68	9	1.82	24	15	16.8	0.37	0.04	457	5	6	1.80	1.50	8	2	172	9	120	89	0.4	10.0	7.9	1	3.9		
7248	7.2	18	4.1	1.2	3.8	3.48	8	2.01	37	30	44.8	0.36	0.54	817	3	4	1.80	1.54	10	24	120	11	130	90	1.6	14.5	12.8	1	7.1		
7249	4.8	27	3.8	1.2	4.2	3.91	10	1.56	37	28	37.7	0.51	0.91	805	1	1	1.50	1.23	11	46	143	6	91	73	2.0	18.1	16.0	1	7.3		
7250	5.9	8	2.4	0.3	1.9	1.81	10	2.16	21	16	25.8	0.18	0.06	486	1	1	1.80	1.75	7	6	481	11	150	104	0.3	4.6	3.9	1	3.7		
7251	7.2	3	2.8	0.8	1.8	1.63	10	1.87	26	17	36.3	0.37	0.33	696	1	1	1.70	1.59	8	11	245	8	130	89	0.6	9.4	8.2	1	4.8		
7252	5.3	6	2.7	1.2	2.0	1.88	10	1.83	27	15	25.5	0.23	0.14	606	1	1	1.90	1.89	9	7	182	14	130	96	0.4	6.3	5.9	1	5.1		
7253	6.7	1	2.4	0.8	0.7	0.65	12	1.78	20	13	15.6	0.38	0.12	447	1	1	1.50	1.34	6	3	152	7	130	88	0.8	1.6	1.3	1	3.8		
7254	11.0	1	2.1	1.0	0.8	0.68	18	3.46	37	16	32.9	0.93	0.02	664	6	7	1.90	1.89	10	2	306	14	210	147	0.4	6.9	6.1	1	7.1		
7255	7.0	6	2.2	0.8	1.9	1.97	9	1.97	21	14	36.7	0.03	0.18	546	1	1	1.70	1.69	8	8	366	15	130	92	0.6	7.2	6.7	1	3.6		
7256	6.0	6	2.5	0.3	3.8	3.35	8	1.26	18	10	22.1	0.29	0.11	459	1	1	1.20	0.98	10	7	795	9	85	71	1.1	10.3	8.8	1	3.4		
7257	5.5	8	1.9	0.6	2.5	2.24	9	1.58	17	11	24.0	0.29	0.16	554	1	1	1.80	1.44	7	10	504	10	110	80	1.0	7.5	6.0	1	3.2		
7258	4.4	1	2.3	1.8	3.2	2.91	26	2.12	87	26	4.2	0.60	0.30	937	1	1	2.30	2.24	15	6	227	8	84	72	0.1	25.5	22.0	1	19.0		
7259	5.5	1	2.5	0.6	0.7	0.63	15	2.27	20	14	14.2	0.45	0.10	410	1	2	2.00	1.90	8	3	145	18	130	88	0.6	8.4	6.5	1	3.8		

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	CsI	CuI2	Dy2	EuI	Fel	Fe2	HfI	K2	Lal	La2	L12	LuI	Mg2	Mn2	Mo1	Mo2	Nal	Na2	Nd2	Ni2	P2	Pb2	Rb1	Sc1	Sc2	Sel	Sml
7260	9.3	153	3.5	1.2	5.3	4.86	6	2.02	49	36	55.7	0.85	1.23	11.5	1	1	1.60	1.31	14	56	529	48	110	112	1.6	19.0	16.7
7261	3.5	21	2.4	1.0	2.4	2.12	12	0.85	27	21	19.8	0.71	0.53	547	1	1	1.40	1.26	7	19	249	10	54	53	0.9	10.0	8.8
7262	3.8	18	1.6	0.7	2.7	2.45	11	1.04	25	19	20.6	0.64	0.57	585	1	1	1.50	1.31	7	20	205	9	63	62	0.9	10.0	8.6
7263	6.4	36	2.6	1.3	4.9	4.13	10	1.76	39	26	34.5	0.84	1.05	1251	1	1	1.60	1.21	10	47	478	10	110	102	1.7	18.8	15.6
7264	4.6	31	2.4	0.9	4.3	3.60	9	1.35	33	23	28.6	0.84	0.98	846	1	1	1.70	1.31	10	49	347	9	82	81	1.4	17.3	13.9
7265	7.3	37	3.0	1.2	4.4	3.73	10	1.59	40	29	28.4	0.71	0.90	957	1	1	1.60	1.25	10	40	428	14	95	84	1.3	16.3	14.3
7266	7.1	50	2.3	1.3	4.8	4.09	9	1.51	32	22	37.8	0.68	1.05	1114	1	1	1.50	1.19	11	58	357	13	95	82	1.5	17.5	14.7
7267	14.0	64	4.2	1.1	3.9	3.51	10	1.63	36	27	56.7	0.95	0.80	1298	1	1	1.50	1.24	13	29	861	30	100	87	1.0	14.5	12.4
7268	7.6	42	2.8	0.9	4.3	3.89	11	1.80	38	27	38.1	0.79	1.01	1089	1	1	1.50	1.23	12	46	440	18	110	96	1.0	16.5	14.2
7269	10.0	72	4.5	2.1	6.3	5.60	9	1.41	48	35	39.6	0.86	1.38	1539	1	1	1.20	1.03	12	15	597	26	79	73	2.6	18.5	16.2
7270	13.0	20	1.7	1.0	5.3	5.07	10	1.54	31	20	28.5	0.76	0.80	646	1	1	1.30	1.12	12	28	222	12	110	99	1.3	15.8	14.1
7271	11.0	120	4.6	1.1	4.2	3.85	10	2.19	42	31	39.7	0.93	0.96	1143	1	1	1.50	1.25	15	38	616	21	130	111	0.8	15.8	13.8
7272	10.0	66	2.8	1.4	3.8	3.38	11	1.67	36	26	32.6	0.84	0.81	1002	1	1	1.40	1.19	11	39	572	33	100	87	0.9	13.9	12.1
7273	8.9	31	2.4	1.2	3.9	3.40	9	1.55	29	20	38.5	0.69	0.76	747	1	1	1.50	1.16	11	270	25	100	86	0.8	13.7	11.4	
7274	13.0	50	2.7	1.3	4.7	4.16	11	2.28	39	29	46.9	0.76	1.01	979	1	1	1.40	1.10	12	40	439	32	140	120	1.4	16.8	14.8
7275	6.6	25	2.2	1.0	3.6	3.16	10	1.41	31	22	29.4	0.71	0.77	984	1	1	1.50	1.28	10	36	475	8	86	73	1.0	13.1	11.5
7276	7.9	41	2.9	1.3	3.8	3.22	11	1.71	40	28	31.3	0.85	0.70	871	1	1	1.40	1.12	10	25	461	19	110	90	1.1	12.6	10.6
7277	10.0	41	3.8	1.3	5.6	4.98	7	2.18	39	29	60.1	0.71	1.89	367	5	4	1.40	1.18	12	63	259	19	130	121	26.0	16.2	14.1
7278	5.3	11	2.7	0.9	3.7	3.39	6	1.44	31	21	34.5	0.58	0.47	867	1	1	1.20	1.08	9	24	501	13	76	82	1.9	9.4	8.2
7279	10.0	15	2.2	1.4	3.9	3.40	16	1.54	59	31	38.0	1.20	0.55	909	1	1	1.60	1.40	13	16	301	10	96	88	3.1	11.9	9.6
7280	14.0	1	2.2	1.9	2.3	2.06	36	3.53	150	46	36.1	3.60	0.27	958	4	6	3.20	3.47	27	2	255	21	210	207	0.8	9.4	7.4
7281	7.4	10	1.1	1.0	2.7	2.41	12	1.36	34	19	18.4	0.86	0.29	618	1	1	1.50	1.30	12	7	306	18	82	78	0.5	11.9	10.2
7282	5.6	4	2.9	0.7	1.5	1.45	11	2.44	30	25	17.2	0.80	0.21	612	1	1	2.00	1.93	9	6	813	14	160	143	0.2	4.6	3.9
7283	6.1	9	2.0	0.3	1.7	1.68	9	2.30	30	22	22.8	0.72	0.30	594	1	1	2.00	1.88	9	13	506	15	160	154	0.3	5.7	5.2
7284	14.0	1	1.5	0.9	1.4	1.25	16	2.08	53	27	10.0	0.22	0.85	685	6	5	1.60	1.33	26	3	130	9	140	118	0.5	12.9	11.5
7285	6.0	9	0.7	0.9	2.3	2.00	10	1.93	26	13	22.9	0.64	0.22	519	1	1	1.80	1.62	8	8	590	13	130	125	1.4	6.2	5.1
7286	5.8	8	1.4	0.9	1.7	1.64	9	2.28	29	19	22.8	0.69	0.27	554	1	1	2.00	1.88	9	10	557	14	160	156	0.2	5.6	4.9
7287	6.1	9	2.0	0.3	1.7	1.68	9	2.30	30	22	22.8	0.72	0.30	594	1	1	2.00	1.88	9	13	506	15	160	154	0.3	5.7	5.2
7288	7.5	24	1.8	1.1	3.5	3.32	8	1.59	32	21	43.0	0.70	0.73	800	1	1	1.60	1.42	12	37	468	12	97	105	1.0	11.9	10.9
7289	7.5	1	1.1	0.8	1.5	1.39	12	1.96	39	22	18.0	0.77	0.23	541	1	1	1.60	1.50	12	4	189	13	130	128	0.3	7.0	5.8
7290	7.5	4	1.6	1.3	2.5	2.32	13	1.70	42	22	25.9	0.90	0.30	611	1	1	1.30	1.14	14	7	286	7	100	101	0.5	11.1	9.3
7291	6.1	19	2.1	1.0	2.8	2.76	10	1.83	37	26	28.3	0.75	0.63	745	1	1	1.70	1.55	12	23	288	10	120	115	0.6	11.4	10.4
7292	6.8	27	2.4	1.5	3.9	3.41	9	1.98	39	27	30.3	0.85	0.80	903	1	1	1.90	1.50	12	28	559	11	130	118	0.7	15.2	12.7
7293	8.1	23	1.6	0.3	3.1	2.88	6	1.82	30	21	40.0	0.53	0.78	652	1	1	1.60	1.32	11	29	243	9	110	118	0.6	13.2	11.9
7294	9.1	14	1.4	0.7	2.5	2.14	8	2.51	34	23	42.7	0.58	0.52	640	1	1	2.30	1.85	10	25	462	15	180	175	0.2	10.1	8.7
7295	11.0	13	2.2	1.3	3.4	3.05	8	2.35	40	26	58.2	0.67	0.69	836	1	1	1.90	1.57	13	25	832	12	160	165	0.3	13.1	11.1
7296	12.0	4	1.4	0.9	2.8	2.56	10	2.19	36	21	38.4	0.70	0.36	836	1	1	1.70	1.44	13	11	1182	14	120	115	0.3	10.0	8.2
7297	8.2	14	2.1	0.8	2.5	2.25	8	2.09	35	23	39.4	0.63	0.50	679	1	1	2.00	1.80	10	17	620	13	150	151	0.2	8.6	7.8
7298	6.9	7	3.1	1.4	2.6	2.60	10	2.25	40	26	37.5	0.83	0.44	848	1	1	2.00	1.89	11	17	337	10	140	146	0.2	8.6	8.0
7299	8.1	19	1.5	1.0	2.5	2.37	7	1.98	36	24	40.9	0.60	0.56	746	1	1	2.00	1.74	10	24	480	14	150	140	0.4	10.4	9.3
7300	3.5	16	2.2	1.2	3.0	2.84	13	0.95	28	20	22.2	0.32	0.58	688	1	1	1.40	1.31	9	21	372	8	55	53	21	10.1	9.5
7301	3.2	20	2.3	1.1	2.6	2.47	13	0.92	31	22	19.9	0.34	0.56	597	1	1	1.40	1.38	9	20	385	12	52	48	1.8	10.0	8.8
7302	6.3	1	1.8	1.0	2.0	1.84	14	1.35	31	20	20.5	0.36	0.50	536	1	1	1.40	1.29	10	11	283	8	88	83	1.6	11.3	10.0
7303	4.7	26	2.2	1.0	3.5	3.24	10	1.32	30	22	27.5	0.34	0.76	850	1	1	1.40	1.25	9	32	490	13	77	73	1.7	12.4	11.2
7304	6.8	14	2.5	1.1	3.5	3.22	9	1.39	32	22	33.3	0.32	0.72	863	1	1	1.30	1.15	10	24	319	7	88	77	1.3	13.9	12.0

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eu	Fel	Fe2	Hf1	K2	Lal	La2	Lt2	Lul	Mg2	Mn2	Mol	Mo2	Nal	Nd2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Sm1
7309	6.1	11	2.4	1.2	2.6	2.41	10	1.79	37	24	25.3	0.31	0.47	601	1	1	1.70	1.52	10	27	302	14	110	106	0.9	9.0	8.0	1	6.2
7310	5.9	19	3.4	1.2	2.5	2.55	16	2.01	47	36	25.5	0.45	0.67	720	1	1	1.70	1.65	12	23	639	18	120	119	0.7	10.0	9.0	1	8.1
7311	6.3	12	1.8	0.9	2.5	2.33	11	2.13	35	22	27.2	0.31	0.49	617	1	1	1.80	1.71	10	19	182	17	140	123	0.8	8.7	7.8	1	5.9
7312	7.6	7	2.7	1.4	5.2	5.07	15	1.75	31	19	43.7	0.27	0.39	609	1	1	1.50	1.48	18	10	513	23	95	96	0.6	13.1	11.9	1	6.1
7313	7.1	1	0.9	0.9	1.8	1.54	10	1.59	27	14	13.1	0.58	0.84	521	1	1	1.50	1.31	9	69	175	9	110	98	0.8	9.0	7.7	1	4.8
7314	7.0	22	1.3	0.6	2.4	3.46	12	1.66	34	15	36.8	0.84	0.65	731	1	1	1.60	1.54	10	25	607	15	130	98	0.4	10.0	9.1	1	5.5
7315	6.9	2	0.9	0.7	4.0	2.03	8	1.90	32	13	18.7	0.69	0.20	646	1	1	1.70	1.41	11	5	347	9	110	114	0.6	10.2	8.1	1	5.2
7316	7.0	41	1.5	1.0	2.5	2.29	9	1.67	31	15	27.8	0.72	0.41	701	1	1	1.70	1.61	8	13	246	11	120	103	0.5	8.3	7.5	1	5.4
7317	10.0	53	2.8	1.6	4.3	3.93	11	2.82	51	33	50.1	1.00	0.91	872	1	1	1.50	1.25	12	30	583	30	160	143	2.2	16.3	14.3	1	8.6
7318	7.8	21	1.9	0.8	2.8	2.49	9	1.91	30	19	34.7	0.72	0.45	680	1	1	1.70	1.49	9	20	438	15	150	123	0.9	10.1	8.6	1	5.1
7319	10.0	11	1.8	0.9	2.7	2.30	10	2.19	34	21	42.9	0.70	0.42	609	1	1	2.00	1.66	10	15	402	14	160	137	0.2	9.3	7.8	1	5.7
7320	10.0	7	1.9	0.8	2.5	2.19	9	2.29	34	22	37.7	0.66	0.41	586	1	1	2.10	1.75	9	13	397	15	160	144	0.1	8.5	6.9	1	5.6
7322	4.9	10	2.0	0.7	1.7	1.60	8	1.87	24	16	19.2	0.57	0.26	581	1	1	1.90	1.86	7	8	602	13	140	120	0.3	4.8	4.3	1	4.8
7323	4.3	3	2.1	0.7	1.6	1.47	8	1.79	20	14	18.5	0.55	0.20	521	2	2	1.80	1.80	6	6	235	14	130	114	0.2	4.0	3.3	1	4.1
7324	4.8	8	1.4	0.3	1.9	1.76	8	1.82	22	14	19.8	0.60	0.26	605	1	1	1.90	1.81	7	9	511	14	140	117	0.2	4.5	3.9	1	4.0
7325	7.1	4	2.0	0.9	1.9	1.79	11	2.11	37	19	33.7	0.87	0.33	645	1	1	2.00	1.90	9	13	161	14	160	140	0.3	7.0	6.0	1	6.5
7326	6.4	6	2.5	1.1	1.9	1.74	10	2.16	29	18	26.5	0.73	0.26	534	1	1	1.90	1.83	8	7	436	14	140	138	0.1	6.3	5.6	1	5.7
7327	8.3	2	1.6	1.0	2.9	2.71	14	1.46	38	21	18.2	0.93	0.36	787	1	1	1.10	0.97	10	7	494	16	94	90	1.9	12.6	10.7	1	6.0
7328	10.0	24	3.3	0.9	2.5	4.31	9	1.15	31	18	34.3	0.61	0.67	1389	3	1	1.90	1.00	10	30	884	12	160	160	0.2	8.3	11.9	1	5.2
7329	8.6	17	2.4	1.2	3.6	3.21	9	1.70	36	22	37.6	0.79	0.91	734	1	1	1.50	1.19	9	36	423	4	110	101	0.8	15.8	13.4	1	6.1
7330	7.1	30	2.3	1.7	4.3	3.56	11	1.52	39	23	32.2	0.82	0.82	933	1	1	1.70	1.30	10	35	431	16	92	83	0.9	14.8	11.9	1	6.5
7332	7.4	41	3.0	1.2	4.3	3.75	11	1.82	44	29	31.4	0.88	0.84	1018	1	1	1.60	1.27	10	33	504	15	110	100	0.9	15.8	13.5	1	7.7
7333	7.9	54	2.8	1.0	4.4	3.89	10	1.92	40	25	31.3	0.83	0.93	1141	1	1	1.40	1.19	9	42	661	47	110	101	1.7	15.8	13.8	1	7.0
7334	5.1	40	3.0	1.6	3.9	3.58	10	1.72	40	27	29.9	0.79	0.89	867	1	1	1.70	1.45	10	40	476	15	110	95	0.9	15.0	13.3	1	7.1
7335	8.9	8	1.8	1.0	2.5	2.40	10	1.53	34	20	33.1	0.73	0.60	706	1	1	1.30	1.18	10	16	179	12	93	92	0.5	12.4	11.1	1	5.6
7336	4.8	20	2.9	1.1	3.8	3.46	8	1.86	35	25	25.8	0.73	0.74	822	1	1	1.80	1.57	10	23	587	10	110	103	0.4	12.9	11.9	1	6.2
7337	5.5	29	2.2	1.1	4.3	3.85	9	1.21	28	18	29.9	0.75	0.91	784	1	1	1.40	1.24	9	47	362	11	77	69	1.5	15.5	13.8	1	5.2
7338	7.2	10	2.3	1.1	3.0	2.78	9	1.42	31	19	38.7	0.77	0.92	912	3	3	1.70	1.51	9	35	205	7	93	86	0.9	18.3	16.4	1	5.6
7339	6.3	30	3.0	1.5	3.9	3.36	9	1.20	34	21	35.9	0.86	1.13	662	1	1	1.80	1.51	9	41	683	5	69	64	1.0	17.9	15.3	1	6.5
7340	4.3	9	2.1	0.3	2.2	2.14	10	1.84	27	19	18.6	0.68	0.27	779	1	1	1.90	1.87	9	8	681	14	130	112	0.3	5.1	4.4	1	5.0
7341	7.9	14	2.5	0.8	2.5	2.27	9	2.10	36	23	35.0	0.74	0.50	805	1	1	2.00	1.79	9	16	837	14	140	128	0.3	8.7	7.9	1	6.9
7342	6.8	1	1.2	0.7	0.9	0.82	10	2.10	29	15	18.8	0.62	0.23	523	1	1	1.90	1.88	9	4	282	17	130	118	0.2	5.6	4.6	1	4.7
7343	5.8	5	1.9	0.8	1.6	1.59	9	2.10	31	20	25.4	0.72	0.33	601	1	1	2.00	1.89	7	9	351	13	140	123	0.2	6.2	5.4	1	5.7
7344	5.7	5	1.6	0.6	1.9	1.73	8	1.98	27	17	23.8	0.63	0.29	617	1	1	1.90	1.89	7	9	735	15	140	122	0.1	5.3	4.7	1	4.8
7345	6.8	7	1.7	0.9	2.1	1.89	12	2.10	39	21	27.5	0.84	0.30	688	1	1	2.00	1.85	9	10	580	16	150	131	0.2	6.5	5.5	1	6.5
7346	5.3	7	2.3	0.7	1.3	1.28	9	1.88	28	21	22.7	0.65	0.38	538	1	1	1.80	1.69	7	11	617	10	130	114	0.6	6.7	6.0	1	5.0
7347	6.1	5	1.2	0.3	1.2	1.10	12	2.02	23	12	20.9	0.72	0.23	457	1	1	1.40	1.29	8	5	305	11	130	119	0.6	7.2	6.0	1	4.0
7348	6.1	15	1.5	0.6	1.9	1.73	9	1.95	22	16	25.5	0.56	0.38	625	1	1	2.00	1.70	7	14	359	11	150	123	0.8	7.4	6.4	1	3.7
7349	8.6	5	1.3	0.3	3.0	2.57	9	1.90	23	13	41.5	0.62	0.38	579	1	1	1.60	1.33	9	13	487	8	150	129	0.7	10.0	7.8	1	3.8
7350	5.0	12	1.9	0.7	1.6	1.49	8	2.07	17	12	19.8	0.50	0.32	615	1	1	1.80	1.76	7	9	520	11	140	127	0.6	7.2	6.0	1	3.4
7351	4.5	10	0.8	1.2	5.8	5.37	8	1.87	19	14	21.9	0.72	0.94	278	1	1	1.80	1.53	8	18	255	1	130	123	0.5	24.4	22.8	1	3.9
7352	9.4	25	2.3	0.8	3.3	2.85	8	2.42	28	20	44.6	0.66	0.67	781	1	1	1.80	1.49	10	29	495	36	180	151	1.0	12.2	10.8	1	5.1
7353	5.4	12	2.9	0.3	2.0	1.82	11	2.17	26	19	20.9	0.71	0.37	614	1	1	1.90	1.71	9	10	672	12	150	131	0.6	7.0	6.3	1	5.3
7354	4.9	6	2.0	0.7	1.8	1.64	12	1.86	27	18	21.9	0.69	0.38	624	1	1	1.90	1.69	9	9	171	11	130	113	0.6	7.4	6.3	1	4.9
7355	4.3	5	4.1	1.9	7.2	6.43	6	1.14	24	19	37.9	0.64	2.08	699	1	1	2.10	1.86	12	24	744	1	65	68	0.6	27.1	23.0	1	6.0
7356	5.9	15	2.7	0.8	2.2	1.91	11	2.12	27	20	24.0	0.75	0.43	827	1	1	2.00	1.75	9	13	547	13	160	131	0.8	8.2	7.0	1	4.9
7357	4.3	14	2.7	0.6	2.3	1.91	9	1.87	24	17	20.7	0.68	0.47	521	1	1	2.10	1.71	8	12	451	10	120	108	0.5	8.5	7.1	1	4.7

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eu1	Fel	Fe2	Hf1	K2	La1	La2	L1	Mg2	Mn2	Mo1	Mo2	Na1	Na2	Nd1	Nd2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Sm1		
7359	7.9	2.6	0.3	3.2	2.84	11	1.88	30	21	38.9	0.61	0.56	54.5	1	1	1.60	1.35	11	22	387	12	140	118	0.7	10.7	9.4	1	5.5	
7360	5.8	1.1	1.5	0.5	2.0	1.83	10	2.03	20	14	25.1	0.53	0.42	59.6	1	1	1.90	1.71	8	11	168	12	150	124	0.6	6.9	6.4	1	4.2
7361	5.5	1.2	1.9	0.7	1.8	1.65	9	2.05	22	15	21.7	0.55	0.36	65.4	1	1	1.80	1.70	8	10	674	13	150	120	0.6	6.0	5.5	1	4.2
7362	4.6	10	2.1	0.6	1.3	1.23	9	1.97	19	13	17.3	0.57	0.31	60.6	1	1	1.80	1.80	6	9	665	12	140	121	0.6	4.9	4.3	1	3.9
7363	5.1	11	1.9	0.7	1.7	1.60	9	1.93	21	14	21.0	0.62	0.37	82.2	1	1	1.80	1.73	7	12	541	12	140	119	0.7	6.0	5.4	1	3.9
7364	4.0	6	1.9	0.5	1.3	1.25	9	1.92	19	14	16.0	0.56	0.29	47.4	1	1	1.80	1.77	6	7	435	10	130	111	0.6	5.0	4.6	1	3.7
7365	5.2	9	2.3	0.6	1.8	1.60	11	2.04	26	19	19.4	0.73	0.37	61.5	1	1	1.90	1.77	8	9	440	12	140	121	0.7	6.9	6.1	1	5.1
7366	4.7	4	2.4	0.6	1.4	1.47	8	1.91	18	15	19.6	0.55	0.36	63.7	1	1	1.80	1.79	6	6	624	9	130	116	0.4	5.0	5.0	1	3.7
7367	5.3	7	1.9	0.7	2.0	1.81	10	1.88	20	14	24.0	0.60	0.38	59.6	1	1	1.90	1.68	8	9	195	10	130	116	0.6	7.2	6.3	1	3.8
7368	4.9	8	1.6	0.3	1.9	1.71	10	1.86	20	14	20.5	0.60	0.34	51.1	1	1	1.90	1.66	7	9	239	11	130	117	0.6	5.9	5.0	1	3.5
7369	8.9	12	2.1	0.8	3.2	2.77	9	2.42	28	20	40.2	0.57	0.70	76.8	1	1	1.70	1.46	9	26	461	12	170	139	1.1	12.6	11.5	1	5.4
7370	5.2	11	2.0	0.3	2.1	1.85	10	1.87	20	13	21.3	0.62	0.36	69.0	1	1	2.00	1.70	8	12	480	13	140	122	0.6	6.7	5.8	1	3.8
7371	4.9	9	2.2	0.6	1.5	1.34	10	1.89	22	17	17.4	0.69	0.32	65.5	1	1	2.00	1.82	7	9	583	11	140	122	0.6	5.6	4.8	1	4.4
7372	7.3	10	3.1	0.7	1.6	1.62	10	2.61	31	26	24.8	0.76	0.29	59.2	1	1	1.90	1.68	9	7	621	13	180	160	0.6	6.1	5.4	1	5.4
7373	8.5	18	3.1	0.8	2.8	2.52	8	2.50	32	25	40.3	0.70	0.62	89.3	1	1	1.90	1.69	9	23	718	13	190	156	1.4	11.0	10.3	1	6.0
7374	6.6	19	2.2	0.9	2.2	2.03	9	2.12	31	23	29.5	0.71	0.50	71.4	1	1	1.80	1.64	10	15	142	11	150	137	0.7	10.0	8.6	1	5.6
7375	4.6	4	1.8	1.1	1.6	1.47	10	1.75	25	18	20.8	0.68	0.38	56.2	1	1	1.90	1.75	7	7	145	8	120	110	0.6	7.6	6.8	1	4.7
7376	5.1	7	2.6	0.9	2.4	2.13	10	1.91	28	21	30.7	0.79	0.53	61.8	1	1	2.00	1.79	9	14	142	8	130	119	0.6	10.0	8.5	1	5.4
7377	5.1	13	1.9	0.9	2.7	2.38	11	1.76	26	16	25.1	0.69	0.38	59.0	1	1	1.90	1.65	9	12	222	12	120	115	0.6	9.0	7.6	1	5.0
7379	4.6	11	2.8	0.8	1.8	1.61	10	1.87	24	18	19.0	0.64	0.35	55.0	1	1	1.90	1.73	8	9	554	11	130	120	0.5	6.4	5.9	1	5.3
7380	5.0	6	1.7	0.6	1.9	1.75	11	1.85	24	17	29.2	0.60	0.38	55.8	1	1	1.80	1.68	8	9	159	10	130	117	0.6	6.8	6.0	1	4.5
7381	4.2	11	3.1	1.2	2.1	1.92	10	2.07	25	21	25.1	0.65	0.41	49.5	1	1	1.90	1.71	9	11	314	9	120	118	0.4	7.7	7.0	1	5.5
7382	5.0	7	1.5	1.1	2.1	1.94	7	1.83	23	16	27.4	0.58	0.50	49.1	1	1	1.90	1.71	8	11	179	7	120	117	0.5	8.8	7.8	1	4.3
7383	4.2	15	2.2	0.3	1.7	1.52	8	1.82	21	16	20.7	0.62	0.40	51.5	1	1	2.00	1.87	7	8	218	9	120	114	0.5	6.8	6.4	1	4.2
7384	5.3	15	2.9	1.3	2.5	2.27	9	1.88	29	22	27.6	0.77	0.51	60.0	1	1	1.90	1.72	10	13	277	14	120	118	0.6	9.4	8.3	1	5.6
7385	4.2	6	1.5	0.8	1.6	1.38	10	1.80	22	15	19.5	0.58	0.35	48.0	1	1	1.90	1.72	7	7	121	9	130	116	0.6	7.5	6.3	1	4.3
7386	4.1	10	2.0	1.0	2.3	1.98	11	1.83	27	18	18.6	0.69	0.39	62.3	1	1	2.00	1.78	8	8	195	13	120	113	0.6	7.9	6.7	1	5.0
7387	4.2	43	11.0	2.6	4.3	3.61	12	1.88	54	42	30.9	1.50	0.54	80.1	3	4	2.10	1.67	16	18	939	41	110	97	1.1	14.3	11.3	1	13.2
7388	3.9	7	6.8	1.9	4.4	3.96	10	1.92	31	25	34.6	1.00	0.53	70.3	2	1	1.50	1.29	17	5	461	4	90	94	0.3	14.1	12.5	1	8.0
7389	2.7	4	4.2	1.0	2.8	2.53	9	1.73	61	52	13.5	0.87	0.59	71.7	1	1	2.50	2.22	14	3	665	41	90	82	1.6	13.0	11.0	1	6.9
7390	3.1	61	3.5	1.8	10.0	8.00	4	0.72	56	43	37.1	0.42	0.39	104.7	5	4	2.10	1.60	18	117	335	276	41	55	0.4	27.5	21.3	1	6.7
7391	5.9	11	3.1	1.0	2.1	1.93	11	2.07	31	24	45.5	0.75	0.48	72.6	1	1	2.00	1.78	8	13	708	12	140	129	0.8	8.8	7.8	1	6.3
7392	4.5	5	2.4	1.0	1.8	1.66	13	1.80	30	21	19.2	0.79	0.38	62.2	1	1	1.90	1.74	9	8	170	12	120	108	0.6	8.6	7.4	1	6.0
7393	5.1	14	3.4	1.2	3.4	3.15	9	1.42	21	15	31.1	0.76	0.39	45.6	1	1	1.40	1.25	11	10	257	10	88	93	0.6	15.1	13.6	1	5.8
7394	5.7	27	2.8	1.0	1.8	1.62	10	1.93	30	23	24.8	0.72	0.47	59.1	1	1	1.90	1.63	8	12	505	10	130	115	0.6	9.2	7.8	1	5.9
7395	8.3	19	2.7	0.6	2.8	2.55	9	2.22	27	20	37.7	0.68	0.62	85.4	1	1	1.70	1.49	9	22	738	13	160	147	0.9	10.6	9.6	1	5.0
7397	2.1	1	4.6	1.4	5.8	5.23	7	0.92	21	18	21.6	0.75	0.16	109.8	7	6	1.90	1.65	16	23	368	1	57	63	0.4	29.8	26.2	1	5.7
7398	8.9	16	2.3	0.3	2.5	2.35	8	2.29	25	22	39.9	0.51	0.58	70.7	1	1	1.70	1.50	10	20	638	15	170	157	0.8	9.4	8.9	1	4.8
7400	5.3	14	3.3	1.1	1.8	1.73	10	2.13	31	25	21.0	0.68	0.41	66.3	1	1	1.90	1.76	8	10	645	12	140	123	0.6	8.2	7.5	1	6.2
7401	4.6	12	2.5	0.8	1.8	1.70	10	2.20	21	19	20.3	0.54	0.35	55.3	1	1	1.80	1.73	9	8	485	11	140	122	0.4	6.0	5.7	1	4.0
7402	4.1	5	2.2	0.9	1.6	1.49	10	1.94	22	17	16.7	0.57	0.30	58.5	1	1	1.90	1.77	7	7	209	11	130	114	0.6	5.6	5.0	1	4.2
7403	4.3	4	1.9	0.7	1.0	0.89	10	1.98	18	16	14.6	0.52	0.25	48.9	1	1	1.80	1.69	7	4	246	10	130	117	0.4	4.6	4.2	1	3.6
7404	3.7	6	2.9	0.7	2.7	2.52	8	1.67	22	17	17.3	0.71	0.42	55.8	1	1	1.90	1.65	8	7	432	11	110	94	0.5	10.0	8.4	1	4.7
7405	4.4	24	3.7	0.3	2.0	1.75	8	1.80	23	19	18.6	0.69	0.42	53.1	4	4	2.10	1.78	8	8	253	12	130	107	0.7	10.7	8.9	1	6.2
7406	4.6	12	3.0	0.9	1.9	1.70	9	2.04	32	26	21.8	0.64	0.43	55.2	1	1	2.10	1.77	8	10	278	10	140	115	0.6	7.8	6.7	1	6.4
7407	4.2	16	4.0	1.2	2.3	2.20	8	2.02	27	24	22.1	0.64	0.60	74.5	1	1	2.00	1.87	9	10	748	9	130	110	0.5	8.9	8.3	1	6.5

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eu	Fel	Fe2	Hf1	K2	Lal	La2	Li2	Lul	Mg2	Mn2	Mol	Mo2	Nal	Na2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Sm1
7408	4.0	8	2.5	0.8	1.7	1.65	13	1.83	24	22	18.8	0.59	0.46	623	1	1	1.90	1.79	9	6	232	7	120	102	0.6	7.2	6.7	1	5.3
7409	4.2	10	2.0	0.7	2.0	1.76	10	1.87	24	17	20.4	0.64	0.39	536	1	1	2.00	1.80	8	9	180	10	120	104	0.6	7.5	6.6	1	4.7
7410	8.0	28	3.2	0.8	2.8	2.42	8	2.38	30	24	36.8	0.67	0.63	678	2	2	1.90	1.64	10	22	638	19	180	147	0.8	10.1	8.8	1	6.7
7412	4.2	17	2.9	1.3	2.1	1.82	9	1.94	27	20	18.0	0.67	0.49	712	1	2	2.10	1.88	7	8	306	14	130	106	0.6	8.5	7.2	1	5.4
7413	3.5	39	2.9	1.2	2.9	2.55	11	1.64	27	21	18.4	0.78	0.79	729	1	1	2.10	1.81	11	15	352	8	110	99	0.6	12.4	10.7	1	5.2
7414	3.2	7	4.4	1.4	3.0	2.62	12	1.83	26	22	19.6	0.89	0.92	796	1	1	2.10	1.82	11	8	224	5	110	100	0.4	15.8	13.7	1	6.4
7415	3.3	14	4.3	1.6	3.6	2.92	9	1.73	28	21	22.6	0.92	0.73	731	1	1	2.10	1.72	11	13	185	7	110	97	0.5	14.0	11.5	1	6.1
7416	3.7	5	2.5	0.9	2.3	1.93	10	1.64	25	19	16.9	0.69	0.42	607	1	1	2.10	1.74	8	9	271	11	110	104	0.5	9.4	7.8	1	5.1
7417	5.0	10	1.9	1.1	2.0	1.56	10	2.03	22	16	20.8	0.63	0.33	545	1	1	2.40	1.71	7	10	426	11	140	133	0.6	7.6	5.5	1	3.7
7418	3.5	9	3.5	1.2	2.5	2.21	14	2.18	26	20	18.0	0.70	0.43	484	1	1	2.00	1.82	9	12	771	15	110	107	0.4	7.8	6.9	1	5.8
7700	6.3	1	1.8	0.3	1.5	1.30	13	1.39	23	8	16.4	0.43	0.03	388	1	1	1.30	1.08	7	3	129	6	83	67	1.2	10.0	8.4	1	4.2
7701	7.3	1	2.3	0.8	2.7	2.47	13	1.46	28	14	20.2	0.48	0.14	432	1	1	1.20	1.07	9	6	102	8	82	70	1.2	12.6	10.9	1	5.1
7702	7.0	29	4.2	1.4	3.8	3.34	11	1.66	36	26	46.7	0.25	0.71	623	1	1	1.60	1.30	10	26	317	21	100	76	1.1	14.6	12.4	1	6.5
7703	3.4	1	3.8	0.8	3.7	3.41	17	1.78	17	10	14.1	0.31	0.08	300	1	2	1.30	0.98	14	3	248	9	82	76	0.4	10.4	8.3	1	4.2
7704	3.8	2	3.9	1.6	2.1	1.85	15	1.32	28	19	15.2	0.45	0.19	487	1	1	1.30	1.11	11	8	386	30	69	65	0.7	9.1	7.6	1	5.8
7705	37.0	2	2.0	0.3	0.4	0.43	7	4.18	13	7	23.9	0.33	-0.01	189	1	1	3.20	0.01	9	1	241	13	300	184	0.5	5.5	4.6	1	2.3
7706	4.6	9	3.1	0.9	3.3	2.93	13	1.12	35	20	25.1	0.38	0.40	589	1	1	1.60	1.37	10	14	149	8	64	58	1.2	13.4	11.8	1	6.1
7707	5.0	16	3.1	1.0	3.5	3.09	12	1.35	38	24	29.6	0.70	0.63	624	1	1	1.60	1.30	22	119	7	85	67	1.5	13.7	11.8	1	6.6	
7708	6.4	1	2.9	1.7	2.2	2.02	21	1.25	50	26	34.5	0.93	0.51	752	1	1	1.30	1.15	12	16	138	17	71	64	1.1	13.3	11.5	1	8.2
7709	6.5	1	2.1	0.9	2.2	2.02	18	1.53	39	12	13.6	0.70	0.04	382	1	1	1.40	1.20	10	2	94	12	82	71	1.2	10.3	8.5	1	6.4
7710	4.8	15	3.1	0.9	3.2	2.78	13	1.04	33	19	28.1	0.60	0.42	593	1	1	1.40	1.16	8	16	126	13	64	59	1.8	10.9	9.5	1	5.7
7712	9.0	1	1.8	1.2	0.8	0.69	18	1.20	31	11	9.9	0.71	0.05	709	1	1	1.30	1.04	7	2	81	8	78	65	1.0	10.0	8.1	1	5.1
7713	9.1	12	3.1	0.3	5.5	5.06	6	0.99	25	14	35.3	0.71	0.31	477	1	1	0.86	0.64	16	11	764	8	56	67	1.4	14.4	12.4	1	4.2
7714	5.7	22	3.5	1.1	5.5	3.33	7	1.58	21	20	27.5	0.63	0.58	767	1	1	1.00	1.17	10	28	265	6	58	75	1.2	12.4	12.5	1	4.6
7715	5.7	22	2.1	0.9	3.7	3.37	11	1.58	30	22	27.8	0.48	0.73	783	1	1	1.40	1.19	11	28	333	8	95	90	1.3	13.2	12.2	1	5.6
7716	6.5	1	1.0	0.3	1.6	1.47	11	1.80	15	11	11.3	0.41	0.37	627	1	1	1.00	0.90	12	7	117	5	99	96	0.6	12.2	10.6	1	2.7
7717	7.3	15	1.8	1.0	3.2	2.84	10	1.72	37	23	32.4	0.66	0.85	589	1	1	1.50	1.22	10	28	318	4	100	94	1.8	14.8	12.8	1	6.3
7718	18.0	33	2.2	1.1	3.8	3.89	8	1.87	37	26	115.3	0.52	0.89	985	1	1	1.20	1.11	14	29	513	10	140	149	2.2	16.6	15.8	1	5.9
7719	6.2	15	1.5	1.0	4.1	3.81	10	1.37	31	19	32.2	0.64	0.67	532	1	1	1.20	1.06	9	25	426	5	89	80	6.0	12.4	11.0	1	5.3
7721	4.3	1	1.4	1.0	2.3	1.90	13	1.10	25	17	26.7	0.56	0.48	503	1	1	1.60	1.31	7	13	139	5	78	59	0.7	10.1	8.1	1	4.5
7722	7.2	8	1.3	1.0	2.4	2.10	11	1.49	34	22	24.2	0.62	0.61	402	1	1	1.30	1.09	8	14	160	8	92	85	1.3	14.6	12.1	1	5.6
7723	12.0	9	1.3	0.3	3.7	3.71	6	1.40	24	17	58.2	0.46	0.47	473	1	1	1.00	0.92	14	14	738	34	82	88	0.5	10.4	10.0	1	4.2
7724	12.0	1	0.6	0.3	1.2	1.07	11	1.67	17	11	28.8	0.35	0.27	409	1	1	1.10	0.93	11	5	139	7	73	66	0.7	11.9	10.6	1	3.2
7725	5.7	29	1.9	0.7	3.1	2.73	12	1.04	29	21	27.6	0.54	0.58	613	1	1	1.50	1.23	9	22	234	15	68	57	1.0	10.3	8.7	1	5.0
7726	5.4	18	2.4	0.9	2.8	2.47	11	1.28	30	22	25.4	0.59	0.64	630	1	1	1.50	1.30	9	20	504	8	74	63	0.9	11.2	9.6	1	5.7
7727	4.2	26	1.8	1.0	4.2	3.90	8	0.95	26	16	29.1	0.55	0.74	480	1	1	1.20	1.06	8	37	301	10	55	66	1.0	13.5	11.8	1	4.8
7728	6.2	5	1.3	0.8	2.4	2.23	10	1.67	31	21	27.3	0.53	0.73	753	1	1	1.40	1.25	8	21	158	6	100	98	1.1	15.0	13.0	1	5.1
7729	7.5	14	1.5	1.1	3.7	3.48	9	1.61	33	22	38.0	0.57	1.09	690	4	4	1.40	1.21	10	41	278	8	93	94	1.3	17.2	15.2	1	5.6
7730	6.8	20	1.9	0.7	3.9	3.65	9	1.89	35	24	33.0	0.62	0.76	794	1	1	1.40	1.16	12	26	336	9	110	118	0.4	14.0	12.1	1	5.8
7731	7.1	20	1.5	1.2	2.5	3.30	10	1.36	31	21	36.2	0.61	0.78	548	1	1	1.70	1.44	9	23	146	5	88	86	0.9	15.8	13.4	1	5.1
7732	17.0	62	1.8	1.2	5.1	4.69	6	1.20	27	19	42.4	0.56	0.75	1003	1	1	1.00	0.82	10	40	513	8	71	76	1.2	15.3	12.9	1	4.3
7733	15.0	12	2.0	0.3	4.7	4.94	7	1.39	24	21	40.4	0.68	0.69	659	2	2	1.30	1.23	11	23	300	29	75	84	0.8	12.3	12.5	1	4.4
7734	5.6	21	2.1	1.2	2.8	2.78	11	1.18	25	21	26.1	0.43	0.60	610	1	1	1.40	1.28	9	22	412	9	72	70	0.8	9.2	9.0	1	5.1
7735	8.5	12	2.3	1.1	2.5	2.51	10	1.61	36	29	66.2	0.56	0.70	617	1	1	1.40	1.29	9	30	313	8	110	111	0.9	12.7	12.3	1	6.8
7736	11.0	1	1.2	0.8	2.1	2.04	11	1.61	25	18	31.6	0.61	0.36	448	1	1	1.10	1.09	11	6	247	4	100	112	0.8	13.8	13.2	1	4.4
7737	5.4	27	2.1	1.1	3.3	2.95	10	1.31	31	21	23.9	0.61	0.67	880	1	1	1.40	1.22	8	27	515	10	84	77	1.1	12.1	10.4	1	5.4
7738	5.7	13	2.2	1.1	3.9	3.49	9	1.10	28	19	26.8	0.57	0.57	549	1	1	1.30	1.10	9	16	308	11	68	67	0.9	12.1	10.2	1	5.1

Appendix A - Field and Geochemical Data - Open File NFLD/3134

Sample_Num	Cs1	Cu2	Dy2	Eu1	Fel1	Fe2	Hf1	K2	Lal	La2	Li2	Lu1	Mg2	Mn2	Mo1	Mo2	Na1	Na2	Nb2	Ni2	P2	Pb2	Rb1	Rb2	Sb1	Sc1	Sc2	Se1	Sml
7740	4.2	21	3.2	1.8	4.1	3.51	14	0.75	45	25	21.3	0.86	0.47	580	1	1	1.20	0.95	10	13	664	5	43	1.1	13.5	10.8	1	7.9	
7741	4.3	12	1.9	1.3	2.9	2.34	11	1.16	33	22	26.7	0.69	0.61	576	1	1	1.70	1.31	9	18	116	8	70	59	1.3	11.9	9.3	1	5.4
7742	5.0	14	2.1	1.1	3.4	2.82	12	1.47	40	27	25.9	0.66	0.65	684	1	1	1.70	1.35	10	20	370	10	95	78	1.4	12.3	10.2	1	7.0
7743	3.8	17	1.7	0.9	3.6	3.08	10	1.16	31	22	25.9	0.75	0.62	619	1	1	1.60	1.29	10	21	211	8	69	63	2.2	11.8	10.6	1	5.7
7744	3.9	15	1.9	0.8	3.2	2.77	10	1.14	30	22	22.4	0.73	0.56	649	1	1	1.40	1.25	9	18	371	7	64	61	1.5	10.0	8.7	1	5.3
7745	7.9	4	1.6	0.6	2.1	1.97	9	1.76	29	21	34.7	0.71	0.62	521	1	1	1.40	1.24	10	18	270	3	120	113	0.8	13.9	12.0	1	5.0
7746	9.3	1	1.7	1.2	2.0	1.94	11	1.53	32	22	29.0	0.82	0.49	858	1	1	1.50	1.36	14	7	242	10	100	105	1.2	15.7	14.4	1	5.4
7747	7.3	22	2.0	1.5	3.2	2.81	9	1.44	35	24	31.1	0.78	0.70	679	1	1	1.50	1.21	10	26	365	7	88	79	0.7	12.6	10.6	1	5.9
7748	8.0	26	2.7	1.0	4.2	3.76	7	1.58	41	30	38.2	0.78	0.67	634	1	1	1.40	1.20	11	28	311	26	94	93	0.6	14.4	12.6	1	6.5
7749	7.5	24	2.3	1.1	4.1	3.56	9	2.04	42	30	33.8	0.87	0.83	844	1	1	1.70	1.40	12	28	347	11	130	115	0.9	15.2	12.9	1	7.3
7750	6.9	22	2.2	1.4	3.9	3.23	10	1.98	41	28	34.3	0.85	0.77	837	1	1	1.80	1.40	11	27	286	10	120	113	5.8	15.5	12.3	1	7.0
7751	6.1	11	1.5	1.1	5.7	4.64	7	1.32	30	16	33.2	0.75	0.44	923	1	1	1.20	0.92	12	18	864	7	74	87	2.7	14.7	12.6	1	5.0
7752	9.3	1	0.9	0.3	0.9	0.86	21	1.68	23	17	9.4	0.73	0.27	464	2	1	1.70	1.52	19	3	103	19	100	104	1.1	13.4	11.2	1	3.9
7753	5.1	1	1.7	0.8	5.6	5.36	9	1.44	21	18	24.1	0.62	0.56	656	1	1	1.50	1.28	15	12	1202	11	89	102	1.1	14.8	13.9	1	4.3
7754	7.7	1	1.3	0.6	0.6	0.54	21	1.58	44	27	9.6	1.10	0.13	567	1	1	1.00	0.89	14	1	197	20	92	90	1.1	8.5	6.4	1	7.3
7755	6.5	1	1.0	0.9	1.4	1.22	20	1.58	41	24	11.1	1.00	0.17	580	1	1	1.20	1.07	12	3	160	11	91	85	1.2	8.9	7.1	1	6.9
7756	5.1	17	1.8	0.7	2.9	2.65	10	1.57	31	24	24.8	0.73	0.56	586	1	1	1.60	1.41	10	20	398	13	90	93	1.5	10.0	8.4	1	5.4
7757	4.4	6	1.6	0.7	2.6	3.0	12	1.42	30	22	19.3	0.74	0.38	533	1	1	1.60	1.44	10	11	242	9	86	80	1.3	7.5	6.4	1	5.0
7758	4.5	11	2.0	1.4	3.0	2.80	11	1.54	32	26	24.7	0.80	0.53	590	1	1	1.70	1.55	11	20	265	11	93	90	2.3	10.0	8.5	1	5.7
7759	4.4	13	3.2	1.1	4.1	3.37	12	1.42	30	18	26.3	0.93	0.47	603	1	1	1.80	1.41	11	16	1075	13	89	77	1.4	11.9	9.8	1	6.2
7761	5.8	16	1.5	0.7	3.6	3.25	9	1.43	29	20	33.6	0.61	0.54	568	1	1	1.50	1.31	12	18	281	21	95	87	1.0	10.2	9.2	1	4.6
7762	6.7	32	3.5	1.4	7.0	6.87	5	0.91	27	22	68.1	0.56	0.47	1308	1	1	0.60	0.47	17	12	655	17	72	90	0.7	15.7	15.6	1	5.1
7763	4.7	19	2.4	0.8	2.6	2.24	12	2.11	31	19	19.1	0.87	0.36	562	1	1	1.80	1.62	9	14	292	20	130	116	0.9	7.4	6.2	1	5.8
7764	6.6	21	1.7	0.8	3.0	2.66	9	1.60	27	15	31.3	0.79	0.37	491	1	1	1.60	1.35	10	13	465	18	110	104	0.5	10.9	9.5	1	5.3
7765	6.1	10	1.7	0.7	2.2	1.87	7	1.95	27	18	25.7	0.63	0.36	558	1	1	1.90	1.69	8	13	428	15	140	128	0.3	6.6	5.6	1	4.7
7766	5.6	6	2.1	1.0	1.5	1.31	8	2.04	33	22	23.6	0.74	0.35	591	1	1	2.00	1.76	7	12	733	13	140	135	0.3	6.6	5.7	1	5.9
7767	6.6	11	0.8	0.3	2.3	2.09	10	2.03	28	16	26.1	0.79	0.29	576	1	1	1.90	1.63	9	16	518	15	150	130	0.4	5.9	4.6	1	4.4
7768	6.7	34	2.3	0.8	4.3	3.55	10	1.73	37	19	27.4	1.00	0.30	690	1	1	1.40	1.14	10	11	1235	12	110	107	2.2	11.1	9.1	1	6.6
7769	5.2	7	1.1	0.7	1.7	1.43	8	1.78	23	15	20.3	0.57	0.26	579	14	12	2.00	1.73	7	8	159	15	130	115	0.3	5.2	4.1	1	3.6
7770	5.3	17	1.8	1.0	3.1	2.66	12	1.34	33	18	24.9	0.80	0.33	844	1	1	1.90	1.53	10	13	203	14	97	87	0.6	8.2	6.5	1	5.7
7771	8.5	1	1.4	0.7	2.3	2.28	11	2.53	29	22	43.3	0.84	0.25	830	1	1	2.00	1.82	15	5	370	17	220	195	0.2	7.0	6.0	1	5.0
7772	10.0	6	1.2	0.8	2.9	2.74	6	1.74	22	16	37.6	0.46	0.32	538	1	1	1.50	1.30	13	6	1104	13	140	141	0.4	7.2	6.5	1	3.6
7773	4.5	8	2.2	0.9	2.2	2.04	9	1.24	25	13	31.2	0.69	0.17	589	1	1	1.40	1.34	8	4	233	8	87	77	0.5	8.0	7.5	1	5.8
7774	5.4	23	2.5	0.9	2.6	2.39	9	1.75	26	18	30.3	0.74	0.52	748	1	1	1.70	1.61	9	19	353	11	120	110	1.4	10.2	9.4	1	5.2
7776	6.1	8	2.1	0.8	2.2	1.96	8	1.58	22	13	30.0	0.65	0.34	570	1	1	1.60	1.37	7	10	426	8	110	105	0.8	8.5	7.1	1	4.1
7777	6.6	12	3.6	1.4	1.8	1.60	7	1.31	42	29	35.2	0.65	0.41	593	1	1	1.60	1.36	9	12	410	10	89	93	0.5	9.4	7.8	1	6.5
7778	6.6	7	1.7	0.9	1.7	2.42	9	2.08	33	22	27.9	0.76	0.30	610	1	1	2.10	1.79	9	9	458	13	160	148	0.2	6.8	5.8	1	5.5
7779	4.9	17	1.1	0.3	2.4	2.13	10	1.53	24	14	23.5	0.70	0.29	720	1	1	1.80	1.57	9	9	331	14	110	104	0.6	6.1	5.0	1	3.8
7780	14.0	1	1.3	0.3	1.8	1.73	12	2.39	30	19	39.3	1.00	0.37	670	2	2	2.00	1.74	18	4	678	9	200	202	0.3	10.9	9.9	1	5.2
7781	7.0	1	0.6	0.7	2.1	1.79	9	1.80	19	9	23.8	0.65	0.20	484	1	1	1.70	1.40	9	5	740	11	140	130	0.6	6.1	4.8	1	3.2
7782	6.5	18	1.9	0.8	2.3	1.98	8	1.93	26	17	29.2	0.70	0.45	871	1	1	1.80	1.55	9	25	402	10	140	133	0.9	8.6	7.1	1	4.7
7783	11.0	14	1.3	0.8	3.1	3.07	10	3.03	44	34	35.5	1.00	0.80	378	1	1	1.90	1.73	11	19	172	9	170	165	2.5	21.8	20.4	1	7.9
7784	5.7	1	1.2	0.8	1.2	1.16	16	2.43	25	18	18.9	0.69	0.33	443	1	1	1.80	1.66	12	5	163	16	140	130	0.2	7.7	6.4	1	4.7

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7002	83	3.1	0.3	6.1	2514	2.3	21	2	5	1.7	14	220	46
7003	70	1.5	0.9	14.4	6018	3.1	89	3	17	2.6	82	250	82
7004	86	1.2	0.7	7.7	5902	2.4	109	2	7	2.9	36	350	73
7005	106	1.4	1.1	12.5	4953	3.6	97	5	24	3.3	72	300	63
7007	103	1.3	0.9	11.9	4175	3.1	82	2	14	2.8	58	310	61
7008	72	1.1	0.5	8.8	4871	1.9	91	3	7	2.0	50	230	44
7009	97	1.3	1.1	10.6	4848	2.7	82	14	15	2.9	53	270	63
7010	114	1.7	1.1	13.0	4634	4.7	86	6	17	3.2	75	250	62
7011	101	1.9	0.8	16.7	3749	4.5	50	3	12	2.5	41	50	53
7013	95	1.6	0.8	13.4	4563	3.8	84	3	8	2.3	53	50	62
7015	104	2.4	0.6	11.1	4727	5.0	50	4	8	2.0	19	300	52
7016	83	2.1	0.6	16.0	3398	5.4	61	4	8	2.5	27	390	44
7017	103	2.0	0.7	12.9	2646	5.0	33	2	12	2.6	31	160	43
7018	98	1.8	0.6	12.7	2681	3.2	34	2	6	1.8	25	170	47
7019	97	1.8	0.6	10.0	2471	3.3	22	2	11	2.0	17	210	43
7020	106	1.8	0.7	11.2	3337	3.2	21	1	11	2.4	21	210	56
7022	91	1.6	0.3	10.0	2703	3.0	34	2	6	1.9	23	230	42
7023	114	1.6	0.8	11.0	4321	3.3	60	2	9	2.3	33	270	58
7024	104	1.5	0.8	11.1	3645	4.0	49	2	12	2.0	32	340	52
7025	97	1.3	0.6	8.7	2380	2.9	27	1	10	1.8	17	240	36
7026	99	1.4	0.6	9.0	2669	2.8	30	1	10	1.8	21	270	41
7027	98	2.6	0.6	8.9	2540	3.9	31	2	10	1.9	23	330	40
7028	101	2.1	0.9	12.5	3886	4.6	56	2	13	2.9	40	300	55
7029	90	1.6	0.9	13.3	3786	4.6	75	3	14	3.1	70	50	59
7030	94	1.6	0.7	10.7	3202	4.0	44	2	11	2.5	35	190	59
7031	79	2.0	0.6	10.0	3934	3.2	42	4	7	2.5	17	370	64
7032	93	2.7	0.3	6.7	2226	2.9	26	2	9	1.7	19	210	40
7033	110	1.6	0.8	12.6	2799	4.6	34	1	11	2.2	23	280	38
7034	77	1.3	0.8	9.2	3012	3.0	47	2	15	2.7	35	460	48
7035	94	1.7	1.1	10.1	4574	7.3	61	3	22	3.1	48	440	52
7036	73	1.2	0.8	10.0	3312	2.6	55	3	12	2.5	55	300	52
7037	76	1.4	0.9	12.7	4202	4.4	70	3	13	2.7	64	360	56
7038	70	1.3	0.9	13.0	4036	3.3	83	4	14	2.9	65	330	65
7039	72	1.2	1.0	12.1	3666	4.8	79	4	13	2.8	59	260	58
7040	82	1.5	1.0	13.1	4051	3.6	71	4	13	3.1	48	380	63
7042	95	1.5	1.0	11.7	3856	5.2	66	2	18	2.9	55	370	51
7043	90	1.4	1.0	11.3	3865	4.0	75	4	15	2.6	58	260	59
7044	97	1.3	0.8	11.1	3647	3.4	58	3	14	2.7	49	380	48
7045	125	1.8	1.0	10.7	5233	3.3	89	3	19	2.8	57	190	35
7046	85	1.5	0.8	11.2	3563	3.6	41	3	14	2.3	42	270	56
7047	65	1.5	0.9	12.9	3814	3.2	66	3	13	2.5	57	270	63
7048	79	1.3	1.0	10.0	3707	2.7	72	3	16	2.5	50	230	51
7049	79	1.2	0.9	12.2	3924	7.5	85	3	13	3.0	60	280	59
7050	124	1.8	1.0	12.4	3999	3.6	67	3	19	3.0	48	310	49
7051	127	2.1	1.5	18.3	5133	5.2	94	4	34	4.4	56	560	37
7052	125	2.0	1.5	25.7	4256	4.3	58	2	37	3.5	40	620	60
7053	125	1.8	0.8	11.0	3170	3.4	44	2	15	2.3	26	370	44

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7054	133	2.5	0.9	14.5	4128	3.9	72	2	18	2.8	53	450	39
7055	131	1.8	0.9	10.6	3123	3.4	49	1	18	2.9	27	370	34
7056	108	2.2	0.9	12.0	2869	3.9	36	2	14	2.7	26	270	51
7057	115	2.1	0.8	10.0	3216	3.7	42	2	17	2.5	51	310	39
7058	100	1.6	0.8	11.8	3284	3.3	54	4	11	2.7	39	170	53
7059	98	1.8	0.9	11.0	3011	3.1	47	2	14	2.8	44	330	50
7060	75	1.3	0.9	10.9	3282	3.1	49	2	17	2.5	34	440	42
7061	78	1.2	0.8	12.0	4047	3.5	80	3	11	2.5	53	310	61
7062	126	1.9	0.9	13.1	3401	3.5	48	1	16	2.5	33	460	42
7063	117	2.1	1.0	14.3	3261	4.5	45	2	17	2.9	29	340	50
7065	117	1.9	0.6	10.6	3515	3.0	66	1	9	2.2	26	240	41
7066	44	3.1	0.3	14.0	7964	9.3	163	5	13	1.2	124	300	41
7067	91	2.7	0.9	12.6	2583	7.4	46	3	16	2.2	33	170	29
7068	350	1.5	0.6	7.1	13583	5.5	171	1	12	4.3	24	3200	110
7069	93	1.6	0.5	8.4	2192	2.8	30	1	8	1.5	21	150	33
7070	92	2.0	1.0	13.9	3086	8.3	48	2	13	2.0	33	260	51
7071	108	2.2	0.7	9.0	2133	3.1	28	2	11	1.9	17	180	42
7072	114	2.5	0.9	14.6	3243	4.4	48	1	15	2.3	27	310	38
7073	79	1.8	0.8	10.6	3715	3.5	42	3	12	2.7	38	390	58
7074	67	1.4	0.9	10.4	3684	2.8	51	3	12	2.7	43	270	64
7076	72	1.5	0.7	8.7	5555	2.6	80	4	9	1.9	44	290	67
7077	77	1.4	0.9	10.8	4370	2.5	57	2	15	2.6	51	340	60
7078	67	1.3	0.8	10.7	4456	2.5	75	4	12	2.3	56	240	66
7079	72	1.4	0.9	8.1	4188	2.5	46	3	16	2.8	38	410	59
7080	59	1.4	0.7	10.0	4319	2.8	76	3	12	2.0	35	350	73
7081	63	1.6	1.0	12.4	4191	3.3	74	3	14	3.0	62	220	73
7083	74	1.6	0.8	12.2	4574	2.9	55	3	11	2.1	51	270	59
7084	82	1.8	1.0	11.1	4641	2.8	60	3	16	2.6	54	300	58
7085	84	1.7	1.0	11.5	4644	3.0	67	3	16	2.3	57	260	61
7086	50	0.9	1.3	18.7	3399	3.2	55	4	21	2.6	42	50	41
7087	58	1.9	0.9	14.0	7736	3.3	108	3	16	2.6	68	250	56
7088	87	2.0	1.1	10.8	5936	3.2	85	3	17	3.1	75	320	67
7089	58	1.4	0.9	10.6	4376	3.0	66	4	12	2.4	69	320	64
7090	97	1.3	1.2	16.1	3031	7.5	62	1	23	1.7	43	50	26
7091	50	1.5	0.8	10.6	4221	2.8	66	2	10	2.6	50	290	70
7092	58	1.6	0.9	12.0	4396	2.9	71	4	13	1.7	60	240	72
7093	81	1.6	0.8	8.6	3747	2.8	35	2	15	2.4	40	400	54
7095	51	1.9	0.7	8.0	5709	2.8	81	3	9	3.0	23	380	92
7096	65	1.7	1.0	13.1	4249	3.6	65	3	14	2.6	53	370	78
7097	66	1.5	1.0	12.5	4089	2.9	63	3	13	2.7	52	270	68
7098	40	1.3	0.8	12.9	4715	2.7	93	4	13	2.2	57	50	69
7099	37	1.5	0.9	14.3	3625	3.6	105	2	9	2.2	86	250	114
7100	57	1.9	1.3	14.9	3919	3.7	83	3	13	3.8	65	250	85
7102	1	1.3	0.9	13.6	1	3.1	1	3	1	2.3	1	320	1
7103	70	1.4	0.9	10.0	5052	2.8	51	3	18	2.8	65	460	61
7104	74	1.4	0.7	8.1	4476	2.2	50	2	13	2.1	43	330	54
7105	60	1.4	0.7	12.7	4409	3.3	100	3	8	1.7	81	50	66

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7106	59	1.4	0.7	10.9	3767	3.2	57	3	10	2.3	47	410	58
7107	108	2.4	0.6	13.2	4186	3.0	29	2	5	2.5	11	340	50
7108	123	2.1	1.1	17.4	3349	5.4	45	2	19	2.8	44	430	51
7109	105	1.5	0.6	12.3	3019	3.3	42	3	7	1.6	29	150	46
7110	102	1.5	0.8	15.7	2676	7.7	34	3	12	2.3	22	240	40
7111	112	2.1	0.6	15.1	3161	4.2	40	3	9	1.7	30	310	47
7112	86	2.0	1.0	13.9	3864	5.0	54	4	12	2.3	17	210	62
7113	104	2.1	0.6	15.1	3887	3.8	46	3	7	2.2	26	350	53
7114	102	1.8	0.7	15.2	3500	4.1	54	2	9	2.0	43	270	52
7115	108	2.1	0.8	23.3	3034	6.7	30	2	12	2.6	25	360	54
7116	108	1.8	0.8	15.6	3359	5.2	39	2	11	2.9	26	290	60
7117	111	2.3	0.9	19.2	3740	5.6	42	3	10	3.1	27	390	53
7118	124	3.4	1.6	29.2	3535	11.1	42	3	27	5.8	56	500	63
7119	115	2.3	1.1	20.1	3732	5.9	48	2	11	1.4	42	50	66
7120	116	3.0	1.1	21.8	3489	10.0	45	3	16	4.6	55	350	56
7122	135	2.6	1.6	21.5	4194	8.9	60	2	27	3.8	48	450	46
7123	104	1.8	0.7	11.1	3204	4.0	29	2	12	2.1	23	240	46
7124	102	1.8	0.6	10.3	2897	3.9	32	1	11	2.2	23	260	41
7125	96	2.5	0.7	19.1	3792	7.1	40	3	11	3.1	40	220	65
7126	91	2.9	0.8	16.2	3312	10.6	39	4	13	2.9	44	220	48
7127	97	1.6	0.6	14.0	3584	4.3	46	3	8	2.7	39	260	56
7128	93	1.3	0.6	10.0	3132	4.3	42	3	11	2.0	30	220	38
7129	98	1.6	0.9	12.4	4100	4.1	43	2	13	2.7	32	360	57
7130	108	1.6	0.9	13.7	3637	5.1	39	2	12	3.3	30	320	60
7131	80	1.1	0.8	8.9	4043	2.3	91	2	12	2.5	82	50	52
7132	84	1.0	0.8	9.3	4326	2.6	90	2	14	2.3	60	350	50
7133	77	1.0	0.8	10.0	3842	2.6	76	2	12	2.5	53	310	58
7134	76	1.1	0.7	9.1	3536	2.3	62	3	12	2.2	46	360	58
7135	80	1.3	1.1	10.3	4309	3.1	111	4	17	3.0	72	340	63
7136	83	1.3	0.9	10.2	4384	2.5	90	2	13	2.5	70	270	60
7137	91	1.1	0.8	10.5	4206	2.8	75	2	13	2.5	51	350	58
7138	83	1.3	0.9	11.1	4058	2.7	72	2	12	2.7	60	260	57
7139	90	1.2	0.8	9.1	4139	2.5	94	3	13	2.6	61	250	51
7141	70	1.2	0.7	9.2	2760	2.3	55	4	10	2.5	42	360	55
7142	82	1.2	0.8	9.4	4116	2.8	88	3	12	2.9	59	270	60
7143	80	1.3	1.0	12.0	4450	3.4	111	4	15	3.0	80	260	66
7144	73	1.1	0.6	8.5	4423	2.3	109	3	11	2.4	65	50	56
7145	82	1.4	0.9	9.5	4532	2.7	107	3	13	2.9	60	250	65
7146	83	1.3	1.1	10.8	4213	3.5	96	2	14	3.1	63	370	63
7147	75	1.1	0.9	11.1	4132	2.7	110	2	11	2.7	85	50	62
7148	75	1.5	1.2	13.6	4156	3.1	84	3	18	3.4	72	360	73
7149	74	1.7	1.0	14.1	4097	3.3	101	4	15	3.2	79	50	75
7150	85	1.4	0.8	7.4	4623	2.5	92	2	12	2.7	50	320	57
7152	79	1.2	0.8	9.0	3568	2.3	70	2	12	2.5	63	340	54
7153	92	1.3	0.9	10.0	3948	2.7	70	2	15	2.6	52	310	56
7154	89	1.1	0.8	7.7	4464	2.6	85	3	15	2.6	54	300	55
7155	89	1.1	0.9	7.2	4790	2.8	107	3	18	3.3	74	370	61

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7156	66	1.1	0.9	10.0	3985	2.5	82	2	13	2.8	64	50	60
7157	70	1.4	1.0	13.4	3829	3.0	80	8	14	2.8	59	300	67
7158	74	1.1	0.8	10.0	3927	2.9	77	2	13	2.6	65	50	57
7159	78	1.2	1.1	11.1	4486	3.7	105	2	15	2.4	65	360	61
7160	78	1.1	0.8	7.6	4602	2.7	120	3	11	2.0	69	50	59
7161	68	1.0	0.7	10.2	3920	2.4	96	2	11	2.4	63	50	58
7163	102	2.1	0.6	13.4	2659	6.6	29	3	9	1.2	22	50	51
7164	107	1.7	0.8	12.5	3492	4.2	39	2	12	1.4	27	260	55
7166	103	2.1	0.8	12.6	2975	4.7	30	2	13	1.5	20	170	52
7167	122	2.9	1.4	23.0	3831	8.0	53	4	28	3.0	55	100	58
7168	107	1.6	0.8	13.7	3266	3.8	45	2	10	0.7	31	50	54
7169	112	2.6	1.0	18.7	3187	8.0	40	4	16	1.4	34	250	50
7170	111	2.3	1.1	15.2	3369	7.4	41	2	25	2.5	41	200	46
7171	87	1.4	0.9	14.5	4941	3.2	95	3	13	1.4	68	50	72
7173	121	1.5	1.2	17.3	4365	3.9	69	2	12	3.6	48	540	54
7174	72	1.5	0.9	12.1	4626	3.9	56	3	12	3.0	37	400	70
7175	87	1.1	0.8	11.8	3981	2.8	58	2	7	2.7	35	460	46
7176	69	1.3	0.3	8.8	3509	2.4	60	2	7	1.9	21	50	45
7177	35	4.3	3.3	30.2	2484	10.0	12	1	16	19.0	12	50	191
7178	70	2.0	0.7	10.7	7009	2.9	62	4	6	2.7	9	510	71
7179	75	1.8	0.8	9.5	6062	2.9	100	5	9	2.5	33	400	60
7181	97	2.5	0.6	10.1	9314	2.9	59	9	5	2.8	10	840	65
7182	100	1.9	0.8	10.1	10117	3.1	112	2	7	3.0	17	510	66
7184	273	1.7	0.6	2.9	12820	2.9	126	1	16	3.4	19	2700	45
7185	63	1.3	0.6	6.5	3494	2.4	51	2	6	2.1	12	380	54
7186	34	1.6	0.7	8.2	3731	2.7	33	3	5	2.8	8	520	64
7187	66	1.1	0.6	7.7	3174	2.2	42	3	11	1.5	34	340	47
7188	48	2.2	0.3	7.4	4736	2.3	51	3	5	1.9	14	290	69
7189	47	1.2	0.3	5.5	4691	2.3	48	4	6	2.0	18	340	76
7190	23	1.7	0.3	5.5	6402	2.1	56	3	6	2.2	16	450	77
7191	45	1.7	0.9	8.6	4070	2.8	49	3	6	2.8	11	530	66
7192	54	1.7	0.9	10.2	4400	3.0	60	3	6	3.0	10	470	67
7193	46	2.3	1.3	16.9	5931	3.7	90	5	7	4.0	14	440	79
7194	49	1.6	0.7	8.2	5255	2.7	93	6	9	2.7	17	260	81
7195	33	1.6	1.0	8.9	4883	2.8	104	4	7	3.0	17	350	79
7196	54	1.9	0.9	11.8	5535	3.3	41	3	5	3.2	10	680	64
7197	164	1.8	0.8	16.8	5730	3.8	76	3	4	2.6	11	890	76
7202	66	1.6	1.0	15.4	4560	3.0	82	5	19	2.9	67	460	70
7203	80	0.9	1.0	9.2	4481	2.5	92	2	17	3.4	56	220	59
7205	76	1.4	0.7	8.1	4867	2.8	84	3	9	2.8	43	290	66
7206	65	1.1	0.9	7.6	3870	2.4	84	3	9	2.4	47	320	62
7201	59	1.1	0.9	10.0	4027	2.6	95	3	13	2.5	71	230	65
7207	63	1.1	0.7	10.0	3623	2.7	89	10	13	2.7	69	390	63
7208	100	1.4	1.0	10.2	4567	3.8	119	3	15	2.7	75	330	73
7209	100	1.4	0.9	10.3	5012	2.8	66	3	7	3.3	15	240	61

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7210	61	1.6	0.6	7.5	6197	2.8	82	4	7	2.8	15	400	85
7211	50	1.5	0.6	7.4	5293	2.3	59	34	5	2.3	11	450	56
7212	56	1.5	0.3	6.3	6130	2.1	62	4	5	2.1	11	380	52
7214	79	2.1	0.3	6.6	2582	5.0	19	3	4	1.0	17	50	83
7215	140	1.7	0.3	9.0	6907	3.3	49	4	7	2.4	15	860	60
7216	65	1.2	0.5	7.5	4943	2.4	91	2	8	1.7	22	50	43
7217	84	1.5	0.7	8.4	4761	3.1	78	3	10	2.0	60	50	58
7218	100	1.4	0.8	10.0	6310	2.8	83	2	7	3.2	22	450	59
7219	73	1.1	0.7	10.0	4372	2.4	76	3	10	2.2	57	330	60
7220	64	1.0	0.6	8.5	3944	2.2	76	3	9	2.3	38	50	52
7221	75	1.3	0.5	6.3	3859	1.9	51	3	10	2.0	32	270	48
7222	69	1.6	0.6	9.0	5061	2.6	69	3	8	2.7	29	330	77
7223	87	1.1	0.6	6.6	4271	2.3	41	4	11	2.5	30	390	53
7224	75	1.7	0.6	8.9	4824	3.0	106	6	8	2.7	27	50	69
7225	80	1.2	0.7	9.4	3670	2.6	79	2	7	1.9	41	50	47
7226	88	1.3	0.7	9.2	4191	2.6	89	2	9	2.2	53	250	59
7227	75	1.4	0.7	7.9	4542	2.7	59	3	8	2.4	25	340	53
7228	69	1.4	0.6	9.1	4316	2.8	32	2	4	2.3	8	630	62
7229	106	2.9	0.8	10.0	4570	3.8	38	2	8	3.8	15	940	89
7230	63	3.4	0.3	3.0	1801	2.7	13	3	3	0.0	21	50	84
7231	69	1.7	0.8	13.5	4333	7.4	75	2	11	2.4	34	50	42
7232	116	1.7	0.8	11.4	3543	3.7	52	2	16	2.9	32	320	49
7234	121	2.0	0.6	9.4	6571	2.9	114	2	6	2.9	20	520	60
7235	170	1.8	0.9	4.8	15546	1.6	118	1	8	4.4	18	50	100
7236	207	1.5	0.3	6.9	6681	4.2	93	1	11	2.4	23	1500	106
7237	78	1.4	0.8	10.3	3450	2.6	78	2	6	2.2	63	50	41
7238	100	2.0	0.6	13.9	3309	6.3	48	3	8	2.4	27	250	48
7239	100	1.3	0.7	9.4	5457	2.2	79	1	5	2.6	30	230	54
7240	77	2.3	0.6	10.5	3701	2.6	24	3	4	2.4	9	380	48
7241	132	1.0	0.6	10.4	3053	2.7	57	1	4	2.2	17	290	31
7242	89	1.5	0.6	10.3	3328	2.3	73	1	5	2.2	44	230	39
7243	82	1.7	0.7	15.9	3842	3.3	78	4	9	2.8	35	340	75
7245	98	2.3	0.3	8.1	5212	3.9	139	3	28	2.6	40	1400	36
7246	97	1.8	0.7	12.5	3409	4.3	32	2	9	3.2	26	230	67
7247	88	1.7	0.6	9.0	4818	2.7	46	5	6	2.3	16	300	69
7248	100	1.4	1.0	11.8	4450	5.9	82	3	18	3.1	52	220	82
7249	77	1.3	1.0	10.7	5122	3.4	98	3	16	3.1	64	250	85
7250	97	2.0	0.3	12.5	2521	5.0	31	2	7	2.3	25	310	51
7251	95	1.9	0.7	8.9	4375	3.4	48	4	10	2.7	36	360	67
7252	97	2.3	0.5	15.4	3346	5.5	38	3	8	2.7	27	360	71
7253	64	1.9	0.6	8.7	3988	3.3	37	3	6	2.6	15	410	83
7254	89	4.5	1.0	20.7	3660	5.3	22	5	7	5.4	18	50	117
7255	83	1.8	0.5	11.4	2996	5.3	36	6	7	2.0	39	270	60
7256	57	1.6	0.3	9.4	3960	2.5	79	3	7	2.1	34	210	61
7257	68	1.6	0.3	8.6	3314	2.6	45	2	8	2.0	31	340	61
7258	234	2.0	3.2	39.5	10563	4.8	174	1	7	12.0	29	760	34
7259	114	2.1	0.6	8.2	4638	2.4	31	2	8	2.5	20	460	57

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7260	101	1.1	1.2	18.2	4969	3.7	112	4	18	1.3	113	50	75
7261	67	1.2	0.8	9.0	3280	2.5	47	4	12	1.9	36	210	61
7262	68	1.4	0.7	10.0	3314	2.2	53	3	10	1.7	42	170	60
7263	78	1.3	0.9	11.6	4251	3.2	99	3	13	1.9	68	50	69
7264	78	1.2	0.7	10.1	4191	2.8	84	3	12	1.8	56	50	61
7265	75	1.4	1.1	10.9	4229	3.5	86	4	16	1.5	60	50	65
7266	75	1.2	0.9	12.7	4346	2.9	95	3	11	1.4	75	160	66
7267	65	1.8	1.1	15.5	5268	3.8	71	88	21	1.9	62	220	78
7268	72	1.5	1.0	13.7	5034	3.0	90	4	15	1.7	78	50	75
7269	73	0.9	1.2	12.4	5003	4.1	111	4	20	2.0	97	50	65
7270	69	1.3	0.8	9.0	5140	2.7	117	4	11	1.8	57	50	71
7271	64	1.9	1.1	15.5	5751	3.6	85	5	24	1.9	70	50	83
7272	65	1.5	0.9	13.2	4635	3.2	74	4	16	1.8	65	50	73
7273	60	1.5	0.8	12.6	4463	2.7	74	5	12	1.7	59	50	66
7275	57	1.5	1.1	15.9	5070	3.7	94	6	15	1.3	84	320	91
7276	78	1.5	0.8	10.1	4864	2.7	74	5	13	1.5	51	230	67
7277	66	1.5	1.0	12.4	4140	3.1	70	6	15	1.9	55	50	72
7278	70	1.1	0.9	13.4	4004	4.7	91	2	18	1.0	100	50	94
7279	101	0.9	0.8	10.1	3199	2.4	47	2	13	1.2	34	50	50
7280	91	2.2	1.2	18.1	5854	4.8	67	5	12	2.7	50	50	100
7281	221	6.2	2.9	64.8	7118	10.0	55	3	11	1.0	23	920	115
7282	101	1.9	0.8	10.9	6086	3.1	90	3	7	1.9	32	50	63
7283	117	2.6	1.0	13.5	2816	5.2	30	2	15	1.5	18	300	51
7284	89	4.7	1.2	12.2	5330	3.6	47	5	8	2.5	26	310	73
7285	93	2.1	0.5	12.4	2847	3.5	38	2	5	1.2	24	50	46
7286	110	2.2	0.7	12.8	2738	3.9	33	2	10	1.2	29	220	49
7287	110	2.2	0.8	13.3	2900	4.1	34	2	10	1.6	22	160	53
7288	97	1.6	0.8	12.2	4309	3.4	77	3	10	1.4	55	50	59
7289	90	2.2	0.7	14.3	4980	3.5	54	3	7	1.4	17	180	74
7290	63	2.0	0.8	14.8	5814	3.8	64	4	9	2.0	28	50	93
7291	94	1.6	0.8	13.4	4698	3.6	61	3	11	1.6	45	50	72
7292	98	1.5	0.8	12.1	4693	3.2	77	5	14	2.0	54	50	68
7293	91	1.2	0.7	12.4	4185	2.6	70	12	9	1.0	55	50	58
7294	101	1.8	0.8	15.4	3252	4.1	49	3	8	-0.5	38	50	61
7295	97	2.0	0.9	16.0	3916	4.0	69	3	11	1.1	72	50	55
7296	100	2.1	0.7	15.7	4233	3.5	60	2	8	1.2	50	50	49
7297	106	1.8	0.8	14.6	3398	4.5	49	2	11	1.0	40	50	49
7298	131	1.8	1.0	17.8	3559	5.2	50	2	16	1.4	37	170	40
7299	101	1.5	0.7	14.7	3895	4.0	57	2	8	1.0	45	50	58
7300	95	1.7	0.8	15.9	3983	5.4	63	2	10	0.9	30	50	54
7301	99	1.5	0.7	14.0	3800	3.7	60	2	8	1.0	52	50	58
7303	86	1.3	0.9	10.0	3783	2.2	57	4	13	1.7	36	440	50
7304	87	1.3	0.9	10.2	3969	2.3	59	4	12	2.2	40	480	54
7305	88	1.3	0.9	10.4	3907	2.6	51	3	11	2.4	37	400	59
7306	85	1.5	0.9	9.0	4877	2.7	65	4	10	2.7	30	480	62
7307	79	1.3	0.9	11.9	3858	2.3	69	3	12	2.3	56	290	57
7308	73	1.3	0.9	10.5	3986	2.7	70	3	13	2.6	48	210	54

**Appendix A - Field and Geochemical Data - Open File NFLD/3134**

Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7309	108	1.8	0.9	17.5	3455	3.4	62	3	11	1.6	32	310	55
7310	121	2.4	1.2	18.5	4811	4.8	60	3	17	2.9	38	510	74
7311	119	1.9	0.9	15.4	3548	3.2	50	3	10	1.9	34	350	57
7312	125	2.5	1.0	14.0	6650	4.9	109	4	14	2.5	33	620	56
7313	89	2.0	0.6	9.2	4652	2.8	59	3	5	1.4	17	280	55
7314	103	2.9	0.7	12.3	3698	3.2	69	4	8	1.7	51	250	49
7315	89	2.8	0.7	14.0	4814	4.8	61	11	6	1.2	30	50	60
7316	95	1.4	0.8	10.8	3519	2.6	44	2	8	1.6	34	190	46
7317	77	2.1	1.1	16.3	4175	5.1	90	4	12	1.8	104	50	85
7318	87	2.0	0.8	11.5	3420	4.1	54	3	10	1.6	48	200	55
7319	104	1.9	0.7	16.3	3408	4.8	48	2	9	1.0	35	50	44
7320	104	2.0	0.7	16.1	3237	4.1	44	3	10	0.5	35	50	50
7322	102	2.0	0.7	11.6	2747	4.8	30	2	10	0.8	20	150	49
7323	95	1.9	0.7	10.9	2382	9.4	26	2	12	1.1	15	180	37
7324	98	1.9	0.6	11.7	2689	3.8	33	2	9	0.9	20	220	41
7325	104	2.6	0.8	18.9	3132	5.6	35	3	9	1.4	26	50	56
7326	108	1.9	0.7	14.1	2791	4.9	33	3	9	1.4	26	200	48
7327	42	2.0	0.8	10.3	5293	3.3	78	5	10	2.4	35	320	101
7328	59	1.9	0.7	15.9	3290	4.6	69	4	15	0.6	87	200	50
7329	75	1.2	0.9	10.0	4331	2.6	82	3	12	1.8	66	230	63
7330	78	1.3	1.0	12.3	4470	2.9	76	4	12	1.6	63	320	66
7332	78	1.6	1.1	12.8	4384	3.7	80	4	15	1.8	64	50	73
7333	75	1.3	1.0	12.4	3839	3.1	87	4	14	2.1	75	210	69
7334	93	1.5	1.0	13.0	4712	3.2	77	3	15	1.9	55	50	65
7335	71	1.5	0.8	8.9	5365	2.8	71	3	11	1.9	41	50	67
7336	110	1.4	0.9	10.9	4527	2.8	73	3	15	1.9	50	50	58
7337	78	1.1	0.8	10.0	3792	2.5	87	4	12	1.7	56	190	58
7338	101	1.5	0.8	7.8	5571	2.7	105	3	12	1.9	52	210	65
7339	97	1.2	1.1	8.3	4234	2.5	88	3	16	2.4	55	50	57
7340	109	2.0	0.8	13.2	3618	4.2	40	2	11	0.8	24	200	55
7341	112	2.0	1.0	15.7	3484	5.0	49	3	13	0.7	37	200	52
7342	115	2.2	0.6	11.3	4182	2.9	33	2	6	1.1	16	290	42
7343	115	1.8	0.7	13.5	2933	5.4	33	2	9	1.3	25	210	49
7344	111	1.9	0.6	12.2	2648	3.7	34	2	9	1.0	23	180	43
7345	109	2.5	0.9	17.4	3178	5.4	37	3	9	1.2	27	200	59
7346	90	1.7	0.7	8.8	3006	3.1	34	2	13	1.7	23	220	55
7347	72	1.8	0.6	10.0	3475	3.2	37	2	7	1.5	19	280	63
7348	86	1.8	0.6	10.2	2987	4.3	37	2	8	1.4	25	230	54
7349	71	1.8	0.6	8.8	3636	2.9	53	2	8	1.4	29	200	58
7350	85	2.0	0.5	8.1	2428	3.2	31	1	10	0.8	21	240	41
7351	92	1.3	0.6	6.1	1907	2.0	188	6	4	2.3	40	50	37
7352	81	1.8	0.8	13.7	3444	3.6	65	3	11	1.2	47	50	62
7354	101	2.3	0.8	11.2	3163	3.6	41	2	15	1.5	24	280	51
7355	92	2.3	0.7	10.4	3575	3.0	38	2	11	1.7	22	270	63
7356	326	0.8	0.9	1.8	8845	0.6	159	2	22	2.4	68	230	14
7357	89	2.6	0.8	11.3	3445	4.7	42	2	13	1.6	27	290	60
7358	97	1.8	0.6	10.8	2912	3.0	40	1	14	1.2	27	230	40

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Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7359	87	1.8	0.7	13.4	4028	2.9	67	2	12	2.0	38	260	56
7360	88	2.4	0.6	11.1	3024	3.7	42	2	9	0.6	25	230	49
7361	86	2.1	0.6	10.2	2812	3.7	36	2	11	0.9	27	290	49
7362	83	1.8	0.6	8.0	2539	3.5	26	2	11	1.3	19	250	48
7363	84	2.1	0.6	10.1	2988	3.5	34	2	11	1.1	23	190	53
7364	96	1.6	0.6	7.4	2487	2.7	26	1	10	1.3	18	230	47
7365	96	2.3	0.7	10.7	3224	3.5	35	2	13	1.5	24	260	58
7366	95	1.8	0.6	6.5	2739	2.7	31	1	14	1.3	21	240	42
7367	89	2.1	0.6	9.2	3098	3.3	41	2	10	1.3	23	170	52
7368	86	2.1	0.3	7.4	2826	2.7	34	1	10	1.4	19	220	45
7369	84	2.0	0.7	12.4	3529	4.1	70	3	11	1.0	48	240	65
7370	81	2.5	0.3	10.8	3099	4.0	37	2	10	1.2	29	250	51
7371	88	2.1	0.6	9.2	2955	3.5	30	2	11	1.5	19	190	56
7372	105	2.4	0.7	11.6	2564	4.6	30	2	17	1.8	29	50	47
7373	95	1.9	0.9	11.7	3471	7.4	60	3	17	1.7	48	50	66
7374	100	1.9	0.7	12.7	3476	3.2	45	2	12	1.3	34	50	57
7375	111	1.9	0.8	9.4	3519	2.6	38	2	10	1.8	24	180	57
7376	116	1.8	0.8	9.3	3807	2.9	50	2	13	1.8	32	50	61
7377	99	2.0	0.7	12.8	3370	3.4	45	2	11	1.6	27	280	59
7379	100	1.9	0.8	10.9	2999	3.1	36	2	14	1.2	21	220	52
7380	97	1.9	0.6	7.7	3394	2.5	38	2	11	1.7	25	220	59
7381	116	1.6	0.8	8.8	3235	2.3	42	1	17	1.7	27	150	45
7382	105	1.5	0.7	8.2	3205	2.2	48	2	10	1.2	31	50	43
7383	114	1.5	0.6	7.5	2909	2.3	35	1	12	1.5	26	50	45
7384	112	1.7	0.7	10.5	3771	2.8	50	2	15	1.9	46	50	57
7385	99	1.8	0.7	10.0	3016	2.6	36	2	9	1.5	21	180	51
7386	102	2.1	0.8	10.0	3454	2.8	42	2	12	1.9	26	190	63
7387	114	2.5	2.3	12.3	5629	3.5	60	2	56	5.4	138	50	100
7388	88	1.8	1.5	10.0	6286	2.5	71	1	32	3.7	61	50	79
7389	87	2.4	1.0	11.0	3493	2.6	31	1	20	1.9	55	50	63
7390	334	1.3	0.9	4.3	11552	1.2	180	1	17	1.4	910	50	48
7391	101	2.2	0.9	11.0	3595	4.7	46	2	16	1.8	34	50	66
7392	107	2.2	0.9	12.0	4038	3.4	39	3	13	1.8	24	210	71
7393	79	1.6	0.8	13.8	3863	4.0	57	2	13	1.7	28	300	55
7394	101	1.8	0.9	10.0	3541	2.8	41	2	16	1.8	31	170	56
7395	88	1.9	0.8	13.1	3697	3.4	59	3	13	1.2	43	50	59
7397	183	1.4	1.0	4.8	12668	2.0	205	2	22	2.3	89	50	42
7398	84	1.8	0.7	13.4	3627	3.9	54	3	12	0.6	40	170	55
7399	104	1.8	0.6	10.0	2798	2.8	32	1	11	1.3	16	210	50
7400	103	1.9	0.9	10.7	3378	3.4	40	2	17	1.6	32	50	58
7401	111	2.1	0.6	9.4	2796	3.1	38	2	13	1.2	24	220	40
7402	97	2.1	0.6	9.3	2956	2.9	32	2	12	1.3	18	190	50
7403	92	2.2	0.3	6.5	2587	2.3	21	1	10	1.4	16	200	47
7404	93	1.5	0.7	8.4	3490	2.2	47	1	15	1.9	55	50	50
7405	90	1.6	0.9	11.3	2471	3.4	34	2	17	1.8	26	50	52
7406	99	2.0	0.9	9.2	3054	2.5	38	2	16	1.8	33	50	56
7407	131	1.8	0.9	8.8	3565	2.8	50	1	20	1.7	38	50	50

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Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7408	110	2.2	0.8	10.0	3892	3.1	38	1	13	1.4	24	310	68
7409	106	1.7	0.7	9.1	3248	2.6	40	2	12	1.8	25	160	57
7410	88	2.3	0.9	11.8	3568	3.4	51	2	15	1.5	89	50	60
7412	106	1.5	0.8	9.3	3251	2.8	39	2	15	1.8	38	50	56
7413	131	1.7	0.7	8.7	5047	2.7	73	2	15	2.1	40	50	70
7414	168	1.7	1.0	6.4	5680	2.2	79	1	25	2.8	35	50	52
7415	115	1.4	1.0	8.0	4937	2.4	68	1	21	2.4	46	50	57
7416	106	1.5	0.8	8.4	3756	2.6	41	2	15	2.6	59	340	63
7417	92	2.1	0.6	8.9	2719	2.8	33	2	11	1.4	29	50	52
7418	130	1.4	0.9	10.0	3456	3.0	50	1	20	2.2	27	260	44
7700	58	1.6	0.7	8.4	3927	2.7	55	3	5	2.3	20	430	63
7701	58	1.6	0.7	9.3	4549	2.8	83	3	7	2.7	25	410	76
7702	93	1.6	0.9	15.5	4337	4.2	76	3	14	2.8	61	360	65
7703	70	1.5	0.6	12.1	4433	2.9	76	1	13	2.3	22	640	54
7704	75	1.8	0.9	12.0	4437	3.0	52	2	16	2.7	29	510	61
7705	53	5.7	0.3	5.9	1441	2.5	20	2	4	0.7	19	50	52
7706	80	1.4	0.8	13.4	4092	8.1	55	3	9	1.7	39	340	72
7707	82	1.3	1.0	11.1	4481	3.0	74	4	12	2.0	49	390	68
7708	84	1.8	1.1	14.8	6668	4.2	82	4	11	2.7	35	620	96
7709	67	1.8	0.9	16.6	4995	3.5	89	4	6	1.5	19	580	79
7710	70	1.3	0.7	10.9	3550	2.9	57	3	11	1.6	45	450	66
7712	73	1.8	0.7	9.3	5361	3.1	57	4	6	2.2	15	470	77
7713	53	1.4	0.6	10.2	5476	2.3	117	3	10	1.7	52	50	52
7714	67	1.1	0.6	13.2	4062	2.6	78	3	13	1.1	58	50	75
7715	65	1.5	0.8	11.7	4359	2.9	76	4	13	1.5	56	420	71
7716	40	1.4	0.3	7.3	6164	2.4	75	3	9	1.2	26	370	73
7717	70	1.4	0.9	10.1	4111	2.6	73	4	12	2.1	55	300	63
7718	90	1.5	0.8	9.1	4832	3.1	103	4	12	1.7	116	310	60
7719	57	1.1	0.8	9.1	3014	2.4	67	4	9	1.7	74	300	60
7721	63	1.4	0.7	6.9	3460	2.3	49	6	9	2.1	36	360	60
7722	54	1.4	0.8	8.6	4273	2.7	81	4	9	2.1	43	400	73
7723	52	1.6	0.6	9.0	4481	3.3	72	4	9	0.8	107	50	49
7724	47	1.7	0.6	6.0	6083	2.3	72	5	5	1.1	17	390	60
7725	61	1.3	0.7	12.7	4031	2.8	55	8	11	1.1	44	340	65
7726	65	1.4	0.9	11.1	4218	2.6	56	8	14	1.6	46	400	67
7727	59	1.0	0.8	9.3	3009	2.2	69	3	10	1.3	45	240	55
7728	72	1.3	0.7	8.1	3914	2.6	85	4	9	2.1	37	280	67
7729	79	1.2	0.8	8.3	4935	2.6	108	3	11	1.6	56	280	66
7730	70	1.5	0.7	12.0	5162	2.7	78	3	12	1.4	65	240	72
7731	90	1.3	0.6	7.1	5219	2.4	88	3	10	2.1	42	250	64
7732	49	0.9	0.3	8.9	3723	2.4	103	3	10	1.3	69	50	60
7733	80	1.1	0.7	7.1	4343	2.8	106	4	12	1.6	45	50	69
7734	61	1.3	0.7	10.6	4088	2.6	56	11	12	0.9	51	310	68
7735	74	1.4	1.0	8.3	4372	3.0	75	6	15	1.9	49	310	70
7736	50	1.6	0.7	8.8	5546	2.7	92	12	9	1.6	25	340	84
7737	62	1.4	0.8	10.9	3639	2.6	64	6	12	1.7	60	390	62
7738	54	1.1	0.8	10.8	3760	2.5	64	9	11	1.6	42	330	59

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Sample_Num	Sr2	Ta1	Tb1	Th1	Tl2	U1	V2	W1	Y2	Yb1	Zn2	Zr1	Zr2
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
7740	61	1.2	1.0	15.8	4056	4.0	54	3	17	2.2	34	440	59
7741	81	1.2	0.9	10.0	4145	2.5	56	3	10	1.5	38	260	54
7742	88	1.5	1.0	11.1	4349	2.9	66	4	13	1.8	44	320	59
7743	82	1.2	0.8	10.6	3856	3.0	63	3	10	1.4	41	230	50
7744	77	1.2	0.7	8.8	4179	2.5	56	3	11	1.5	39	200	54
7745	77	1.5	0.7	7.6	4891	2.4	74	4	10	1.8	43	190	60
7746	89	1.6	0.9	8.3	6796	2.7	101	4	12	2.2	34	220	68
7747	71	1.3	0.9	10.5	4457	2.6	64	4	13	2.0	53	50	63
7748	77	1.4	0.8	10.5	4435	2.7	77	4	15	2.0	60	50	60
7749	90	1.6	1.0	12.9	4832	3.1	81	4	14	2.1	59	50	71
7750	92	1.6	0.9	12.4	4316	3.2	74	3	12	2.1	54	50	66
7751	67	1.1	0.6	10.6	3841	2.3	81	3	9	1.8	73	50	48
7752	78	1.9	0.6	8.1	8548	2.8	79	4	8	1.9	15	640	82
7753	226	1.3	0.5	7.2	7511	2.1	137	2	12	1.5	47	100	53
7754	61	2.4	1.0	15.5	7536	3.9	41	3	7	2.4	9	430	86
7755	75	2.2	1.0	13.2	6591	3.9	56	3	7	2.3	13	520	88
7756	101	1.4	0.7	10.5	3901	2.6	56	3	10	1.6	39	50	49
7757	105	1.5	0.7	8.3	4378	2.5	53	2	10	1.8	25	280	47
7758	110	1.4	0.8	11.9	4174	2.9	59	3	11	1.7	34	190	52
7759	106	1.4	1.0	12.4	3771	3.4	65	2	15	2.1	33	260	45
7761	89	1.4	0.6	13.9	4146	2.9	66	3	10	0.6	41	220	48
7762	45	0.9	0.8	14.5	4783	2.3	140	2	16	-0.5	50	50	26
7763	113	2.0	0.9	13.7	3017	3.4	46	4	12	1.8	31	300	49
7764	84	1.9	0.6	19.2	3377	4.7	54	6	9	0.8	29	50	50
7765	99	1.7	0.7	12.8	2605	3.5	41	2	10	0.8	25	50	40
7766	102	1.8	0.8	13.5	2954	3.5	32	2	12	1.4	24	50	51
7767	94	2.6	0.5	12.7	3007	4.4	39	2	6	1.5	29	50	48
7768	80	1.7	1.0	15.5	3301	3.4	59	2	11	1.7	39	280	56
7769	96	1.6	0.3	10.2	2815	2.8	31	2	7	1.2	23	250	43
7770	91	1.9	0.7	13.4	4289	3.6	50	3	10	1.6	34	260	61
7771	87	4.7	0.8	18.3	3388	5.7	40	5	9	1.3	29	250	64
7772	83	1.8	0.5	13.7	3667	3.8	57	3	8	-0.5	36	50	39
7773	76	1.6	0.9	10.0	4041	4.5	49	2	12	1.5	16	220	55
7774	87	1.4	0.8	11.4	3974	3.7	51	3	12	1.6	38	280	69
7776	72	1.4	0.7	9.2	3116	4.2	41	2	11	1.6	29	160	45
7777	87	1.5	1.1	10.4	3773	4.7	46	3	22	1.7	30	50	46
7778	97	2.2	0.7	14.5	3118	6.7	33	2	10	1.3	24	50	56
7779	83	2.0	0.5	11.2	3529	6.0	38	2	8	1.4	25	210	52
7780	93	3.4	0.9	13.5	5278	4.7	54	6	8	1.8	26	320	81
7781	71	2.3	0.3	9.4	2985	3.7	38	3	5	1.5	21	250	50
7782	82	1.8	0.7	11.7	3234	3.7	41	3	10	1.4	31	180	58
7783	89	1.7	1.0	9.2	4021	2.5	119	4	7	2.8	51	50	54
7784	99	1.9	0.7	10.0	5113	2.7	46	2	9	1.6	21	440	61